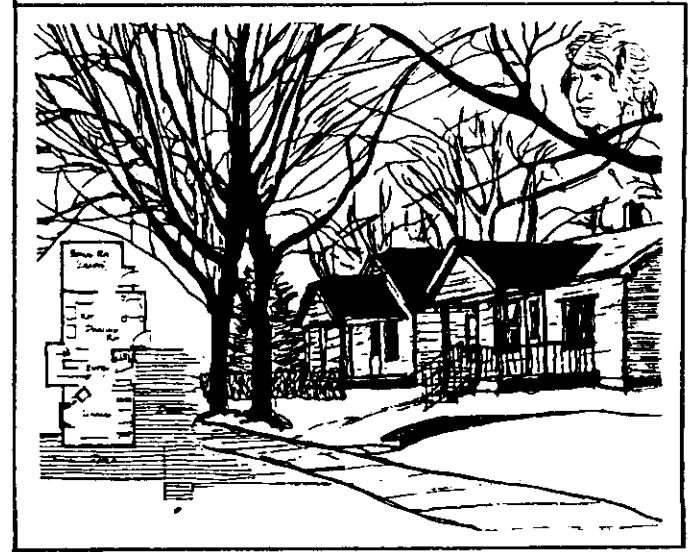


THE ELDERLY AND THEIR ENVIRONMENT

A Study of Elderly Housing

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A special thanks is extended to all who have helped me throughout the thesis year. Thanks to Stan Mendelsohn who introduced me to the various aspects of elderly design. Thanks to Alfredo Missair who was always there with invaluable guidance and patience.

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Student of the College of Architecture and
Planning of Ball State University, Muncie In.

The elderly population is the fastest growing age group in the country today. The fact is that presently only 9% of this age group live in planned elderly housing. Many other individuals who would benefit greatly from this type of housing are not able or are not wanting to live in this environment because of various psychological, economic, or other reasons. Now to best satisfy this situation and improve the elderly living conditions of today is the goal of my thesis. I would like to see the elderly be able to have their own say in their community. The element of personal choice is very important.

After analyzing various types of elderly living environments from the tightly supervised aging home to the elderly individual in a rural house, I have discovered that many are unhappy with their living situation. I have determined that the issues of individuality, independence, and the atmosphere of a "home" are just as important to the aging as are the issues of services and security. So, for the people who would like to live in a planned environment, I have created a program where the elderly will be encouraged to express their own personal concerns as a group in order to shape their own community.

I have labeled this program a "renovated residential community." The program will renovate various houses in an existing neighborhood in which the elderly will reside in group living

situations. The central program will offer support and services only if requested. So in the end, the plan will enrich the neighborhood with new life, as well as provide a more ideal living environment for the elderly to reside in.



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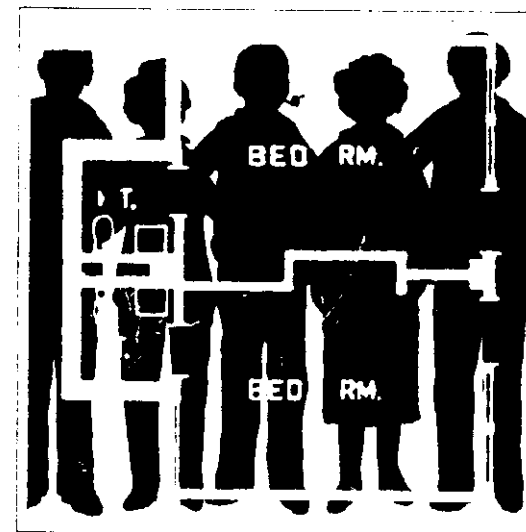
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The elderly age group of today is the fastest growing age group of all. We must prepare to be able to furnish housing for this increasingly demanding group. Today nearly 30 million Americans are 65 or older. By the year 2020, that age group will have almost doubled in size.(1) And the elderly have many needs particular to their age group. Some live alone and some have physical disabilities. Both of these needs demand special attention, physically and spiritually. In addition, the current generation of seniors is more affluent than ever before. Their average household income is \$18,279, they own 40 percent of the financial assets held by the nation's families and 75 percent of them own a home.(2) With the older American now having more money to spend, a wide variety of housing types has evolved to fill the broad needs of this group. Retirement housing and communities, congregate housing, various types of planned housing, and other experimental housing projects are big issues today.

Most of the people who can afford to live a comfortable retirement have alternative sources of income besides social security. They work part-time, own stocks and bonds, and receive pensions. But there are elderly who have to live off of social security alone. And there are many individuals in this situation across the country. They have trouble paying bills and find it difficult financially to provide for general maintenance of their house and other

possessions. Both the rich and the poor should be able to live in an environment suitable to their needs.

The fact is that only 5 percent of people 65 and older live in institutions and 4 percent live in planned housing. This leaves almost 90 percent of the elderly who live in different types of residences across America.(3) This is not all bad. Many people prefer to live in their own residence. The idea of "home" is very important. It is so strong that most of the elderly would rather stay at home and deal with everyday burdens than to move into planned housing. Many stay at home because of sentimental reasons. That is where they lived and raised a family. Their roots are located there. It is traumatic for many to move into planned housing. Some see this as the last step in their lives. So many of these individuals enter into a depression. And even if they are still relatively healthy, they are forced to watch their friends decline in health every day. Finally, to live in planned housing is a tremendous financial burden, even for the more affluent elderly. Money and health are the two top concerns of the aging.



The typical elderly individual has a pre-conception that all planned housing communities are hospital-like in nature. This is not true. There are many communities out there that cater to the elderly's needs rather successfully. Four Seasons Retirement Center in Columbus, Indiana is a local and fairly successful example of planned housing. But these examples are placed few and far apart. And waiting lists are long for these popular communities. But the typical planned housing complex is not as successful and is what the elderly envision. Their pre-conceptions are basically correct. For their money they would rather stay at home and live as they had for years.

For planned housing to become more attractive to the elderly, visions of "home" need to be incorporated into the facility. This way, the move from their old home would be made easier. A way to do this is to look at the typical home. Most homes are open, bright, cheery, and personalized with mementoes from the past. Planned housing should have as many of these qualities of "home" as possible. Allowing a large amount of natural light to penetrate inside would be an asset. Some elderly complain that their housing units are dimly lit. Morning light would give the aging a new reason to rise and greet each and every day with a refreshed attitude. Other elderly have the hobby of plant growing or gardening. Window gardens would allow natural light to enter and also provide a plant growing area

year-round. Gardens outside might want to be included. The elderly would then have different tasks at different times of the year. Therefore, the residents would then experience the element of change throughout the season. The elderly should be able to interact with the outdoors just like most of them did back at "home". If they are tucked away in a dreary room identical to their neighbor's, they might show a lack of motivation and individuality. Their living unit needs to be at a residential scale, just like "home", and allow for personalization. These are a few ways that "home" can be incorporated into planned housing.

Security----

Security is one of the advantages of planned housing. Elderly people often live alone. They are vulnerable to various acts of crime just because of this reason. A large amount of the aged population are also frail, female individuals. This makes them particularly vulnerable. And living alone, these people often have a great fear of crime. The occupants of planned housing find great security in their living units. This is important particularly at night when they sleep alone. However, the sense of security is also felt during the day for individuals particularly in urban areas. Not only is security from crime important, but also knowing someone else is near in case of medical emergencies

is comforting. For people living alone, emergency telephones are sometimes provided. So the advantage of living in a close community with others with the same concerns and needs are evident.

Interaction----

Interaction with people of all ages is important for the aged. Often the person living alone back home is restricted to the indoors, due to a lack of mobility. They might talk on the telephone, but don't really get to visit many others during the day. This is sad. In planned housing, the physically restricted are able to move about to visit, participate in planned activities, or just to sit back and watch others. If a particular individual does not feel like socializing because he or she is not feeling well, they should be able to go straight to their living unit without confronting others. Interaction is important, but so is independence and the idea of personal space.

Services----

The services provided for the residents of planned housing is also helpful. As old age limits mobility, he or she slowly becomes unable to accomplish daily chores. They might find it impossible to take care of the yardwork, housework, and other activities necessary to keep a household in decent order. In planned

housing, most services are provided from meals to banking. Also social services are often provided. Daycare centers, craft sessions, and games are typical scheduled activities which are requested and which are furnished.

Mobility of Elderly----

Planned housing is good for the less mobile individual. Transportation is provided to and from shopping centers, grocery stores, church services, and various social functions. For those who find it difficult to move about the building, personnel and neighbors are on hand to help. A well-designed facility should take mobility into consideration.

The above were primarily advantages to planned housing. Now I will address the disadvantages associated with this type of living. Unfortunately the disadvantages outweigh the advantages which could partially be the reason so many prime candidates for planned housing turn it down.

Financial Considerations----

Financial considerations are at the top of the list. Even an elderly couple living comfortably can feel a financial strain when they move into some sort of a planned community.

A majority of people sell their houses and pay cash for their entrance fees. Then there are the monthly maintenance fees. And as health begins to decline, the bills really start to rise. So, living in typical planned housing is a tremendous financial drain to everyone. For example, at the Four Seasons Retirement Center in Columbus, Indiana, one must pay \$15,000-\$21,000 to enter and \$615-\$630 a month just for a studio apartment. For a two-bedroom apartment, the entrance fee is \$55,000-\$65,000 and the monthly fee is \$680-\$745. Three meals per day for one person costs \$285 per month. (4) Charges for laundry and other services bring the total bill to an outrageous amount. To stay in the nursing wing costs even more. Four Seasons is one of the more costly facilities around the state. But it illustrates the point that planned housing can become very expensive.

Organization of Services & Activities----

Another flaw in the system as far as I am concerned, is that all services and activities are planned for one and for all in the same generic way. Everyone is treated basically the same. The idea of individualism seems to be lost. The occupant is totally taken care of. I believe the occupant needs to take care of someone, if not their own selves. But the treatment is prepared and handed out to everyone on a set schedule. I feel if particular individuals do not want these particular services, they

should not be furnished to them. Some might not be able to totally care for themselves, but others might be able to do some things for themselves. If daily necessities are constantly provided, what is there left to do by the residents? They have taken care of themselves in their own way all of their lives and now suddenly they are not allowed to anymore. Or if they are allowed to, they are constantly under supervision by others.

Effects upon Residents----

In some residents, this treatment has many effects. Personalization and identity is somehow lessened. Some feel a lack of self-worth. And some continue on to slip into a state of depression. Their life is all behind them. Their life is slowly coming to an end. I think independence should be promoted more. Being in a community such as this seems to emphasize this "end of life" syndrome. At the Four Seasons Retirement Center, we were greeted by Ms. Doty, the Asst. Administrator. She welcomed us by saying, "We provide care for our residents from the day they enter until the day they die." This seems to be the universal attitude.

For the more independent and healthy retirement couples, they have problems, also. The recently retired person just embarked on the last major portion of their lives. They are around other elderly couples who they become good friends with. They then have a sense of discomfort in

seeing some fellow residents decline in health, wondering how they would manage financially, and otherwise, should they require the far more expensive health care.

Atmosphere of the "Home" vs. the Institution----

Other problems with planned housing is the institutional atmosphere in many of the typical facilities across the country. They remind one of a hospital. Halls are impersonal with hard floors, and doors are all alike aligned equidistant from each other up and down the hall. Personalization is certainly absent here. It is in this type of facility where leaving "home" behind has its worst impact. Residents are assigned a room just like everyone else's room. The resident lacks motivation and isolates him or herself from the surroundings. The planned housing needs to be flexible enough so that pieces of "home" can be brought with the residents. Then the space can be tailor-made to fit the needs of the individual. Dr. M. Powell Lawton notes, "the task of the environmentalist is not to find the best solution for older people, but to make it possible for each older person to create or to choose the type of environment that is most fulfilling."(5) Dr. Lawton is one of the leading reasearchers of elderly living and is the Director of Research at the Philadelphia Geriatric Center.

QUESTIONNAIRE

With a firm grip upon the issues that are to be dealt with, I went straight to the elderly themselves to listen to their concerns and comments. I made a simple questionnaire to distribute about to the occupants of planned living communities about the Muncie area.

I designed the questionnaire to tell me what the residents of these communities like and dis-like about their environments and what improvements they would like to see made in order to bring in more of the atmosphere of "home". In the appendix, I have included a copy of the questionnaire which I have distributed. Of the results, The strongest response from the elderly was that they wished their living units had larger kitchens, just like their kitchens back "home".

OBSERVATIONS OF EXISTING COMMUNITIES

I felt it to be very beneficial to visit the living environment personally to gain a first-hand experience into the atmosphere the elderly were living in. A group of three thesis students concerned with gerontology visited a number of facilities. We visited Four Season's Retirement Center in Columbus, Indiana, Westminster Place(Muncie), Gillespie Towers(Muncie), and Fountainview Place(Muncie). I photographed

and talked with administrators and residents in these communities.

- 1) Four Seasons is a facility for the independent elderly with a health center providing care for the residents as they decline in health. It is located in a suburban neighborhood of Columbus. The facility is one-story and all living units are connected with a hall which shifts its path from side-to-side. All apartments have an exterior door with a porch outside. The dining/entertainment space is the focal area and a Chapel is the most prominate structure form the outside.
- 2) Westminster Village is a facility for the independent elderly with a nursing center for health care. The community is located in a rural area in Delaware County. The focal space is the lounge and kitchen, which is beside the lounge. This is a well-accepted facility which has established a good deal of respect from the Muncie area.
- 3) Gillespie Towers is a seven-story structure located on the outskirts of downtown Muncie. The apartments are for the low to middle income bracket.

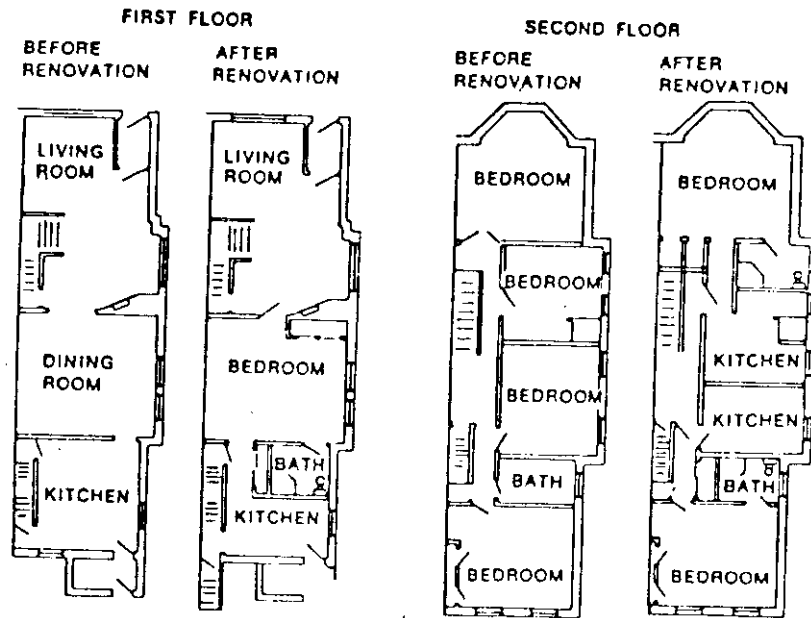
4) Fountainview Place is a facility on the outskirts of Muncie. It is a nursing facility for middle to low incomes and many residents are in wheelchairs.

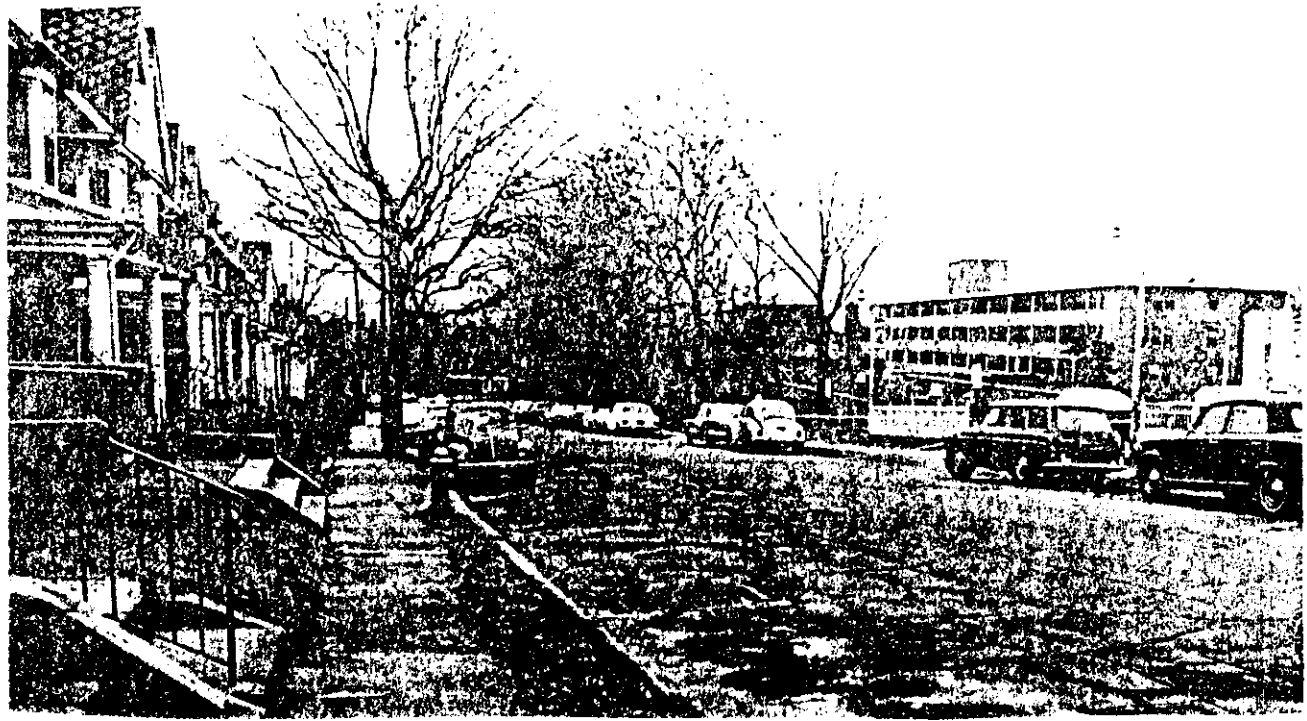
These visits to the planned housing communities were very valuable to gain knowledge of the atmosphere which was present in each of the facilities. Each place had its own particular quality about it. And it was also valuable to visit with the elderly and to listen to their comments about their living conditions. Generally, the more money the elderly individual has, the more happier he is, because he is able to afford to live in more costly communities which have more to offer.



Next, compare the typical planned housing community to the following renovated housing communities. I do believe it is the case when the best architectural and programmatic solution (basic planned housing), is compared to the elderly being able to create their own living environment (renovated community housing), the advantages are evident.

The classic example of this type of housing is the Philadelphia Geriatric Center's Housing. The Center renovated nine houses. The three occupants of each house share only the entry and the living room, with each person having a bath, kitchenette, and the bed and sitting room in his or her own unit. Mild support is offered only if requested. An emergency telephone is provided and if wanted, meals, housekeeping services, and some recreational activities are provided.





Development of Renovated Housing----

The above example is relatively the same idea which I wish to implement. I want to start a program. This program can receive federal assistance if organized correctly. This program needs to select a site in the middle of an appropriate neighborhood. The program will buy a house or two and will renovate it conducive to elderly living, just as in the Philadelphia Geriatric Center. At the same time, the program will build with its funds, a central community center with basic offices and community services for the elderly. The specific services of this community center will be flexible, bending to the needs of the residents. With time, the elderly will request different necessary and convenient functions. Then they will be provided at the program director's discretion. Meanwhile, the facility will buy another house when available and will renovate it also. Residents will pay rent. And applicants will be screened for compatibility in order to select housemates. The development of this community will take many years to mature. But the point is that the services are built around the elderly's needs. In the typical planned housing community, the elderly are set in an environment where needs and services were already furnished based upon the planners best knowledge. That community might look nicer and make a good deal of profit,

but the renovated housing community will cater to the elderly's personal needs much more efficiently.

With the development of a community, a pattern will develop. Neighbors will begin to associate, people will be outdoors, and will be able to enjoy life at their own pace. Maybe over time, sidewalks between neighbors houses will be requested. The program will be there to honor these requests. Or maybe fifteen years into the future, a park might be requested and constructed. Maybe a shuttle to community services will be requested. The residents will be able to choose themselves.

Funding----

The Philadelphia Geriatric Center received funding from Section 236 which was created by the housing act of 1968. This program provided subsidies to reduce the interest paid by mortgagors for multi-family housing projects and, in turn, reduced rates to tenants. The mortgages were also insured by HUD. Since the beginning, HUD has been able to pay the difference between the tenant's contribution and actual operating costs for a limited number of projects. The Section 236 program could possibly be used to fund my project also, or at least to get started and to provide services and amenities requested by the residents.

Services----

Other services could include making contacts to meals-on-wheels through the facility's office. The same could apply for in-house doctors and house cleaning services requested. The office would serve as the link to these services. I will next discuss the particular advantages and disadvantages associated with this type of housing.

Entering the Community----

One of the disadvantages is that the residents still have to move away from their "home" into this other house. But the move should be less traumatic than moving into typical planned housing. And it would be easier to transfer some of the memories and "roots" from "home" and place them in their new home. But, there is an advantage. Imagine a 50 year old couple already living in the community when the program moved in. In 15 years, this couple would not have to move, but could just join the program and still have their true "home" all in one.

Security----

Security might also be compromised in this type of housing. The type of neighborhood the facility is placed in will play a big role in

security. Also, since 3 or 4 individuals will be located under one roof, there will be safety in numbers. And an emergency telephone and alarm could be provided.

ADVANTAGES

Comforts of Home----

But the advantages are that the basic atmosphere of a normal home life is still present. This makes it psychologically easier to adjust to the move. And services are provided to each individual only if requested. The residents are able to cook and clean if this is desired. If not, cleaning services will be made available. So they still have their independence and self-reliance.

Scale and Individuality----

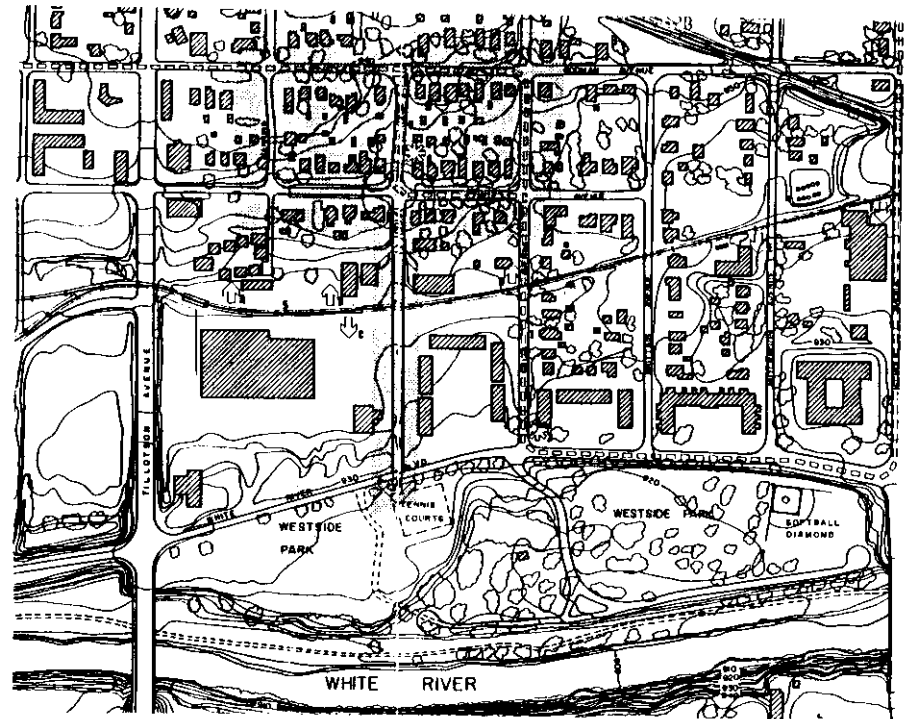
The housing units are at a residential scale, just like "home" is. And each house is individually different. Repetition is avoided. And the residents actually have their own backyard and a nice porch to sit upon.

Community Living----

The elderly will be a part of a community. Not only their own elderly community which is supported by the community center, but they

are a part of the neighborhood about them. Since the development of this program chooses various houses scattered around the area, age integration between the neighbors will exist. The elderly will still feel alive. The community will grow itself. It is by the elderly and it is for the elderly.

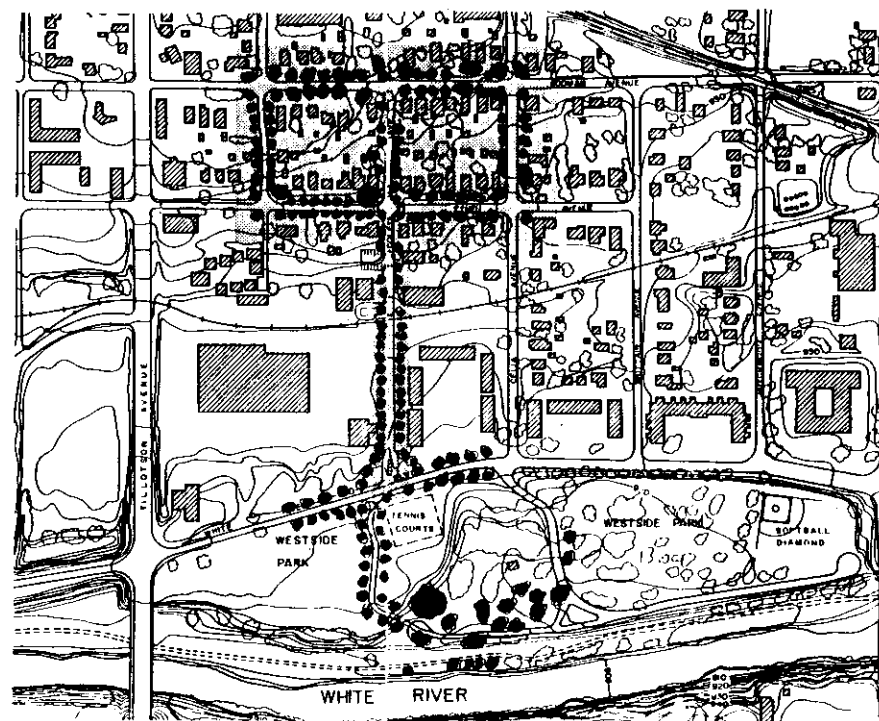
The location of the elderly renovated community is just as important as any other feature of community design. For simplification purposes, I chose to locate my design project in an existing neighborhood in Muncie. Rural areas are generally inadequate as far as satisfying the services needed by the elderly. So, I searched for the ideal urban or suburban community. The neighborhood needed to be in close proximity to shopping/grocery areas, parks & recreation areas, medical facilities, and public transportation routes. By process of elimination, I narrowed the possible neighborhoods down to 2 or 3. I chose the existing neighborhood at the corner of White River Blvd. and Tillitson Ave. both because of the favorable neighborhood and of its nearby supporting facilities and services.



The existing community is of a middle-class population with residents of varying ages. The houses are in average condition, mostly one-story, but some are 1½-story and 2-story. The neighborhood is located behind a strip of commercial establishments to the south and west which are along the highways. Apartments, a nursing home, a bus stop, professional and medical buildings, grocery stores, and a drug store are all within easy walking distance from the heart of the community. An abandoned railroad bed runs from east to west through the community. And a park lies along the White River, just south of the neighborhood. This park offers people-watching, softball, picnic shelter, playgrounds, and a walking path along the river.

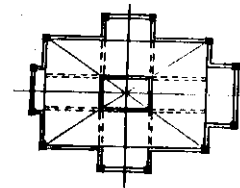
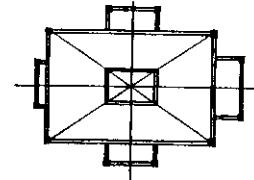
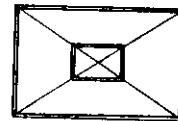
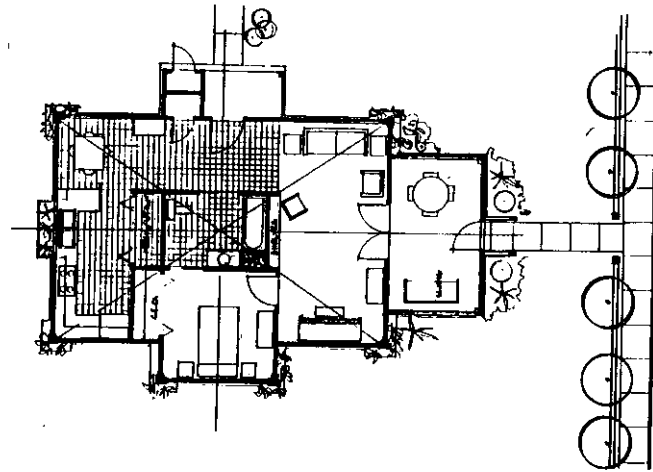
The goal of this community is to provide the services needed by the elderly population and to be able to integrate them into the existing neighborhood so that not only will the elderly benefit, but the residents of the neighborhood will benefit, also. A founding group of administrators will establish their office in the neighborhood. They will either buy and renovate a house, or build a new house which is tailor made to fit the elderly individual or individuals. Then the new tenant will pay monthly rent toward maintenance and any services used. These services might include anything from traveling doctors, to meals-on-wheels, and from window washers, to volunteer services of all kinds. So, the elderly will be cared for in a neighborhood in an individualized fashion only when and only if needed.

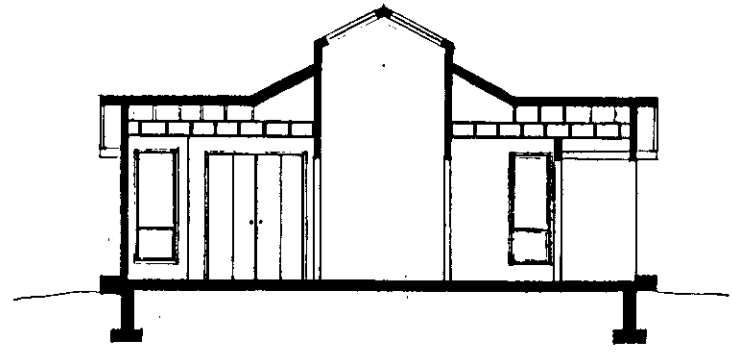
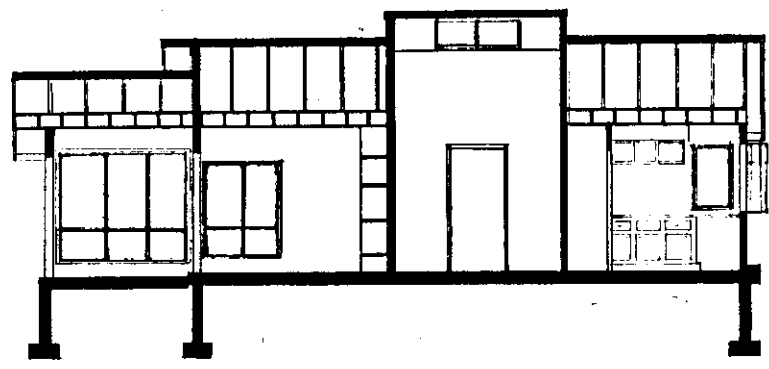
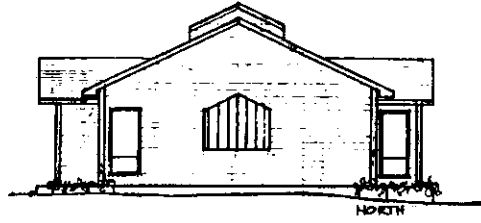
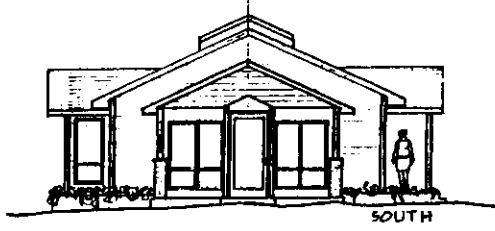
A park adjacent to an elderly community provides opportunities for increased social activity and interaction. In my design, I have attempted to connect the elderly community to the park along the White river. One solution for this design problem is to tie the two together using an axis, or road which is lined with trees which seem to flow out of the park across the road and into the neighborhood so as to bring the "park" atmosphere and all the advantages of the park into the heart of the neighborhood. The trees of the park are scattered naturally until they approach the road and the axis to the neighborhood. At this point, the trees act as a funnel to direct the park northward. The trees react to the rigid grid of the streets and aline themselves, spaced equally apart, along each side of the road. The trees then continue north to define the two-block area which is the central area in the neighborhood.



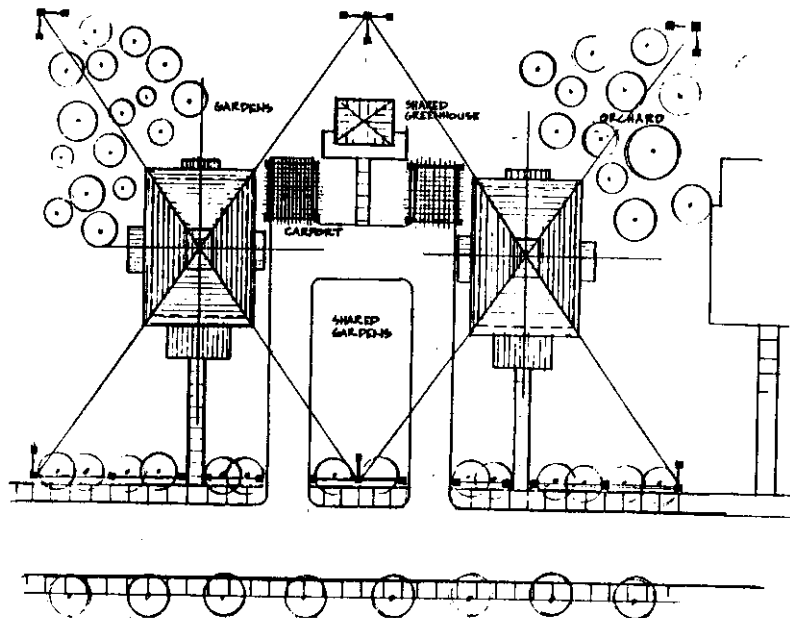
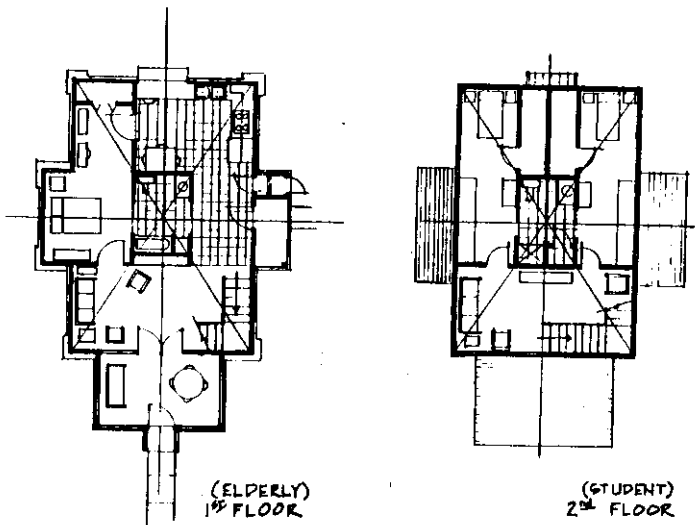
There are many elderly looking for different living conditions. I have designed the housing to fit a variety of different living situations. Some elderly are fairly young and very mobile while some are older and have some troubles getting around. Some are male, and some are female. Some are single, and still some are married. Many elderly look for a 2-story home, while others prefer a house without stairs. Each of these conditions require a different type of home. And I have designed 2-story, 1-story, new, and renovated homes, each flexible in nature in order to adapt to each of the individuals lifestyles.

The new houses were designed from scratch. The house is fairly long and narrow in plan to fit in small, but deep lots in between existing houses. A service core and bathroom is located in the center of the house. The living areas circulate around the core against the outside walls in order to maximize natural lighting and ventilation. The plans are easily adaptable to suit a variety of arrangements. The house is handicapped accessible and the bathroom is planned so that grab-bars could be added if needed.

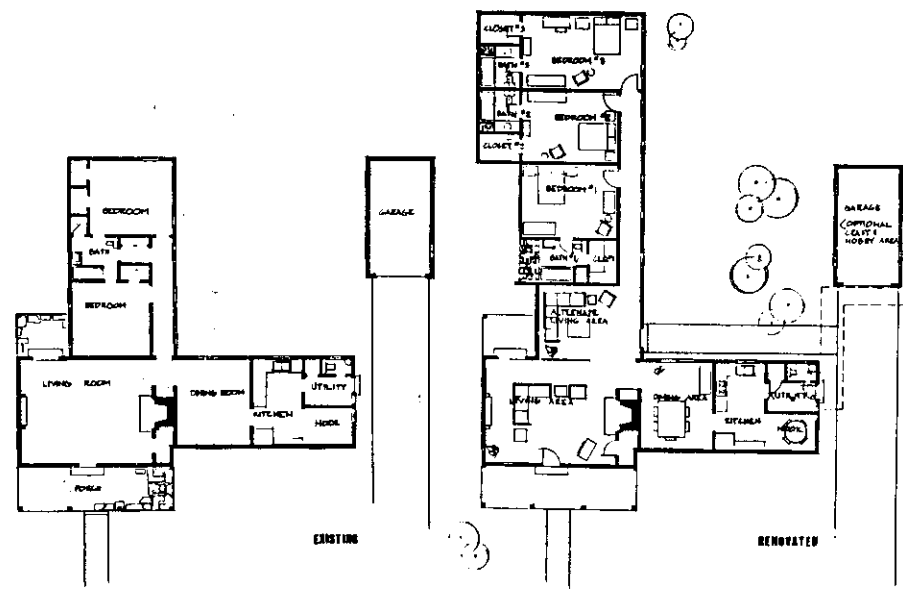
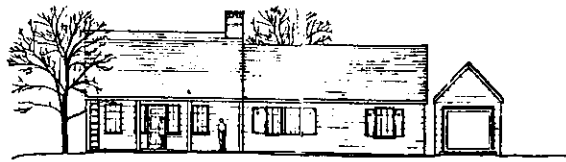


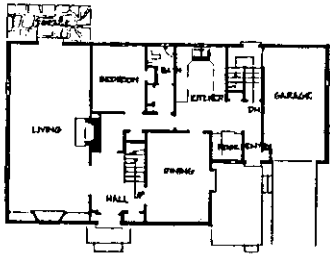
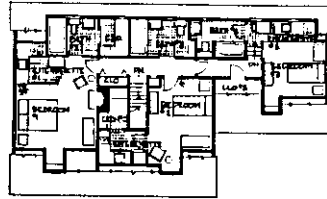
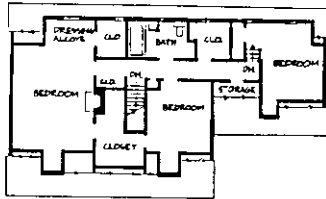
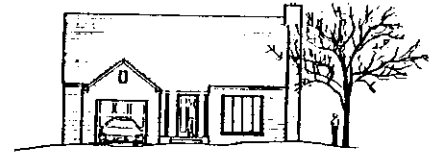


As an alternative, I have developed a 2-story option for the elderly to choose from. This house has the elderly living and sleeping areas downstairs and the upstairs is sectioned off for live-in help from BSU college students. Also, if the siting allows for two houses to be built side-by-side, I have planned for a shared greenhouse and shared garden which the tenants of adjacent properties could use together to promote interaction.

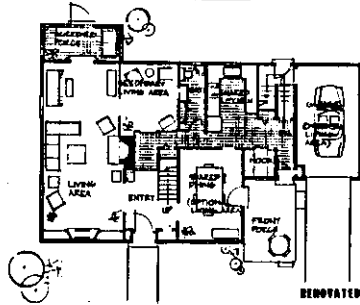


The renovated housing is designed more with a group living situation in mind with a group size of three. However, this could vary depending on individual conditions. These houses are a low-cost conversion and show what can be done with a minimal amount of money. The integrity of the house remains intact so that it still fits into the context, and the "image" of the house is still to fit right in with the other neighbors. However, it should be stressed that before an actual renovation could take place, architect/occupant meetings would have to occur in order to gain the future residents needs, concerns, and compatibility for each other.

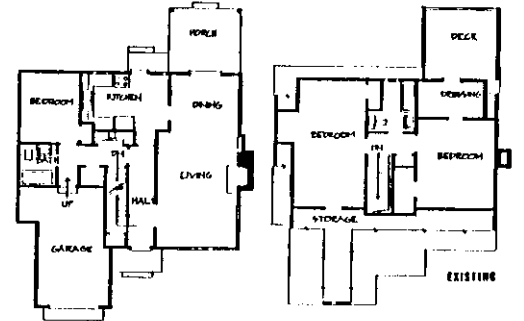




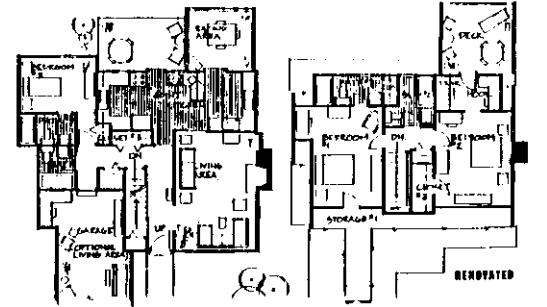
EXISTING



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EXISTING



RENOVATED

The siting of the community is strategically located so many resources are accessible by walking. However, other means of transportation are needed during inclement weather or for destinations outside the community. A public bus route runs one block away from the heart of the elderly community, with an existing bus stop two blocks away. However, a stronger relationship between the community and the bus route is desired.

It is proposed to simply divert the route of the bus to the center of the community, one block from the current route. Then a bus stop could be provided at that convenient area.

An abandoned railroad track and bed runs directly through the center of the community. This track provides an opportunity to unify the area and to create a feature which would draw the population together for public interaction.

A proposed solution to the old railroad bed is to develop the linear element as an attraction and community trademark by using an old refurbished railroad car as a trolley and coffee shop. This unique feature can be "stationed" along Tillotson Ave. and attract the public to the coffee shop as well as the elderly population. Or, the train can slowly move back and forth from east to west of the community making various stops along the way. In this mode, the train will not only function as a transportation element, but also as a magnet for interaction.

The suggested stops along the track will provide access to the shopping area, community center, bank, church, a nursing home, and the White River Plaza.

Also needed, is a means to push the axis, or road, northward from the White River Park. Conversely, a means to terminate the axis once it reached the neighborhood is needed.

My proposed solution is to realize the axis starts at the entrance to the community off of White River Blvd. and terminates at the intersection of Cole and Ethel Streets at the focal point of the community. The paving material of the intersection at this focal point is of brick pavers to signify the significance of the intersection as well as to reminisce back to the days of brick streets. In the park, shuffleboards can be added. And the empty yard to the west side of the park could be utilized as the "elderly yard" featuring a gazebo and exhibition area for shows, get-togethers, and other activities.

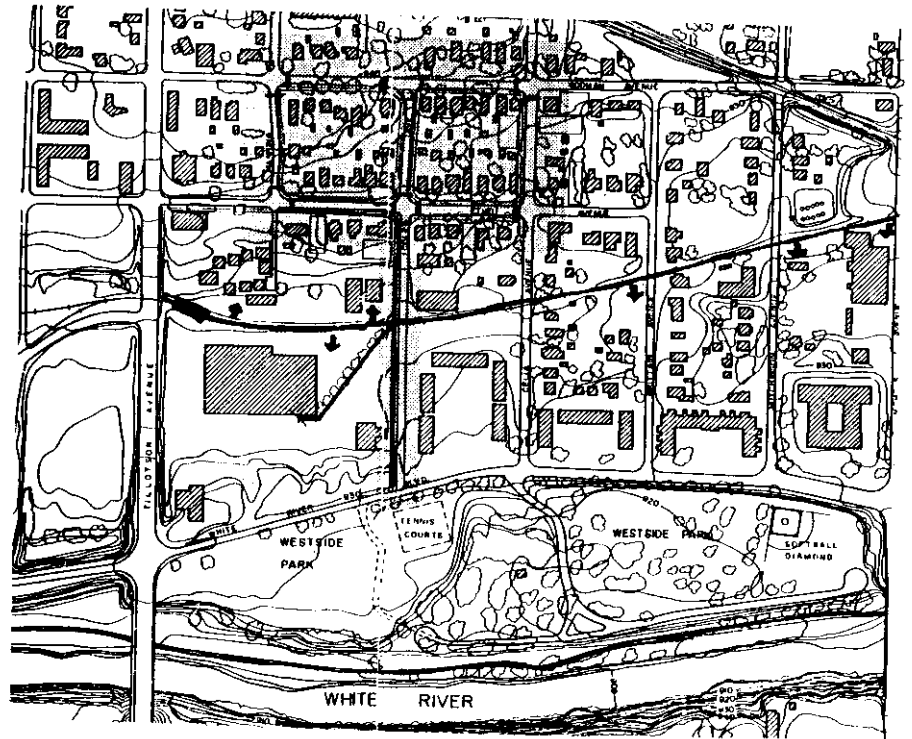
Also needed is a network of walks and sidewalks throughout the neighborhood. I propose to repair and utilize any existing sidewalks and construct new walks where necessary. The surfaces should be textured to provide slip-resistant surfaces when wet or slick.

It is also desired to give special treatment to the intersections where the community sidewalks cross the streets so that travelers know that they are in a unique area. One way to satisfy

this need is to simply extend the surface material of the sidewalks right across the road at each intersection.

Also, the existing pathway along the White River could be utilized by the elderly who need to walk for health purposes. Distance markers might be posted for those who must walk specific distances.

And a shaded area along these walks is needed along with a place to sit, rest, and converse with others. It is proposed to simply place benches in shaded and invitingly landscaped areas at various points along the paths.



The important thing to design to is the elderly and their particular needs. Simply do not design a community without regarding the people who will use it, and expect them to be happy. The older age group of our nation is a select group which deserves special attention and has many needs particular to their age. As long as we design for their needs and listen to what the elderly have to say, before we design, the community will be a success.

My design proposal for an elderly renovated community in Muncie, Indiana is what can best be accomplished in this particular neighborhood in this portion of the city of Muncie. Under no circumstances could these designs be picked up and be placed in another community successfully. Site planning and site analysis is one of the first keys to a successful community, and these conditions are different for each neighborhood. After this is established, listen to what the elderly have to say, research their needs, and design a flexible environment, both at the housing scale and at the community scale in order to accommodate various situations which respond to the elderly and surrounding resources. This will be the beginning of the successful renovated community for the elderly.

¹ "Coming of Age," Leslie Ensor, builder, September, 1987, p. 72.

² *Ibid.*, p. 72.

³ Lawton, M. Powell. Environment and Aging. Belmont, Calif: Wadsworth, Inc., 1980, p. 32

⁴ Brochure from Four Seasons Retirement Center, 1901 Taylor Rd., Columbus, In., 47203.

⁵ Lawton, M. Powell. Environment and Aging. Belmont, Calif: Wadsworth, Inc., preface, x.

⁶ McRae, John. elderly in the Environment. University of Florida, Center for Gerontological Studies and Programs, 1975, p. 86.

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