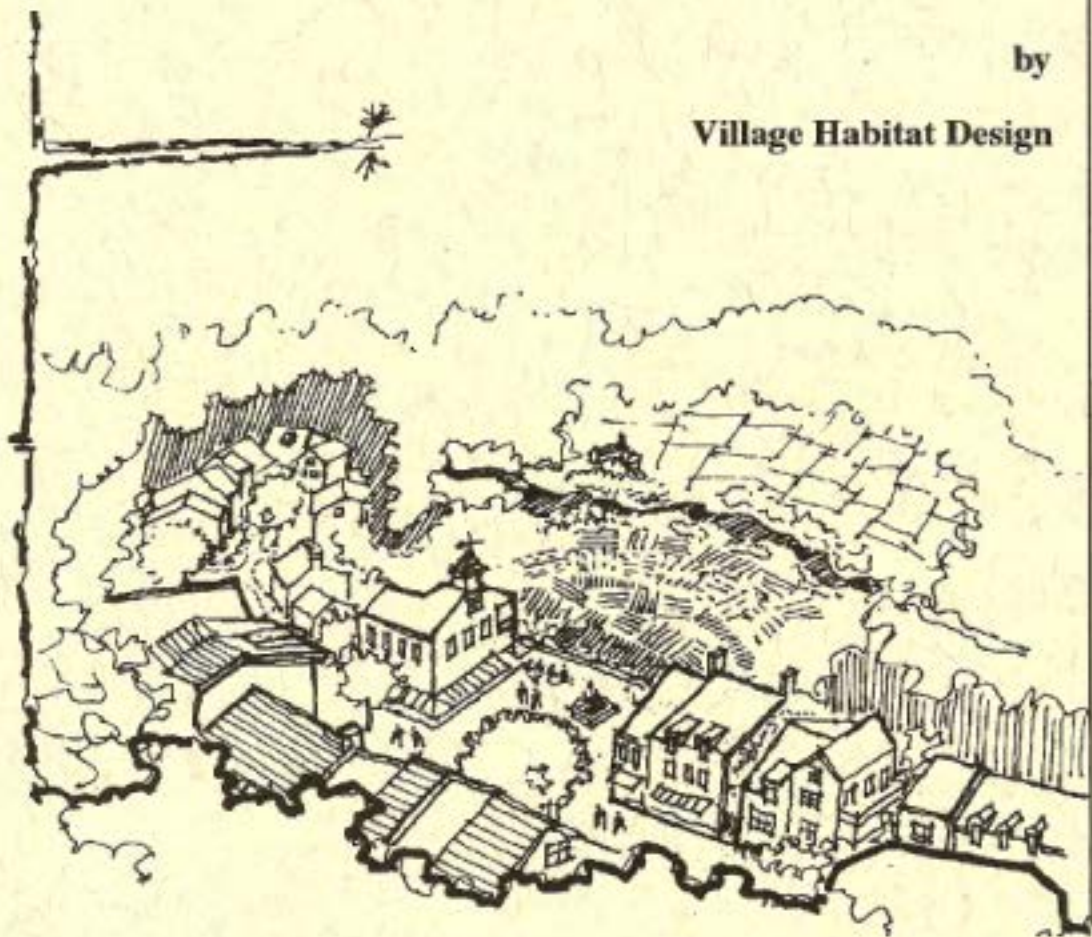


CONSERVATION COMMUNITY

An introduction to concepts and issues in the
establishment of the new American village

by

Village Habitat Design





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Clayton Preston & Greg Ramsey

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INTRODUCTION

The catastrophic consequences of sprawl development are beginning to be widely recognized by planners, environmentalists, social scientists, and the general public. In the Atlanta area, for example, the problem is already a crisis. Village Habitat Design has put forward a solution with the design and construction of a different form of real estate development, a form that we call Conservation Community.

In the 1970's Greg Ramsey's father, George Ramsey, then professor of Architecture at the Georgia Institute of Technology, began to formulate his ideas on practicable sustainable living. Over the course of several years of travel and research he made extensive study of European, African, and Asian villages -- communities that had sustained themselves for hundreds, even thousands of years without environmental degradation. From these he synthesized a framework for a consistently sustainable, yet uniquely American form: the American village.

Through years of working with his father, Greg helped to refine the interrelation of many of the systems that support a high quality of life without degrading the natural resources on which life depends. In 1989 Greg met Clayton Preston, an architect in Atlanta, who was sympathetic to the issues of sustainability. Together they have derived the principles of Conservation Community, and have formed Village Habitat Design, LLC to bring these principles to reality.

As Prof. Ramsey has found, the principles for the design of a sustainable community are intertwined with social issues. We at Village Habitat Design do not presume to prescribe how individuals should conduct their lives, and this booklet is not intended to suggest otherwise. Instead, we wish to acquaint the reader with an alternative to the ubiquitous suburban subdivision lifestyle, and to illustrate the advantages of that alternative, not just to the homeowner, but to the community and to the environment. And take note here, the Conservation Community can be and has been realized as eminently viable in the market place, without subsidy.

This booklet will present to you, in very brief form, the major concepts and methods of Conservation Community. We regret that this is neither a comprehensive nor an in-depth treatment of the subject, but we trust that it will permit the reader to visualize the rewards of living in the new American village.

WHAT ARE THE FEATURES OF CONSERVATION COMMUNITY?

- It preserves a large portion of the land for woodland and agriculture.
- It is pedestrian (walkable) Automobile space is subordinate to human spaces.
- It supports work and commerce within the community.
- It has a greater range of home prices.
- It promotes more daily community interaction of the residents.



THE LOGIC OF CONSERVATION COMMUNITY

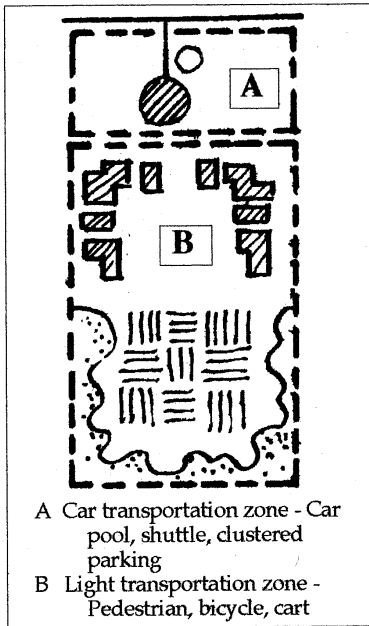
Three goals for any new development should be 1) reduce environmental degradation, 2) improve the quality of life, and 3) strengthen the community. Conservation Community achieves these goals by coordinating a more comprehensive range of considerations than does conventional subdivision development. The number of considerations, though large, may be discussed in terms of 3 main features:

- Land preservation by clustering the buildings,
- Improved utilization of resources, and
- Providing for work opportunities within the community.

Each of these features is comprised of many elements that interact to support and enhance the other elements. In Conservation Community, the various physical parts and functions of the community (buildings, transportation, food production and processing, recreation, systems, etc.) are interrelated -- cooperating, so to speak. The many interrelations, however, make this development pattern a bit difficult to describe. In reading on, you may find it helpful to bear in mind the ways in which each element connects with the others; both in terms of supporting the others and allowing other functions to take place. The greatest strength of Conservation Community can be found in this interrelation.

For example, clustering buildings brings them close enough together so that walking is a practical and enjoyable way to get around. More walking requires less driving which in turn yields less pollution, increased pedestrian safety, and the possibility of owning fewer vehicles. Clustering buildings also means that less land is disturbed by development. Undisturbed land means more natural areas. More natural areas allow for wildlife habitat, recreation space, and even agriculture.

The effect of these interrelations increases dramatically as more of such communities are developed on neighboring lands. Instead of wildlife areas being increasingly isolated from one another, ecosystems can remain connected, with the built areas only "islands" within them. And these islands of clustered buildings can be connected with a variety of more efficient transportation options. In these and many other ways, when several of Conservation Communities are in close proximity to each other the pooling of resources provides a valuable increase in the vitality of each community.



PEDESTRIAN PRINCIPLES

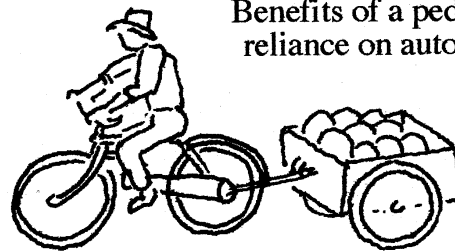
- Pedestrian density: Houses arranged close enough together to making walking and carrying goods easy.
- Pedestrian streets: Circulation is designed to be delightful to walk in.
- Parking outside the village: Walking through the village center to get home fosters interactions.
- Rest places: Small sitting spaces every 6 to 8 houses also encourage impromptu social interaction.
- Public/Private progression: Pedestrian spaces become more private as the street moves through the community.

The width of the parking lot for a suburban shopping center is farther to walk than the width of many pedestrian planned communities.

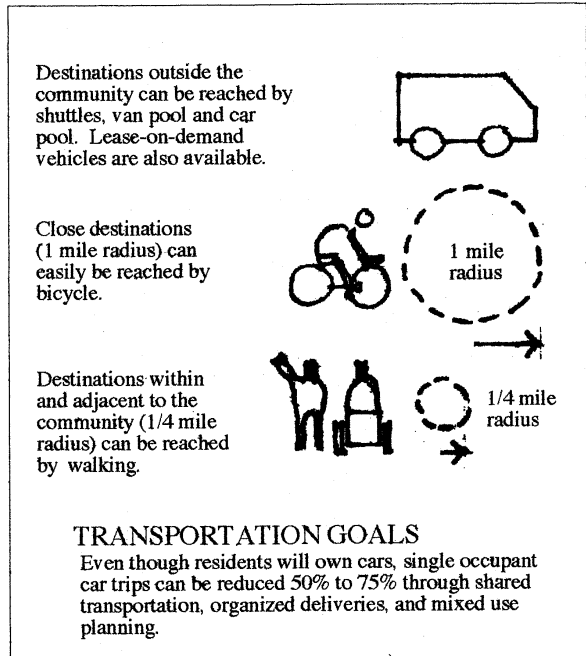
PEDESTRIAN PLANNING. Pedestrian planning is of tremendous importance as a feature of Conservation Community. It does not refer simply to making walking trails and shady benches.

It considers how far it is comfortable and convenient to walk for different activities, what activities can be reached without driving, etc. Buildings are arranged in close proximity to allow walking to be the preferred choice, not just a viable option. As a general rule, the higher the density the better the pedestrian environment. The optimum density is about 15 to 30 units per acre. There are several reasons for this.

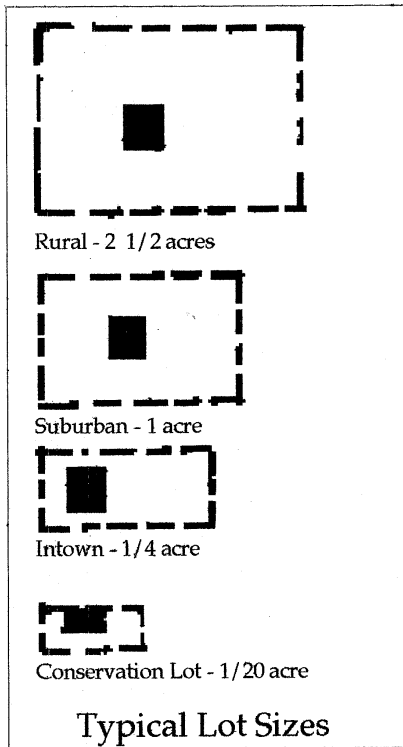
Primarily, at this density most of the things a person needs on a daily basis (services, daily shopping, recreation, socializing, school, etc.) are close enough together to walk to comfortably. In a community the size of a *village*, shops can have their entire customer base within walking distance. This can virtually eliminate a resident's need of a car completely, which, alone, is a tremendous step toward affordability for many people.



Further, within this rich walking environment there is space for plazas, courtyards, and small gardens. Benefits of a pedestrian community include less reliance on automobiles, greater safety for small children, greater security, and more time in your daily life, all of which promote a more vital community.

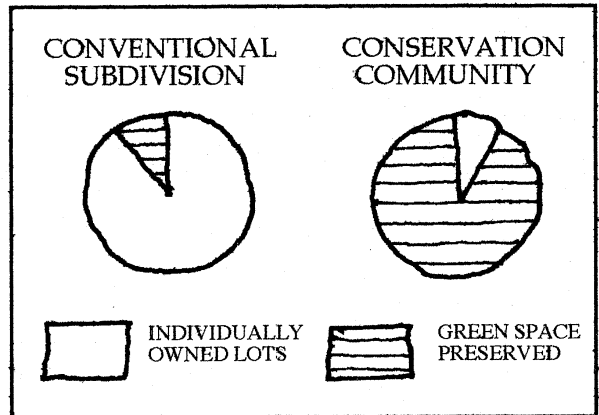


LAND PRESERVATION



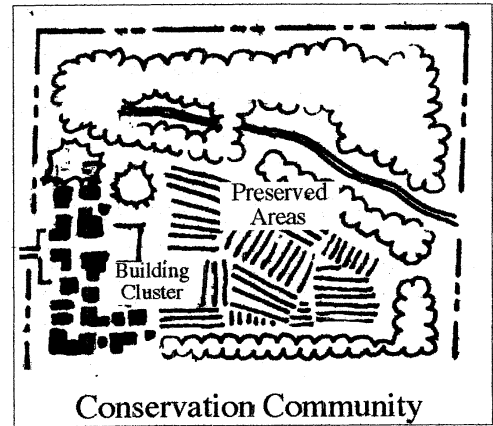
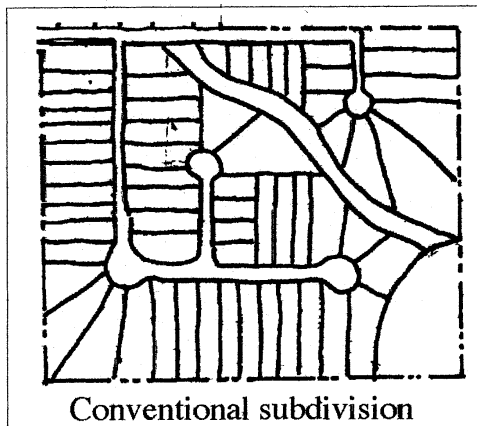
The first principle of conservation in real estate development is the protection of land. This seems to be an oxymoron: how can building homes be an instrument of preserving land?

The answer lies in changing the way land is currently developed. In conventional development, homes or commercial buildings are spread evenly over a parcel of land. In conservation development, the buildings are gathered together on a small portion of the land, leaving the balance of the land undeveloped. The main tool for doing this is called Offset Density.



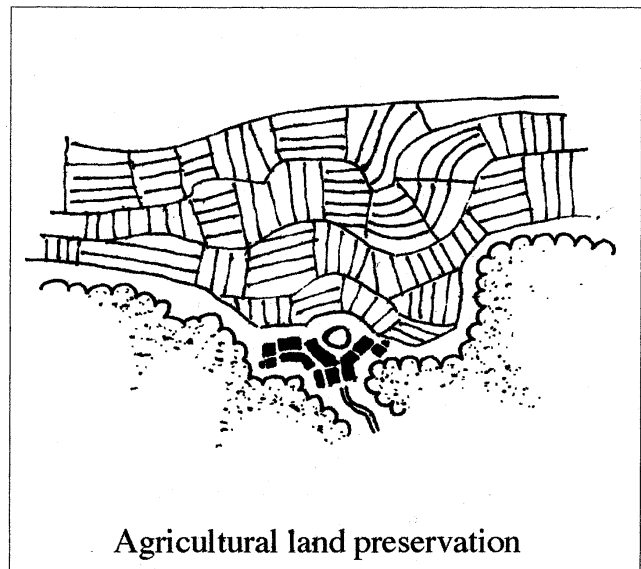
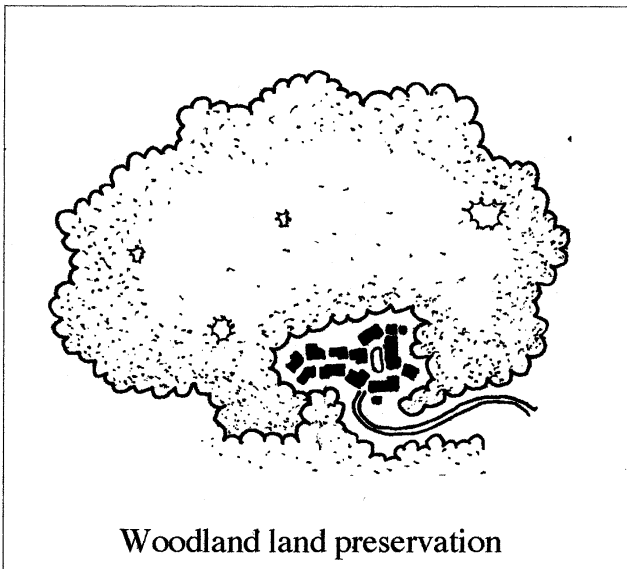
OFFSET DENSITY is the clustering of buildings together on a piece of land, rather than spreading them out evenly. The area that remains undisturbed by the buildings can remain in pristine condition. For Example, a 100 acre suburban parcel may be zoned for 1 house per acre. Instead of placing 1

- BENEFITS of OFFSET DENSITY**
- Preserved green spaces.
 - Walkable communities.
 - Lower cost of construction and maintenance.
 - More community interaction.
 - Adjacent developments can join Woodland Areas together.



house on each of 100 acres, a conservation development can place the 100 houses on 7 acres. This leaves the remaining 93 acres to be protected by conservation easement.

Such an easement defines precisely the allowable uses for that land. For instance, it might specify that up to 20% of the land area can be used for agriculture, that camping structures totaling no more than 600 square feet may be constructed, or that no paved roads will be constructed on the preserved area.



Conservation Easements are already being used widely to protect land permanently from future development and are an excellent counterpart to Offset Density development.

It is important to note that these home lots are owned outright by each individual resident. Common areas, conservation areas, and shared facilities may be owned in common, but the homes themselves are owned fee simple by the individual residents

Thus, land preservation groups can use Offset Density as a practical tool for preserving large tracts of wilderness in pristine condition. In rural areas, with carefully planned developments, the rate of land preservation can be as high as 97%. This means that for each 1000 acres of land purchased, 970 acres can be permanently protected from future development.

Conservation Easement

- Permanent protection from development
- Substantial tax benefits
- "Held" by a conservation group, such as The Nature Conservancy.
- Preservation of threatened family farms

COMPONENTS OF A CONSERVATION COMMUNITY

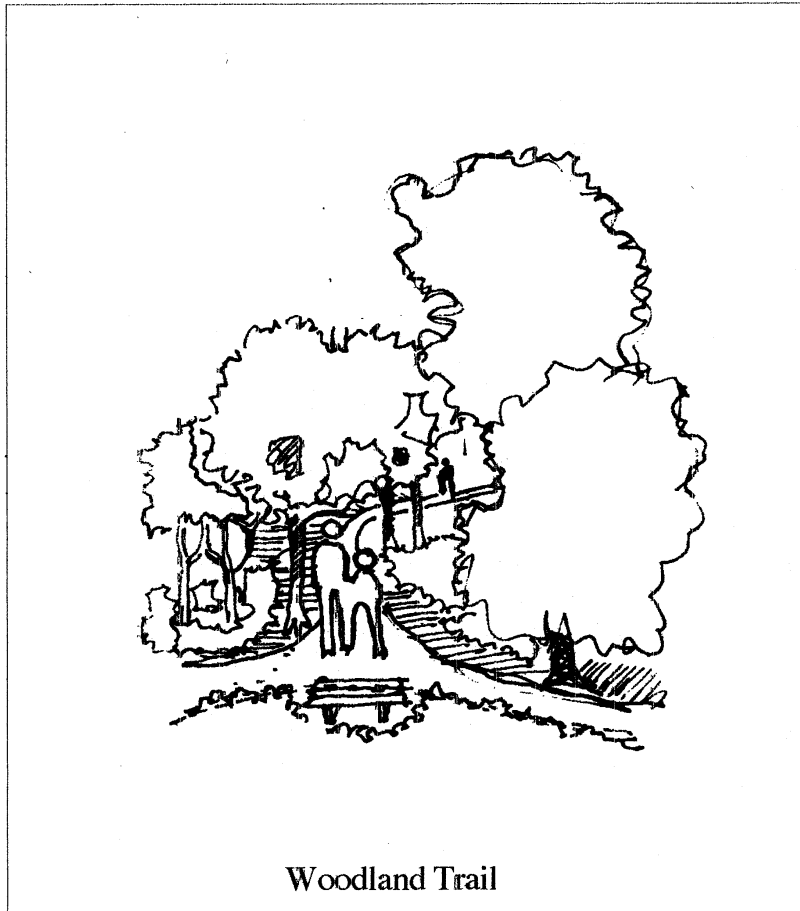
A Conservation Community consists of 3 main components: the Woodland Area, the Agriculture Area, and the Building Cluster. The division of the available land for these three is possible when Offset Density is used to cluster the buildings on the site.

WOODLAND AREA includes several related and overlapping systems. Mature trees, undergrowth, meadow, wetland, pond, and stream each provide habitat for the intricate web of plant and animal life. The Woodland Area is left undisturbed as wildlife habitat. Construction materials for the community such as timber, can also be harvested from the Woodland Area, provided the means cause a minimum of disturbance to the ground and other plant life.

Woodland Areas are also used for recreation and education. Nature trails, camping, bird watching are just a few of the recreational uses of the Woodland Areas.

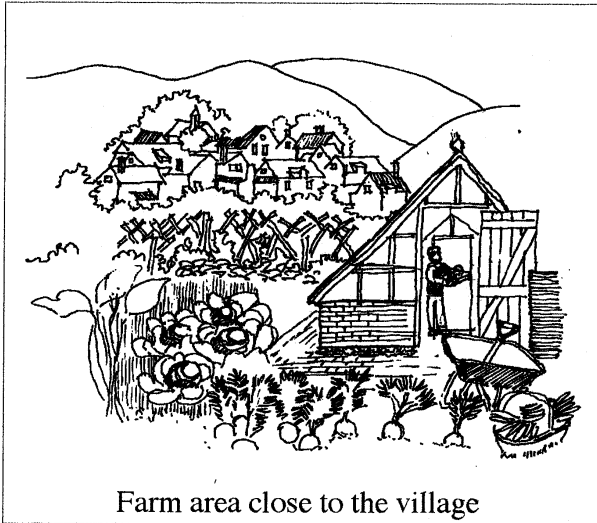
Many schools require students as young as 8 years old to make several 3 to 5 days excursions to primitive camps as part of their required education. Conservation Communities provide this opportunity to the residents on an ongoing basis. It can also provide employment opportunities for the community to provide this service to the public.

Many of our grandparents lived in a rural area and had nature as a daily companion. Most of us today visit nature only on occasion and after extensive planning. Within the Conservation Community the opportunity to live in daily contact with nature returns.



Woodland Trail

AGRICULTURE AREA is an essential part of the Conservation Community. It not only provides food for the residents, it also provides employment, educational opportunities, and recreation. The term "agritainment" has been coined by owners of small farms who invite the general public for a limited experience of the farming life such as planting, harvests, hay rides, etc. These farmers have found this to be an effective way to increase revenue. In all of these ways, Agriculture Area enhances the sustainability of the community by providing for more of the needs of the residents within the community itself.



Farm area close to the village

Food production for residents of the community is often undertaken as what is called Community Supported Agriculture (C S A). In this model, the community hires a farmer to work the land, and gets produce in return. The farmer and the community together will determine the

farming practices to be used, crops to be planted, etc.

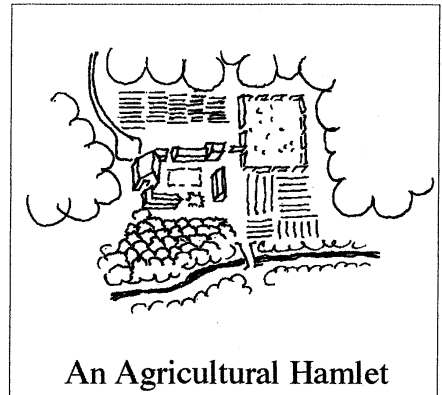
Conservation Communities typically emphasize the importance of organic farming practices. This is important for several reasons. The energy otherwise used on the transportation and manufacturer of chemical fertilizers and pesticides is conserved. The chemicals are unhealthy for humans and the plants and animals in the area. Chemical runoff into streams poisons the water and carries the problems farther from the site.

BUILDING CLUSTER:

The Building Cluster, described in the next section, will contain the residences, the work spaces, the community buildings, and parking areas. These are arranged to enhance the pedestrian quality of the community.

Communities have several forms of agriculture.

- Community Supported Agriculture
- Neighborhood garden
- Kitchen garden
- Edible Landscaping



An Agricultural Hamlet

A LOOK AT THE BUILDING CLUSTER

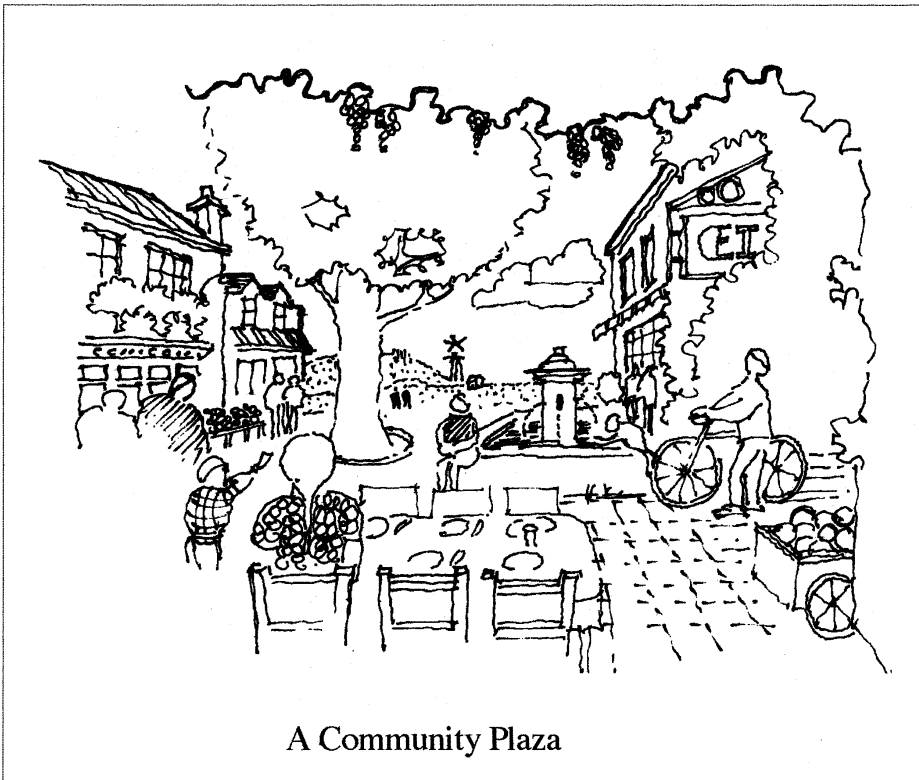
The Building Cluster is the smallest area of the Conservation Community. As has been explained above, its small size allows for the preservation of green space and enables the community to be walkable.

RESIDENCES in the Community. House lots usually range anywhere from approximately 750 sq. ft. to 5000 sq. ft. They are primarily fee simple single house lots.

Some lots can be designed for 2 or even 3 smaller homes (a typical European village pattern). These smaller homes have individual entries from different levels. The practice of combining several smaller units on one lot helps make small units more affordable. This can be vital for elderly, and single people.

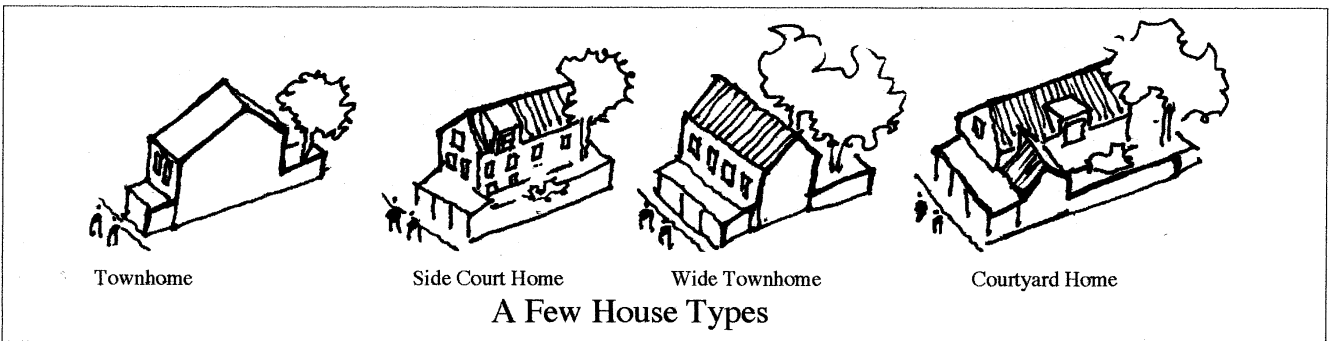
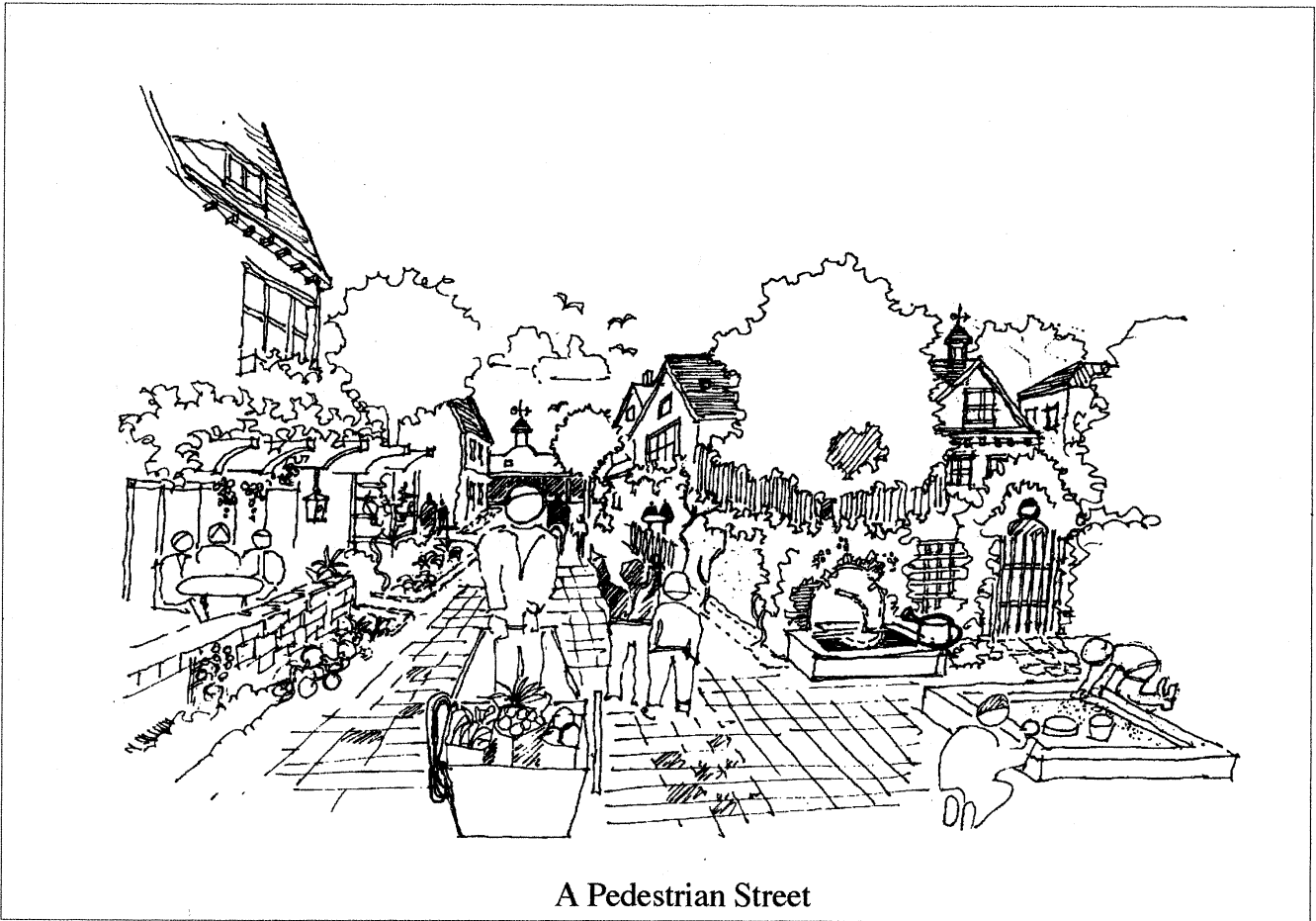
The smaller lot size does not cramp the living space of the residents because the community offers such a wide variety of outdoor spaces such as private patios, courtyards, and pedestrian streets. Not to mention the expanses of garden and Woodland Areas.

One of the greatest advantages within a Conservation Community is the broad range of housing

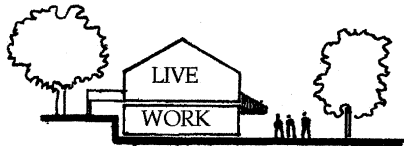


A Community Plaza

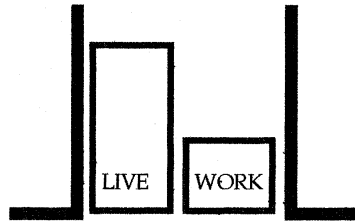
costs. This range is not only an advantage in marketing the residences, but brings vitality of the community.



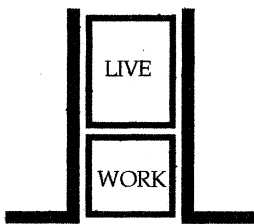
Conservation Community



Over and under



Side by side



Front and back

EXAMPLES OF WORK IN THE COMMUNITY

Agricultural: CSA, herbs, flowers, vegetables, nuts, orchards, bee keeping, nursery, mushrooms, aqua culture systems, as well as **Value added processing:** jams, jellies, condiments, juices, and extracts.

Services: Teaching, child/elder care, handy man, 25th hour

Electronic businesses and professions that are not "place specific": CPA, technical support, consulting

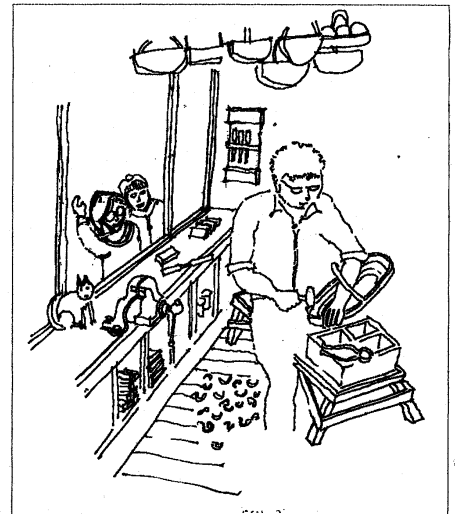
Crafts: Pottery, woodworking, black smithing, textiles, book binding

Educational seminars, retreats, and demonstration of the community.

Eco-tourism

By offering a broad range of housing options, the community will have a broad range of people living in it. To illustrate: A CPA living in a 4 bedroom home hires the carpenter to build the carriage house apartment that will be rented to the retiree who will baby sit the children of the gardener, the carpenter, the CPA, and others. The carpenter's family lives in a small townhouse. A baker lives in the apartment on the second floor of her bakery and rents the third floor to an assistant. Two single people (one retired, one fresh out of school) own a townhouse that is comprised of two separate stacked units. An empty nester owns a small boarding house and rents rooms to a student, a computer technical support rep., a handyman, and a nurse-practitioner. This represents a range of housing costs of \$450,000 homes, \$200,000 to \$110,000 townhouses, \$55,000 flats, and \$100 per week rooms. It also represents significant work opportunities within the community.

WORK SPACES within the Community. In talking about "units per acre" we are referring to dwelling units, which in the context of Conservation Community includes provision for commercial use. (This combination of functions is also referred to as "live/work.") Commercial uses will typically be placed on the first floor with residences above -- either apartments or owner occupants. This arrangement has the benefit of enhancing the daytime activity on the pedestrian streets. Christopher Alexander refers to this as "visible work place" in his book *A Pattern Language*. People on every continent have the experience of standing outside a shop window, watching a tradesman perform his craft, while the aromas of bakery or florist waft on the breeze.



Often a separate commercial cluster will be developed fronting on the main road. This cluster will be oriented toward trade with the public as well as the community's residents. It

would also have residences on the upper floors.

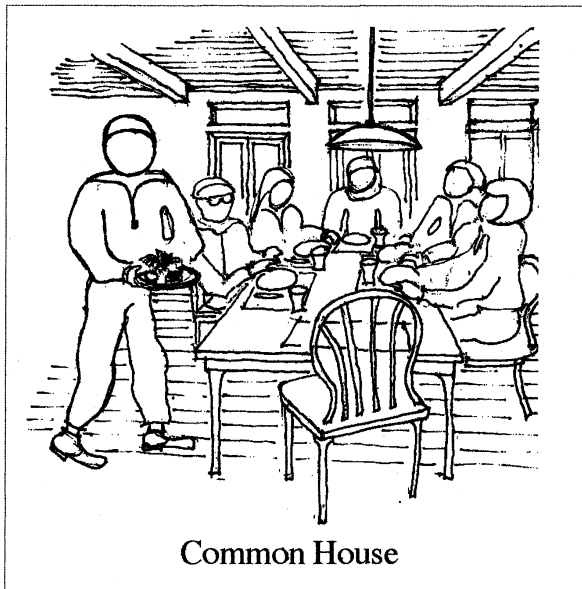
It is important to recognize that the presence of commerce and work opportunities within the community are an essential part of the sustainability of the community. Residents who work in the community are not wasting resources and causing pollution by commuting or running daily errands in single-occupant autos. The amount of work taking place in any particular community will depend on a great many factors including the size of the community, the productivity of its Agriculture Areas, proximity to other residential and commercial areas, access to mass transit, and so on.

COMMUNITY BUILDINGS and other shared resources make up a large part of the improved utilization of resources that is so important to conservation. As will be elaborated below, according to Durrett's and Macamant's CoHousing model, each neighborhood of 15 to 40 homes has its own community building, called the Common House.

This community building is not merely an amenity for the enjoyment of the residents; it is also a center for the shared resources of the community.

While it may house a playroom, the residents are free to organize their own child care program. In a community made up of several *neighborhoods* with several community buildings, this broadens the range of shared resources, and increases the utilization of each.

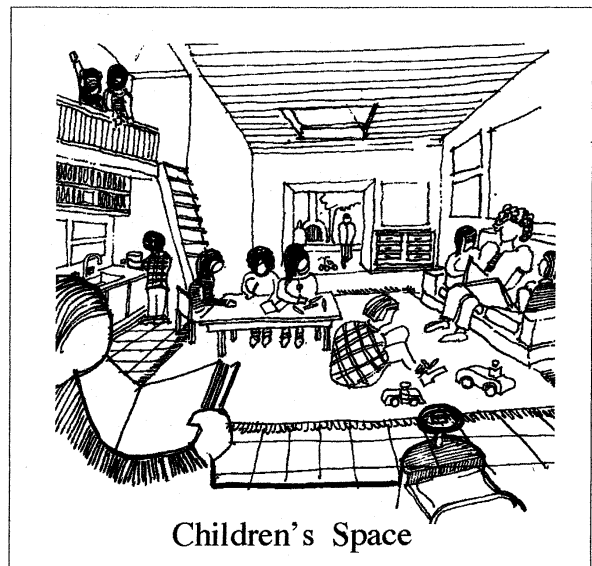
Of course, the community may also have other shared buildings such as garden shed, pavilion, camping facilities, or dedicated guest cottages, work shop, or craft studio.



Common House

Community building functions

- Kitchen and dining
- Child play room
- Library
- Craft studio
- Guest rooms
- "Commercial" laundry
- Workshop
- Recycling collection
- Teen room
- home school



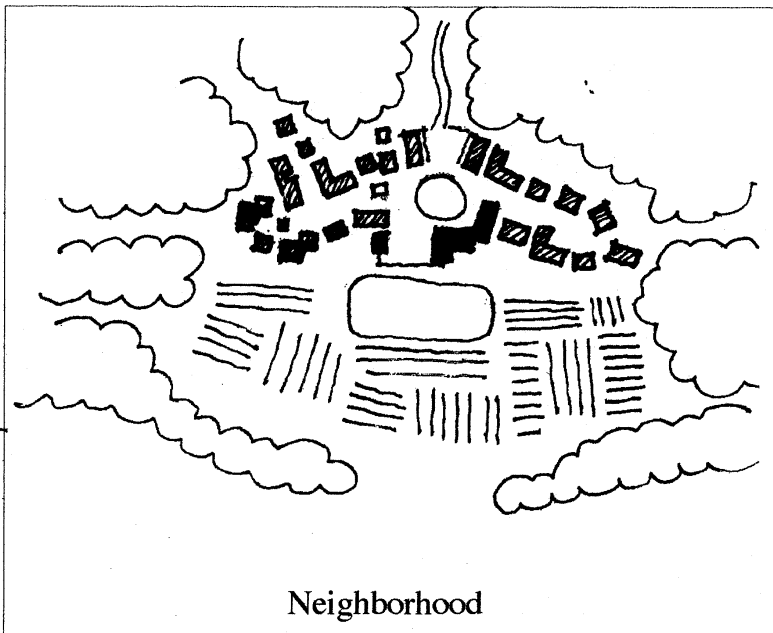
Children's Space

WHAT SIZE IS THE COMMUNITY?

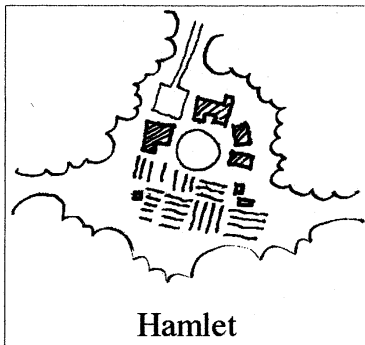
The work of Chuck Durret and Kathryn McCamant, in forming the CoHousing model of residential development,

shows us that the size for a basic community is 15 to 40 homes, with the ideal in the range of 20-35 homes. We call this a *neighborhood*. 20 to 35 homes contain enough people to gain real efficiencies from shared resources, but is small enough that all of the residents can know each other and interact frequently.

Larger communities can be formed by grouping 2 or more of these *neighborhoods* together. When 3 or more *neighborhoods* are linked together, they form a *village*. It is certainly possible to build a smaller Conservation Community than a *neighborhood* of 15 homes. This we refer to as a *hamlet*. Because it contains fewer residents, a *hamlet* will have fewer shared resources.



Neighborhood



Hamlet

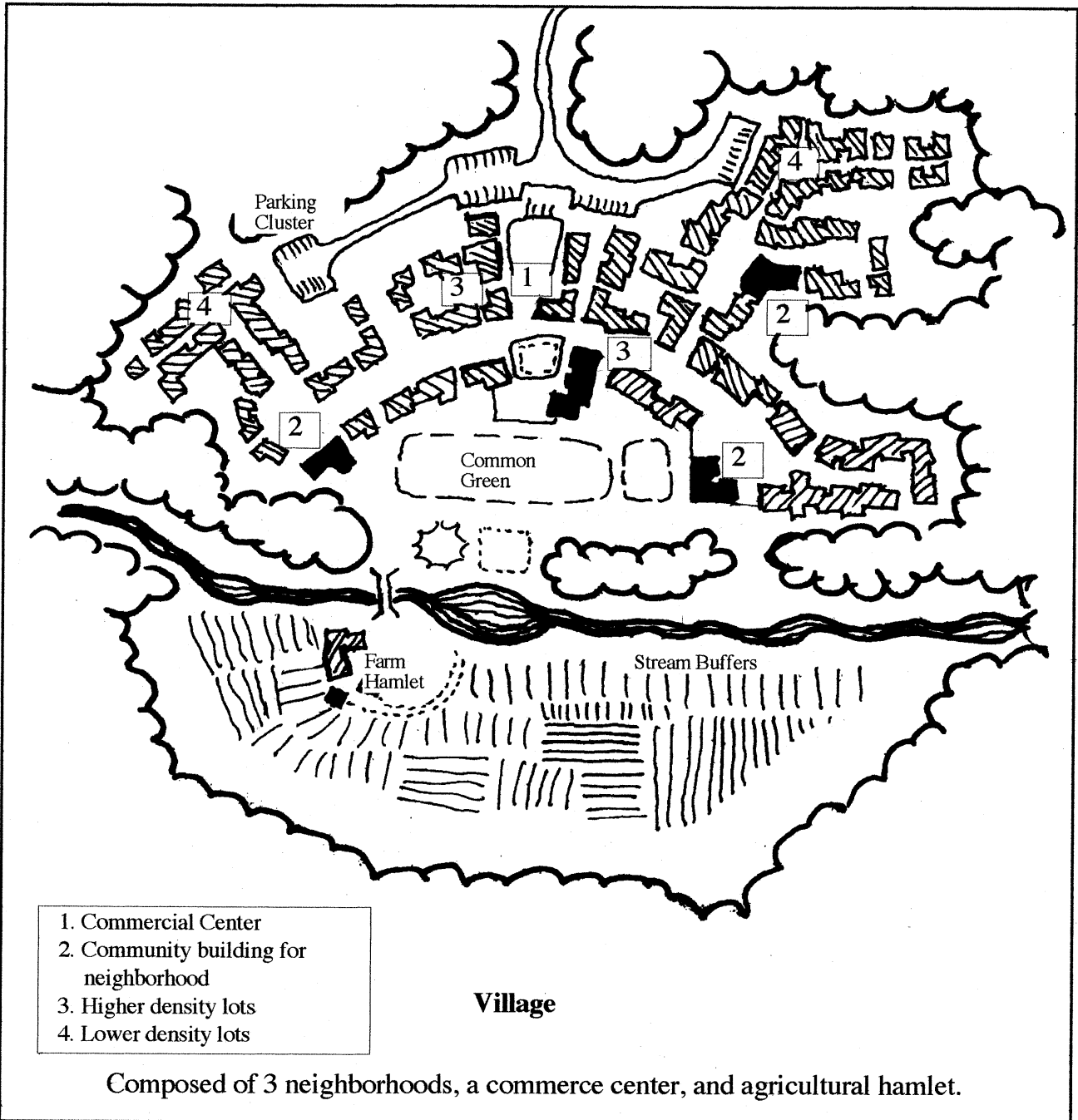
With these three building blocks (the *hamlet*, the *neighborhood*, and the *village*), conservation projects of any size can be effectively developed.

LOT SIZES. Building lots are obviously much smaller than in conventional subdivisions. There are two general sizes: Low density -- 2500 to 5000 square feet -- and High density -- 500-2500 square feet. A community may have any mix of these sizes, depending on other design criteria. Larger sized (low density) lots are usually reserved for special circumstances or higher density building, such as multiple units (apartments) on one lot. Obviously, the higher the density, the more land preservation that is possible.

A low density lot would typically have a one- or two-family detached home, or a small apartment building. High density lots have attached townhouses, stacked flats, or smaller detached homes. Again, when we refer to homes, we are also talking about optional work spaces, usually on the first floor.

APPROXIMATE PROJECT SIZES

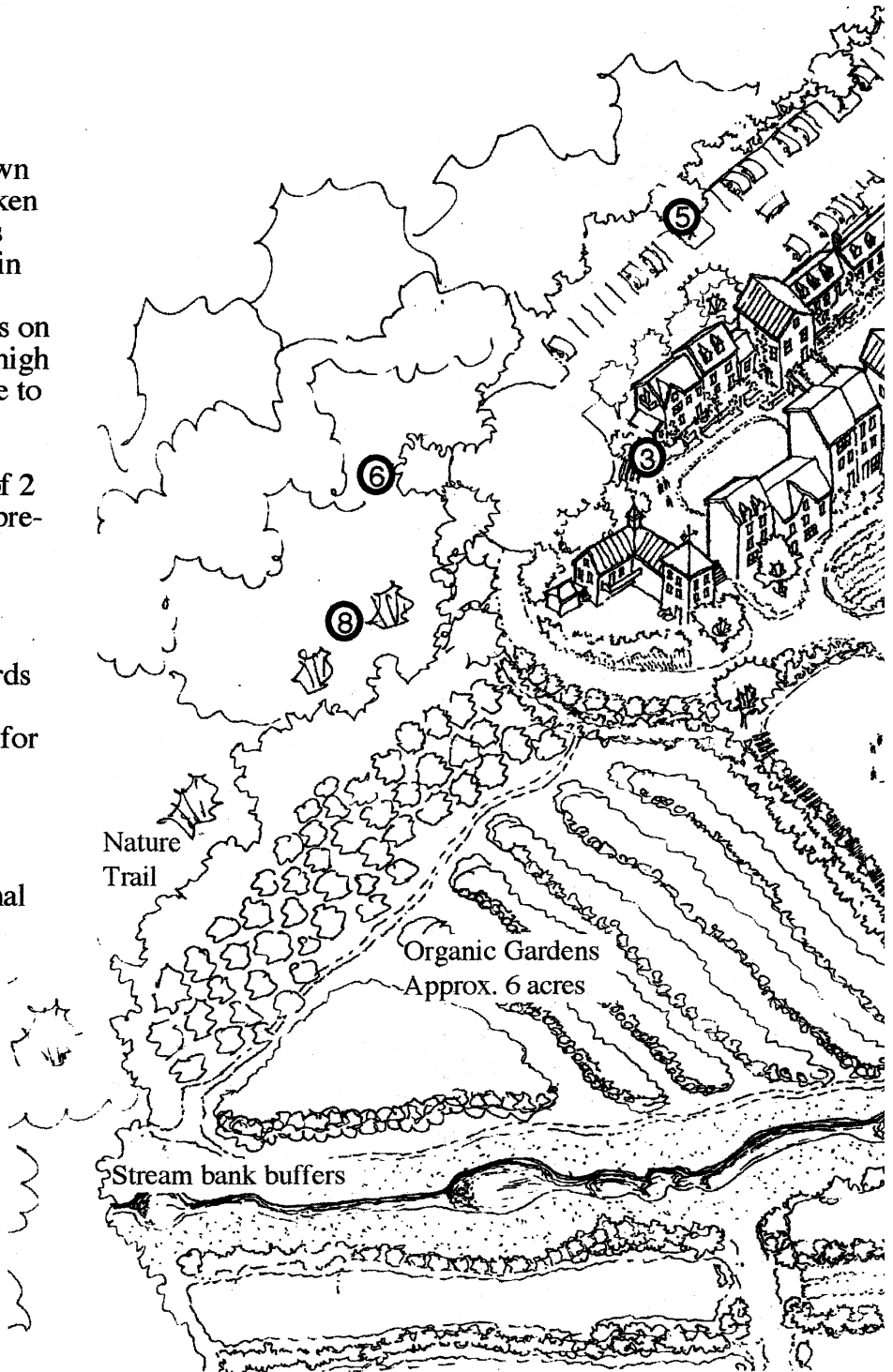
Hamlet	4 to 14 homes
Neighborhood	15 to 40 homes
Village	100 to 1000 homes
* A Village is made up of several Neighborhoods	



East Lake Commons is an intown conservation development undertaken by a professional developer. It was master planned by Village Habitat in 1997.

The land was zoned for 72 units on less than 18 acres. Even with this high starting density the project was able to preserve 9 acres as garden, stream buffer, and even a small woodland area. As of this printing, Phase 1 of 2 is under construction and is 100% pre-sold.,

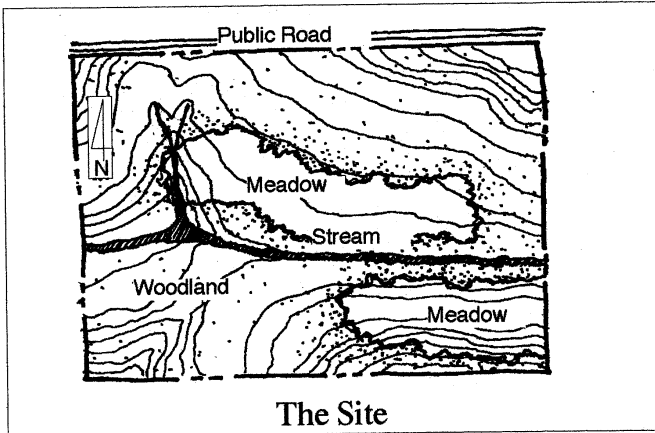
1. Pedestrian Streets
2. Semi Private courtyards
3. Semi-Public Plaza
4. Community building for 35 homes
5. Clustered Parking
6. Storm water retention/purification
7. Neighborhood personal gardens
8. Nature trails



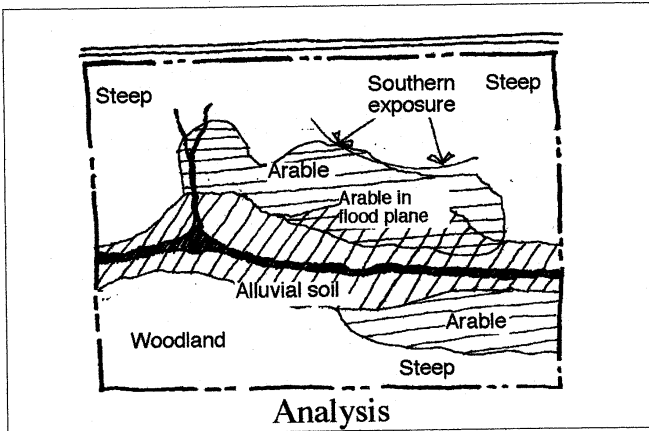


East Lake Commons Aerial Isometric

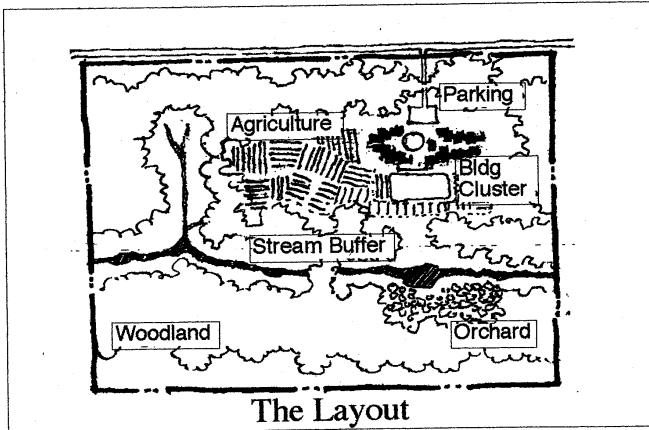
SITE LAYOUT



The Site



Analysis



The Layout

SITE ANALYSIS indicates which areas are most ecologically sensitive and which areas are most suitable for agriculture. The building site is then located in the least damaging part of the land. Other general rules of thumb are to locate the building cluster a little removed from the main road, on high ground, on a southern slope, close to existing structures, and away from more sensitive wildlife areas.

BUILDING CLUSTER The Building Cluster is placed near the main road in order to reduce the amount of paved drive necessary to reach the project. Placing the Building Cluster closer to the road reduces the costs of installing all of the utilities that are brought to the cluster from off site. Such placement also allows a *village*-size development to have a commercial presence on the road without that area being too remote from the main building cluster.

The higher elevations on the site are preferred as building sites. That allows more room to divert storm water runoff into retention ponds before it reaches a stream. In projects where public sewer will not be used, you will need acreage for septic treatment systems (including water reclamation and composting solids) that are down hill from the building cluster, but at a safe distance from any wetland area (the lower areas of the site). The higher elevation places the buildings farther from streams, which tend to be the more sensitive wildlife areas and need wide areas of undergrowth to protect them from erosion. Stream buffers make excellent wildlife corridors for larger species. Finally, the higher elevations are generally less suitable for agriculture.

Southern slopes are better for solar exposure and for gardens and landscaping around the building cluster.

LOCATIONS: Urban / Suburban / Rural

Conservation development is often thought of as a rural farm idea. However, there is definitely a place in the idea for the inner city or suburban areas. By converting previously

developed urban land it is possible to recycle a portion of the energy and material that has been expended on the existing facilities. This conversion also allows us to make use of existing, surrounding resources rather than recreating those resources in a remote location, and it allows us to reach those resources without using single-occupant vehicles traveling great distances.

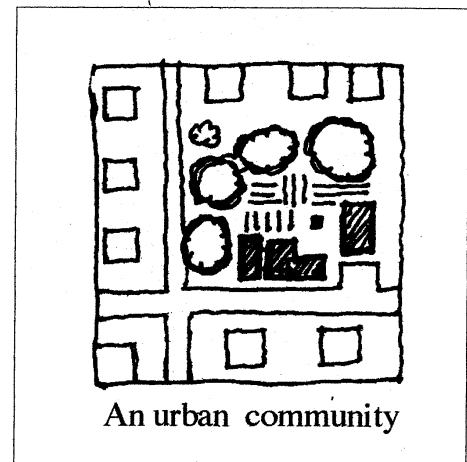
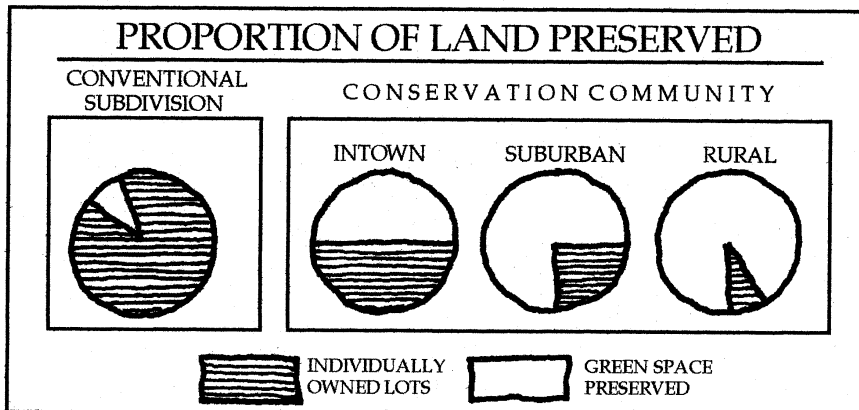
URBAN. An old downtown warehouse could provide an example of urban conservation development. The warehouse interior can be converted to comfortable living space and work space; the roof can be used for gardening and solar collection; the parking area is minimized and covered with arbors.

While this is perhaps not the most obvious form of Conservation Community, it is certainly contributing to the wise use of existing resources.

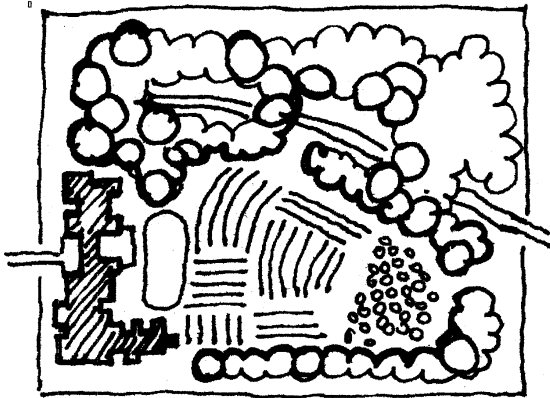
Urban areas that have decayed, where many of the houses have been demolished or abandoned, could provide other examples of urban conservation community.

Vacant lots can be rebuilt with new structures clustered together at one corner of the property, leaving a majority of the land for gardens.

East Lake Commons, in the East Atlanta area, is an example of this type of project. That development is on an 18 acre tract which had previously been divided into duplex lots. The total conservation area is approximately 52%.

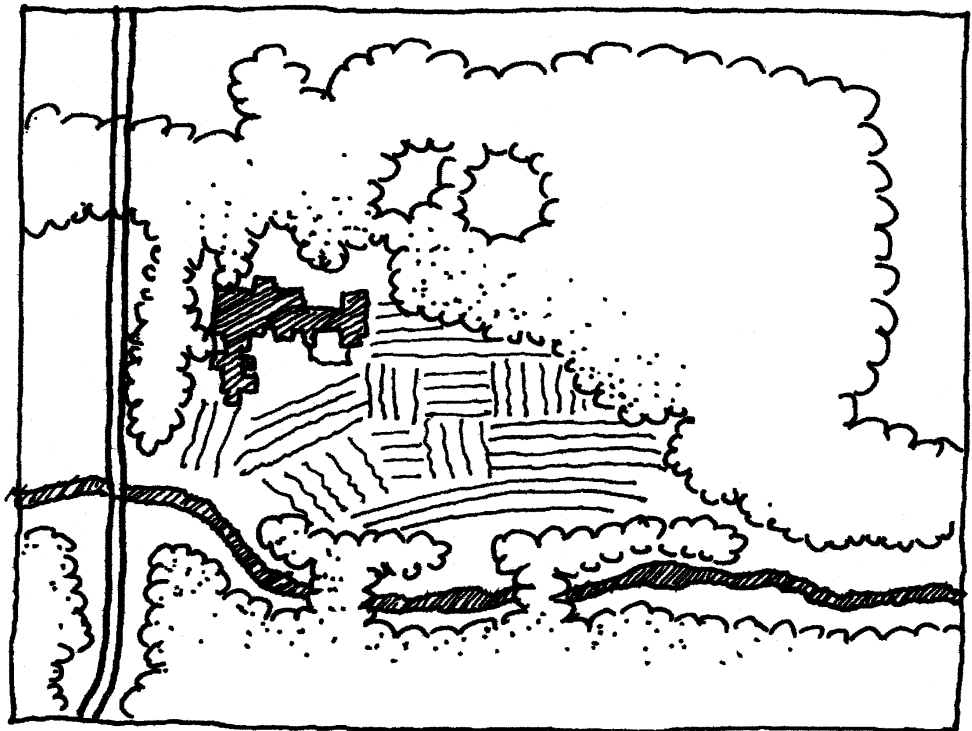


SUBURBAN Conservation Community development has begun to emerge as an increasingly popular approach. Inner-ring suburbs are becoming less habitable due to choking traffic. It is now economically and politically viable to develop more self-sufficient communities that do not rely on automobile travel for basic daily functions. Often the neighbors of a piece of land prefer the prospect of the woodland and field being preserved rather than being cut up into another subdivision. Starting with a conventional suburban density, a conservation community can preserve 75% of the land.



A suburban community

RURAL Conservation Communities. In rural settings land is typically developed at a much lower density than Urban or Suburban developments. By maintaining the Building Cluster at a high density, 90% of the land can be preserved. This is enough green space to provide up to 80% of the food and building material required by the community.



A rural community

DEVELOPMENT ENTITY

A conservation development can be created by either of two entities: Core Group or Developer

CORE GROUP. Historically, a Core Group of dedicated individuals has usually been the prime mover behind a new conservation development. Often the group will form and grow before a potential site is even identified. Once the site has been selected, a the Core Group becomes a great deal more focused. At some point during the process they will begin to actively seek new members who will become future residents.

As new members join the Core Group they will be accepting the previous decisions of the group, and influencing the future decisions. New members add vitality to the group, and increase the resources available to undertake the project. There is plenty of work to do in the planning stages, and it is an advantage to have many members to spread the work among. There are also distinct economic advantages to having a large group early in the process. Land can be purchased without borrowing. Sometimes even infrastructure can be built without borrowing.

The group will be responsible for the development process including construction of the infrastructure. In many cases they will hire a development consultant or a construction manager.

A community may develop a particular focus of interest that attracts other people who share that interest such as:

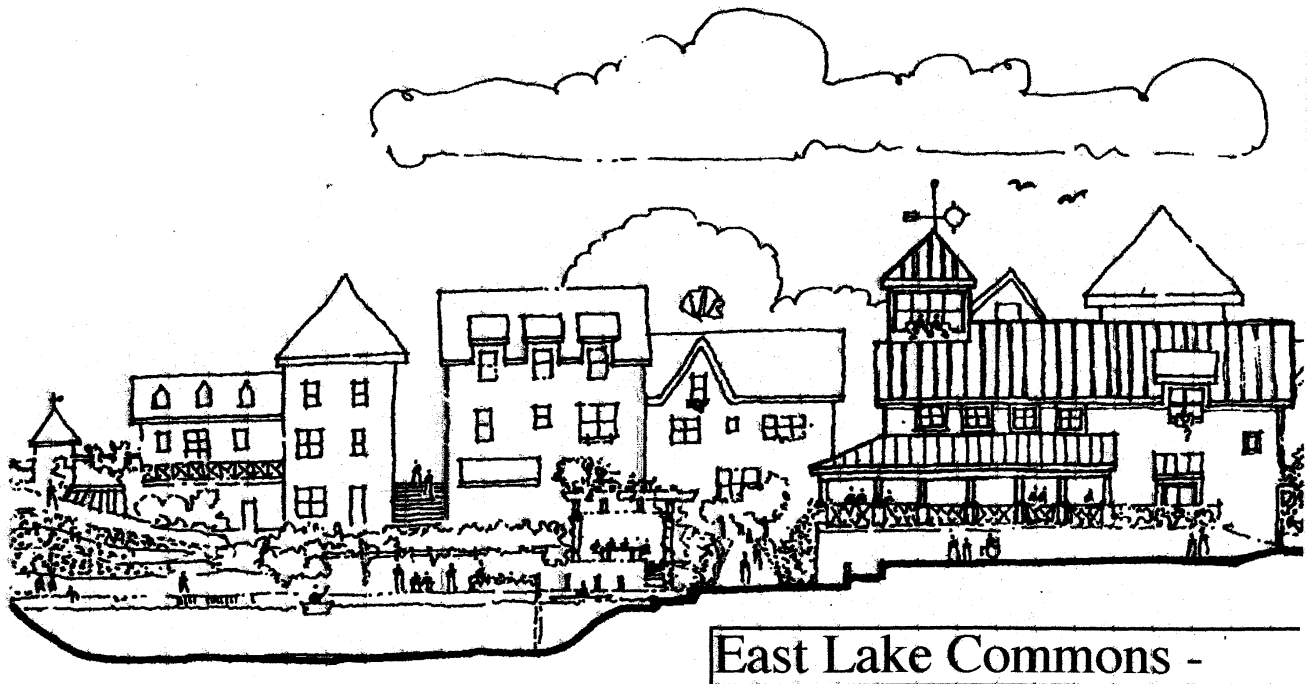
- Eco-village
- Spiritual beliefs
- Arts / Crafts
- Equitation
- Gardening
- Sportsman



CONSERVATION REAL ESTATE DEVELOPER.

This approach is similar to conventional real estate development. The conservation developer will make the initial decisions autonomously. These will likely include choosing the property and arranging the financing. If the developer chooses to sell completed homes rather than simply improved lots he will decide on a price range for the houses and the contractor to build the project. It will likely be planned to be built out at one time or in large phases. A new resident will be brought into the residents' group when he signs a contract for purchase of a unit and pays a deposit.

Conservation developers allow varying degrees of in-put and direction from the residents' group. In some cases the residents will have only minimal in-put. In others, residents may make major decisions, such as what community buildings will be built, and the schematic design of the homes and community buildings.



Conservation developments planned by Village Habitat Design have enjoyed strong pre-sales. This is a big advantage to the developer who is looking for financing.

The developer model has other advantages for the residents as well. There is less risk for them; the developer will be responsible for the complex and costly development process.

In both the Core Group and the Developer models, the future residents begin to work together long before the first shovel of dirt is turned. In the process they learn to resolve issues, make choices, and generally begin to function as a community.



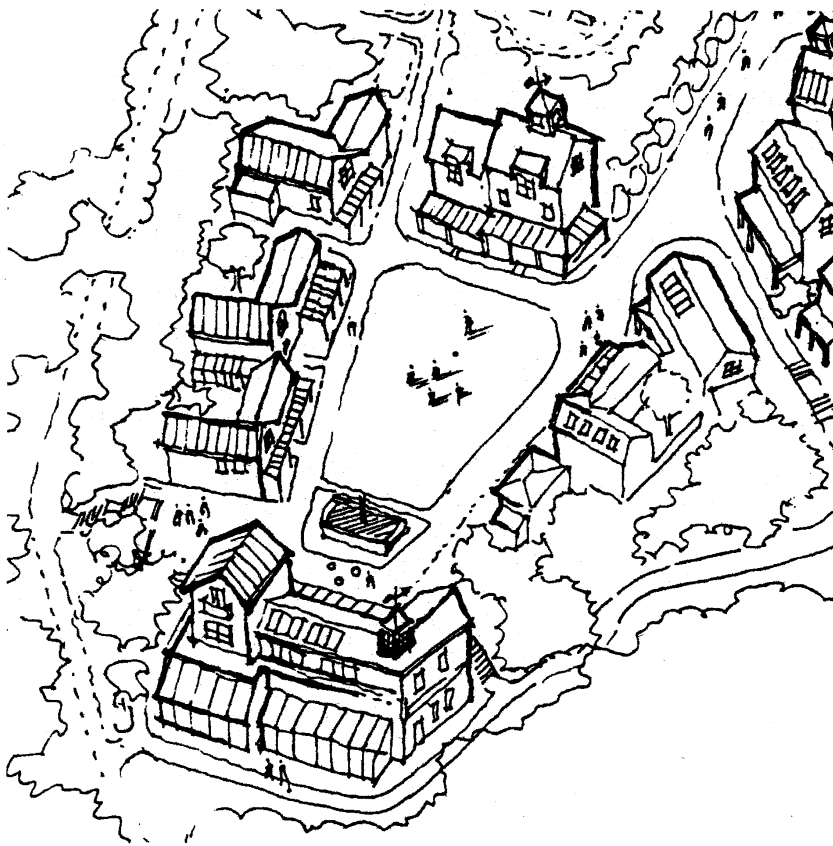
- Section through building cluster

BUILD-OUT OF THE CONSERVATION COMMUNITY

It takes time to build a community. The construction of the buildings is a large part of that. And the work of adding more amenities and features is an ongoing process. The construction of the buildings can take place at once, or over a long time.

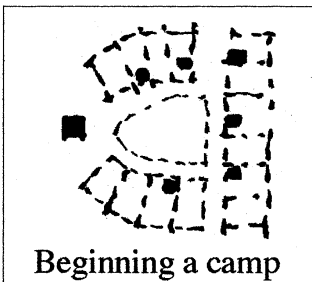
HOME SALES. The fastest and most immediate construction involves preplanning the home designs and selling the lots with home construction included. This is typically the builder/developer model. The developer will offer a variety of prototype home plans that will be built for the purchasers. These plans can offer a variety of customizations to allow the purchasers to individualize their homes for their specific needs. The developer may choose to build some homes "on spec" to fill out a phase.

LOT SALES. The intermediate model involves selling lots without specific home plans. Once the village plat is prepared, lots are offered for sale. The residents who join the community early will have the first choice. The dwellings can be selected by the purchasers from a set of stock plans or custom designed. Each individual contracts with a builder for the construction of their own home (some people will choose to build their homes themselves). Architectural design guidelines are established in advance, either by the developer or the Core Group. It is often desirable to limit the choice of builders to a pre-approved list to ensure quality of construction.

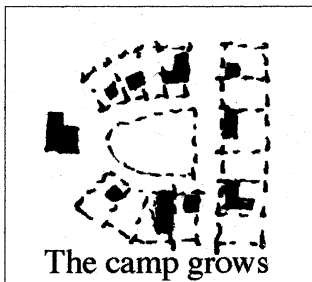


CAMP. The long term model establishes the community first as a Camp. This model is appropriate for rural settings only. One or two room structures without plumbing are built on village lots. The original common buildings are a bath house and a kitchen/dining hall/community room. Over time members enlarge and improve their “cabins” until they can become permanent residents of the community. As this process takes place, all of the systems of the community are gradually

developed and improved. This model allows for the lowest up front cost for starting the community. In each of these scenarios it is a good idea to divide the plat into phases. Phase one



Beginning a camp



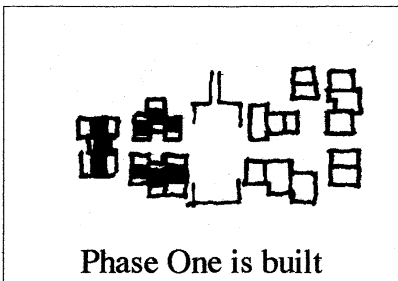
The camp grows



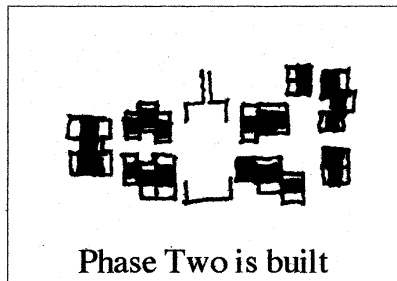
A village emerges

is sold out before phase two is offered. There are several reasons for this. Infrastructure costs can be limited to that particular phase. Phasing also helps discourage non residents from speculating on lot prices.

A note about speculating on lots: People are coming to realize that well-planned conservation communities are excellent investments. While it would certainly be nice for the developer’s cash flow to have people buy large numbers of lots for future resale, there are good reasons



Phase One is built



Phase Two is built

to discourage this. A community of clustered homes is at a disadvantage if there are many vacant spaces within the community. Speculation inhibits the benefits of clustering the homes and deprives the community of residents who contribute their time and energy to the vitality of the community.

Methods to discourage speculation:

- Increased home owner dues for lots that remain vacant.
- No voting for lots that remain vacant.
- One vote per owner
- Individual owners only - no corporate owners

INFRASTRUCTURE, ZONING, MARKETING

INFRASTRUCTURE costs can be much lower for a clustered development. A great deal of 'trunk line' costs can be saved by locating the building cluster close to the point that services enter the site. Distribution of services within the cluster is much shorter, though such compactness requires extra care in planning and installation.

Paving area is also drastically reduced. A clustered development located near the public road can have as little as 1/10th of the paved area that a comparable subdivision would have. This means not only 1/10th of the up-front costs, but also 1/10th of the on-going maintenance costs.

Reduced paving makes storm water damage to streams easier to reduce for two reasons: Clustered development has less impervious surface to shed water into the streams. The compactness of a cluster makes it easier to collect and treat storm water runoff.

Hardscape and landscape costs will be concentrated into a much smaller area. The outdoor spaces of a pedestrian community are more lavishly furnished than a drive-through subdivision, but at no more cost.

These savings also include the savings from the "hidden costs" of sprawl development which are beginning to be recognized. Purchase and operation of one automobile is estimated at \$6,500 per year. This figure does not include the time lost driving errands or commuting. In Atlanta, that time typically amounts to 1000 hours per year per driver. The further costs of pollution and social isolation are real, but hard to quantify.

ZONING is recognized as, perhaps, the single largest impediment to Conservation Community projects. Local authorities are beginning to understand that the zoning regulations need to accommodate more ecologically sensible projects. Often it is the immediate neighbors whose endorsement is needed. However, it seems to be everyone's universal experience that any time a developer wants to make a change from the zoning requirements it is to the neighbors' detriment. The task, then, is to show the neighbors how they will benefit from such a different type of project.

We begin by showing the neighbors two site plans. One shows a conventional project that adheres to the current zoning. This plan will show how much area is cleared for roads, drives,

construction area, and front and back yard. On the other hand the conservation plan shows the proposed building cluster located away from the adjacent residential areas with wide undisturbed buffers. The quantity of preserved land is also indicated. The entrance is located where it will create the least traffic impact on their adjacent residential areas.

A second zoning concern, and one which is not addressed by the offset density, is having commercial uses within the community. Most residential zoning allows "home occupation" but requires there to be no product sold, no merchandise stored, no signs displayed, and no lodging. As was shown above, commerce is very important to a Conservation Community. The local restrictions on commercial activity vary widely and need to be considered case by case.

MARKETING. Whether a Conservation Community is developed by a professional real estate developer or is started by a Core Group of interested individuals, the issues of marketing - of bring new people to the community - are very important. Conservation development has proven to be a highly desirable project type. Projects all over the country have enjoyed tremendous success.

A Conservation Community will include a much broader range of housing costs than is found in a conventional development. Contrary to conventional wisdom, this mix is very popular. The mix dramatically increases the target market. It also provides flexibility in adjusting the housing mix *as the project is built out.*

Pedestrian planning brings many benefits. Compactness makes the community more secure and safe. The subordination of the car makes it safer for children. Pedestrian planning also allows a much more subtle gradation from public to private spaces. And as residents walk through their community they have vastly multiplied their opportunities to meet and get to know their neighbors.



Convenience is a tremendous marketing point. With work spaces in the community, a resident can save all of the time and money expended on commuting. With commerce in the community, so many of the daily errands that occupy so much time in sprawl development can easily be performed with a stroll to the other end of the pedestrian street.

The woodland and garden areas are highly prized

amenities. Environmental awareness is a growing market trend that has been under-represented in the housing markets. Public interest in preservation of natural resources and cleaner air and water has been growing for years. Also, more and more people are going to small farms for "agritainment." An agricultural area in a Conservation Community is not only a strong marketing tool, it provides many work opportunities within the community.

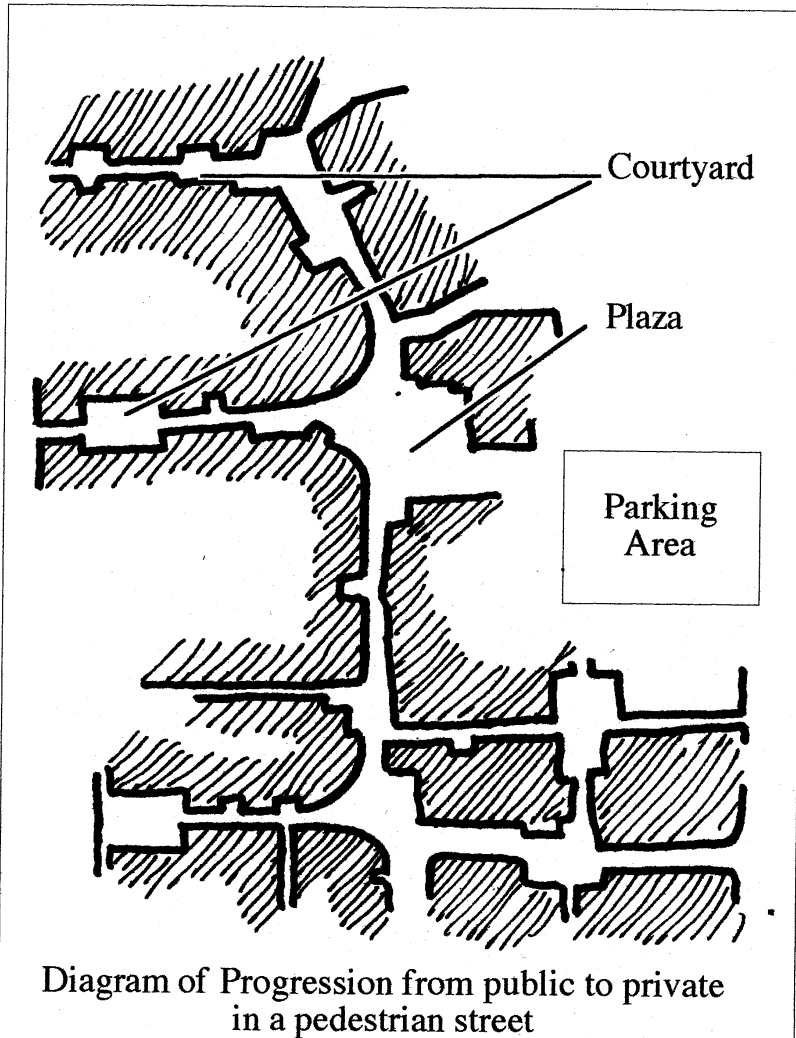
Shared resources is not a new concept to subdivision development. They have long included pools, golf courses, tennis courts and so on. The Conservation development expands the concept to include functional resources as well as recreational resources. These might include a workshop, child care space, guest rooms, craft studio, kitchen, laundry, etc. There are also opportunities for shared agricultural areas such as gardens or orchard. Intentionally shared resources that

help the community be more sustainable might include lease-on-demand vehicles (a pick up truck or a small bus), recycling, and Community Supported Agriculture.

The interest in health, as opposed to medical intervention, has also been growing for years. Conservation Communities offer real reduction in stress and exercise opportunities which are recognized to contribute to good health.

Finally, a home purchaser would be highly motivated if each of their individual purchases would preserve the natural quality of 3, 4, 5 or 10 acres of land in perpetuity.

Improved Utilization through Shared Resources		
Resource	Typical Subdivision	Conserv. Community
Guest rooms	under used	Shared
Work shop	under used	Shared
Play room	under used	Shared
P/U truck	under used	Shared
Passenger Van	under used	Shared
Computer/Internet	under used	Shared
Entertainment space	N/A	Shared
Large Capac. Laundry	N/A	Shared
Child supervision	N/A	Shared
Recycling	N/A	Shared
Privacy Progression	N/A	Shared
Gardens, fount., courtyard	N/A	Shared



MINUSES. The most common preconception about clustered development is that there will be no privacy. Careful planning and substantial construction are needed to overcome the perceived problem: private courtyards, windows that do not align with a neighbor's, and thick masonry or concrete demising walls help to insure a private home.

This perceived problem can be turned into a marketing plus as the importance of community and the detriments of isolation are understood. In subdivisions, as well as condominium developments, the public can drive to the front of any home in the relative anonymity of a car. This not only intrudes on the privacy of the homeowner, but conceals the identity of the driver. Properly planned pedestrian communities have a well-defined progression of spaces from fully public to completely private with many stages in

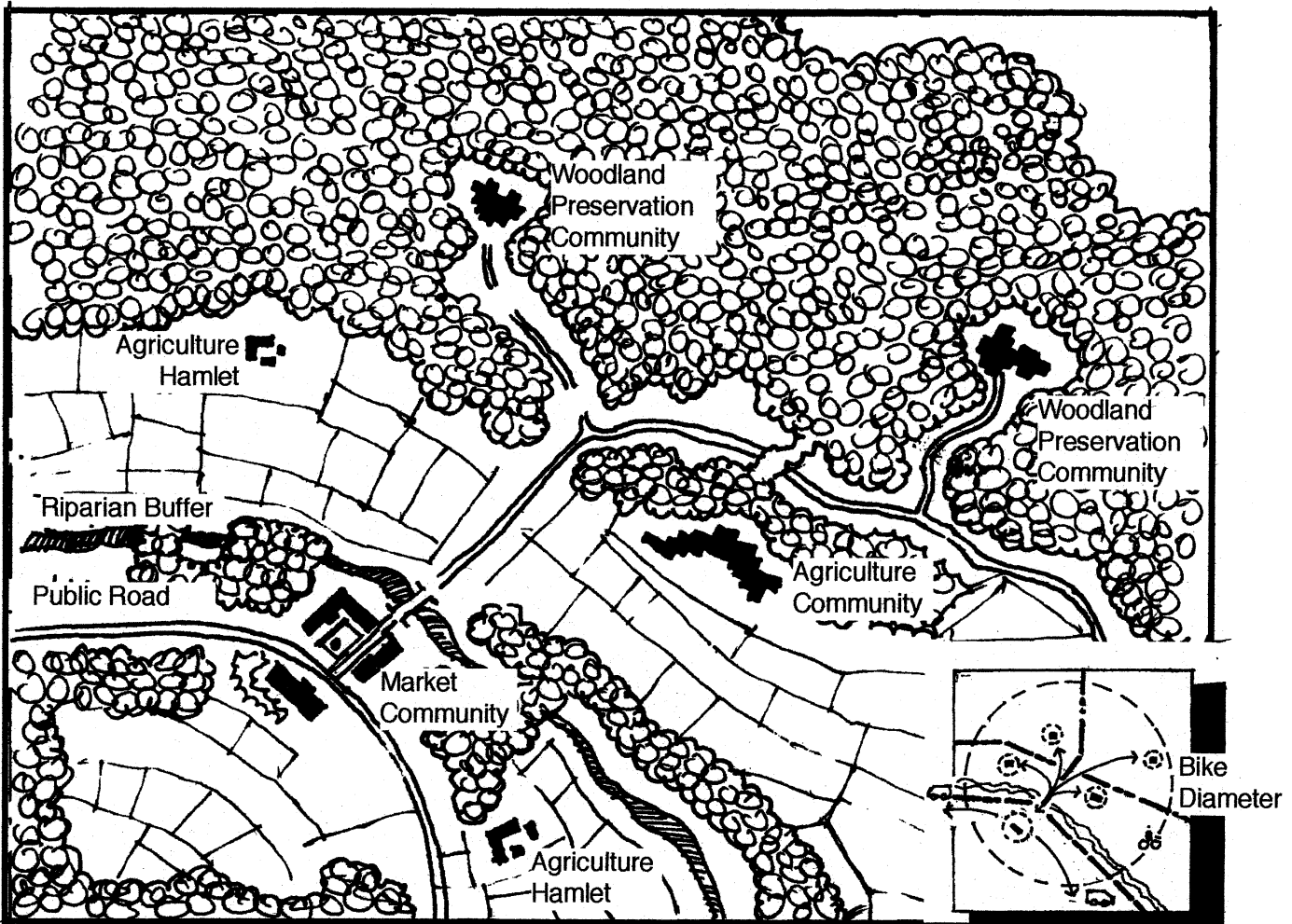
TOURIST destinations that feature pedestrian streets

- Nantucket
- Sea Side, Fla
- Georgetown, D.C.
- Santa Fe
- Disney Land
- St. Augustine, Fla
- New Orleans
- Annapolis
- Williamsburg, Va.
- Any European village

between. These include, in order of publicness, the front porch of the community building, the plaza of the community building, the connecting pedestrian street, interior courtyards, and the entrance deck/patio of the private home. This progression from public to private is common in traditional pedestrian communities. It provides a level of privacy (and security) that is not found in automobile centered development. In this way, the concern over privacy, when explained becomes a strong marketing plus.

CONNECTIONS

LINKING CONSERVATION COMMUNITIES. The Conservation Community is set in a context of other land, other communities, and the larger ecosystem. The way in which it is connected to this larger context is an essential part of its sustainability. The linking mechanisms for the human uses include transportation, communication, and commerce. For natural systems these links are in the form of wildlife corridors,



4 Conservation Communities preserve a valley and provide goods and services to each other.

and contiguous woodland and wetland areas.

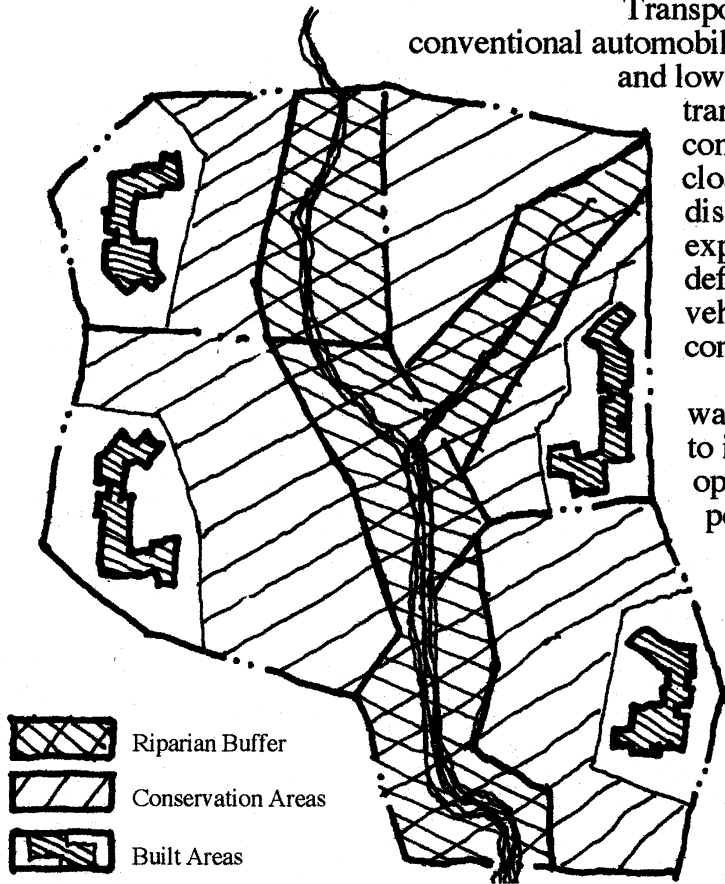
The proximity of Conservation Communities to each other has benefits for the human inhabitants. By providing for links within a specific development, other communities can be connected, and the potential for shared resources and local commerce is increased, providing savings of time and money.




Transportation links can be divided into conventional automobile transportation, public transportation, and low impact transportation. Public transportation is more viable for a clustered community for several reasons. Stops are closer to destinations, routes are shorter in distance, and so in time also, and are less expensive to operate. Public, if loosely defined, may also include lease-on-demand vehicles owned and operated by the community.

Low impact transportation includes walking, bicycling, carts. Though it is hard to imagine in this car centered culture, these options can be preferable in a well planned pedestrian setting.

When several such communities are in close proximity to one another a broader range of goods and services can be provided by and for the residents without the necessity of car trips. Goods and services not available in the group of communities are still accessible by automobile, but will be reached more easily by car pool, shuttle, or public transit.

The synergistic effects of connecting Conservation Communities are remarkable for the natural systems also. They can protect the entire watershed of streams that would be killed by the storm water runoff from sprawl development. And the extensive wild life habitats are an important factor in preserving many species (such as larger mammals) which require larger areas for foraging or hunting.



-  Riparian Buffer
-  Conservation Areas
-  Built Areas

This figure shows 4 adjacent conservation developments along a stream. Riparian buffers protect sensitive ecosystems. Conservation areas (including riparian buffers) protect woodland and may include agriculture areas.

VILLAGE HABITAT DESIGN

Village Habitat Design, LLC., has evolved from a professional practice begun in 1989. The company is truly multi-disciplinary: the principals have experience in planning, design, construction, and development. With our full range of professional consultants, we offer comprehensive services for establishing Conservation Communities. From our offices in Atlanta, Georgia, we provide services to the southeastern United States.

We at Village Habitat Design equate providing the best quality design services with maintaining the highest standards of ethics. While our mission is to improve the quality of the community and to protect the environment, we certainly recognize our responsibility to serve the interests of our clients.

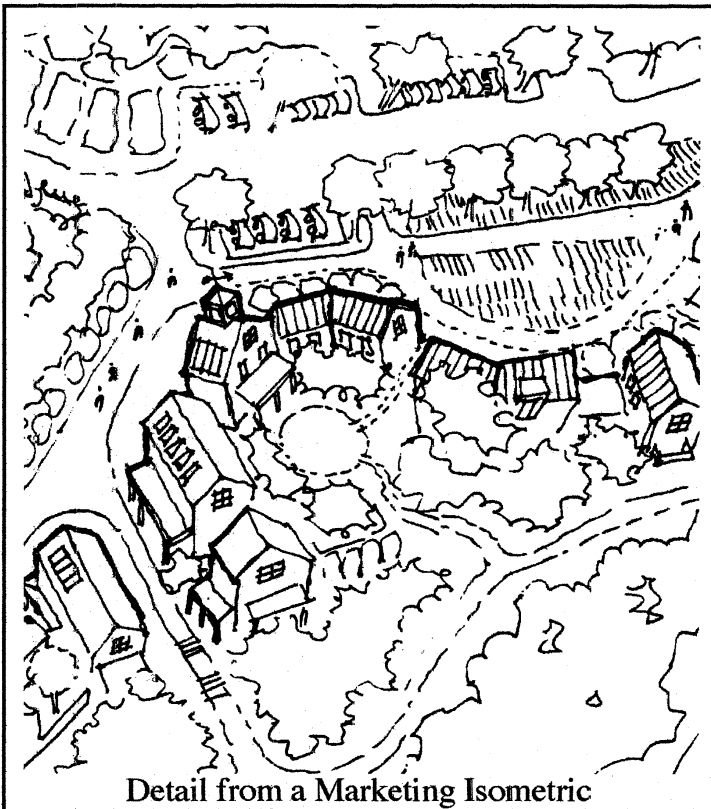
In the not-so-final analysis, an unsuccessful project does a disservice to our clients as well as the community and the environment. For this reason we are committed to providing design solutions that reconcile this broad range of considerations.

A broad array of professional services may be needed or desired because of the wide variety of project specifics. In order to supplement our expertise, we have established relationships with many specialists fields such as conservation, ecology, and sustainable systems.

The following list outlines some of the pre-design services that we perform:

- **Pre-Schematic Master Plan:** A quick, inexpensive drawing of your prospective community. These drawings are attractive pictorial views of the elements you want to include. They allow everyone to visualize what the community can

become as well as being particularly useful in generating discussion, in bringing new members into



the vision, and in beginning to work with the local authorities and neighbors.

- Educational Seminars to explore how the basic concepts of Conservation Community may be applied to your individual situation.
- Organizational Workshops to assist the Core Group in formulating its development goals, legal structure, and a community charter, all of which will help guide future decision-making. Workshops also assist the Core Group in defining the scope of the project and in identifying planning requirements and guidelines used by local authorities.
- Site Analyses: includes surveys, topo, zoning review, EPA environmental audit, micro climate, sun orientation, vegetation, wild life areas, agricultural areas, views, sources of noise or visual intrusion, springs and waterways, on-site and local resource inventory.

Once pre-design concerns are met, Village Habitat Design is prepared to assist you as we proceed with master planning of the community, devising a marketing plan, schematic design of houses and common buildings, coordinating the specialists and engineers, and preparing architectural construction drawings.

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GLOSSARY The following are some of the terms used within this booklet, and a few others that are common in sustainable planning.

C S A: Community Supported Agriculture - The practice of local residents agreeing to financially support and buy the produce from the community farm gardener.

Cohousing: A residential model begun in Norway which emphasizes pedestrian layout, community interaction, and shared resources.

Common House: In CoHousing, the central building which houses the community kitchen and dining room, and other shared areas such as art studio, work shop, library, children's play room, teen game room, guest bedrooms, exercise or yoga room, class rooms, etc.

Conservation: To protect from future exploitation, destruction, or neglect

Conservation Easement: A perpetual and irrevocable attachment to the title of a piece of land which limits or prohibits future development of specific property.

Conventional Development: Building practices used since World War II

Core Group: The individuals who work together to begin the process of developing a Conservation Community. The Core Group will increase in number as the project progresses.

Credo: A statement of the shared ideology and values of a community.

Design guidelines: A written statement of building practices allowed within a community. Within a village it is desirable to have both variety and cohesiveness of form and material. Design guidelines may also prescribe sustainability requirements, construction time frame, and allowable uses.

Eco-Village: A self-sufficient community which exists without depleting or polluting the local resources.

Embodied Energy: The energy calculation for a material or process which includes the energy required to "harvest" the material, process it, transport it, install it, maintain it, and finally dispose of it.

Fee simple: To own by warranty deed. The most direct and comprehensive property right that this society has.

Hamlet: A group of less than 15 dwellings. Also the Farm hamlet of a village, which is located immediately adjacent to the agriculture area.

H.O.A.: Home Owners Association. The HOA will become the management organization of the community.

Intentional Community: Community formed with the intention of living according to a defined set of principles or moral code. (See Credo)

Lease on Demand: Any resource owned by a community that can be rented by the residents on a short term basis. Especially vehicles, such as pick up truck, large passenger van, or panel truck.

Live / Work: Communities of dwellings which have both residences and work

places in the same buildings.

- Monoculture:** In agriculture, the cultivation of a single plant species. Any resource devoted to a single use (eg. office park, residential subdivision, shopping center)
- Neighborhood:** A community of 15 to 35 dwellings which may have a separate community building that houses several shared functions.
- N T D:** Neo Traditional Neighborhood - Community planning based on pre-WWII neighborhoods. Includes smaller lots, affordable homes, work and commerce in the neighborhood, and subordination of the car in favor of human environment.
- Offset Density:** To cluster the dwellings on a piece of land rather than spreading them out evenly over the land.
- Outdoor Room:** An exterior space, such as courtyard or plaza, whose sides are defined by buildings and plants. It is characterized by having seating, shade, and being exclusively pedestrian. This is in contrast to the suburban pattern of residual areas left over between buildings.
- Pedestrian:** subordination of the auto
- Permaculture:** A set of principles formulated by Bill Mollison which describes the interrelations of human and natural ecological subsystems.
- Private / public progression:** Spaces that are graduated from completely public to completely private.
- Riparian:** River or stream bank, including physical structure and ecosystem.
- Sprawl:** To grow, develop, or spread irregularly and without apparent design or plan. Low density real estate development.
- Sustainable:** Development or growth that can be maintained without the depletion or destruction of the resources upon which it depends.
- Traditional Development:** Building practices used before WWII, including traditional neighborhood, European village, agricultural hamlet, (i.e. pre-automobile building patterns).
- Vertical Landscape:** Climbing vines, arbors, shade trees, espalier trees, fountains.
- Village:** An assembly of several neighborhoods which is large enough to support several community based businesses.
- Wild life corridors:** Undisturbed natural areas used by various species of animal in their movements across the landscape. Often linear features such as stream
- Xeric:** Plant life which has low moisture needs. Plants which need only rainfalls to thrive.
- Zoning:** Government regulations which segregate human activities into isolated areas accessible only by automobile travel. A form of monoculture.

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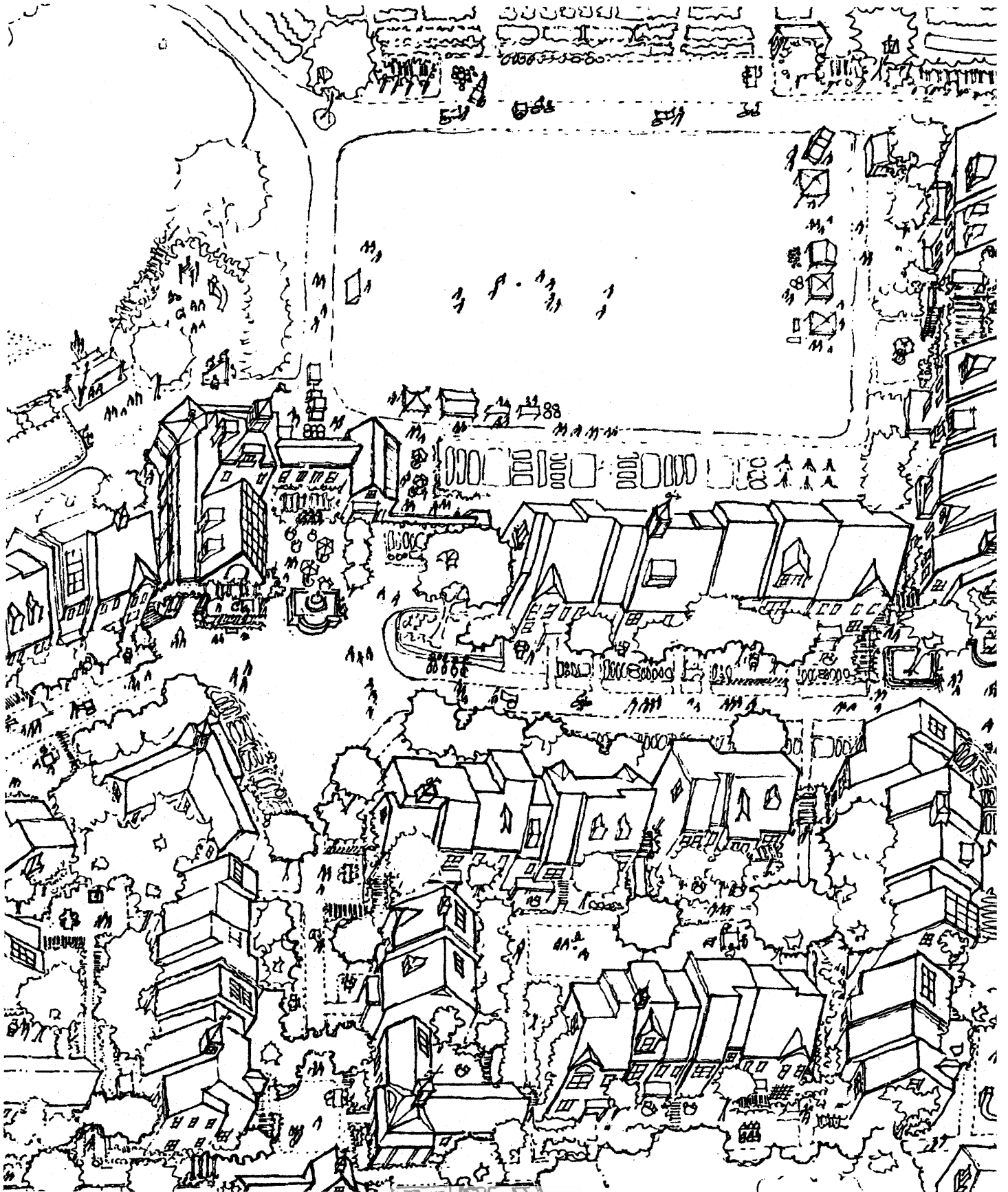
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