

Clarks Creek Health Care Community

To Gay Elizabeth, who made the fulfillment of
my Thesis worth waiting for

acknowledgments

Many people, including the residents and employees of Golden Manor Health Care Facility; Lebanon, Indiana, contributed to the ideas expressed in this booklet and in effect, directly influenced the design applications of my Thesis research.

My friends and colleagues at Ball State University similarly had a tremendous input into the evolution of my Thesis design and application.

My good friend, David Williams, was consistently there during my Thesis year, to encourage, critique, and expand my design thoughts.

A special thanks is due Jack Wyman and Sonny Palmer for their support and patience during the duration of my project.

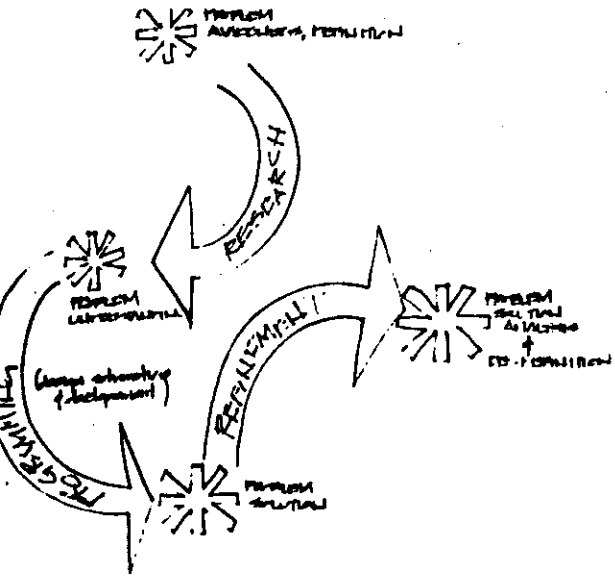
Last, and certainly not least, I wish to



and their family for providing me with the opportunity of living at their Golden Manor Health Care Facility and for their commitment to and their support of the directions that my education has taken me the past seven years.

The typing in my Thesis booklet was done by Sandra Kohler.

project scope



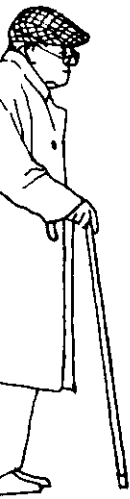
Clark's Creek Health Care Community is a community development built specifically to meet the needs of the elderly. It is conceived as a combination of independent living units, semi-independent living units, and a totally dependent skilled-care living facility.

In addition, the health care community program would include ancillary services such as a "community center" development, maintenance services development, health and rehabilitative services development and administrative services development.

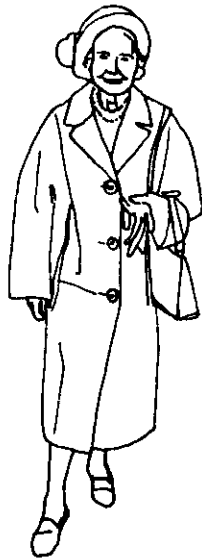
The community development of Clark's Creek Health Care Community is foreseen as a five phase process. Currently existing on the site is a 200 bed skilled-care health care facility. The second and third phase of the community development is what will be addressed in the design application portion of my Thesis project.

independent and semi-independent living units and the third phase consist of the development of a "community center", including maintenance and administrative program requirements. The fourth and fifth phases of Clark's Creek Health Care Community is addressed in my Thesis application in terms of the over-all site development only. The fourth phase is the development of a human health and rehabilitative service clinic adjacent to the existing health care facility and the fifth and final phase would be the design and development of a community chapel.

introduction

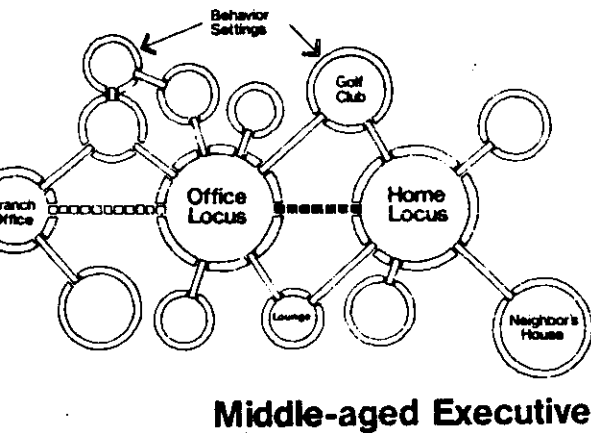
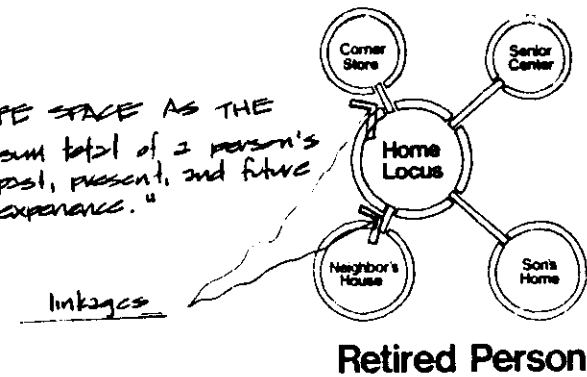


life sustaining community and as such it will need to address the special and specific needs of the elderly. Basic needs that have been determined as critical to the enhancement of the life of an older person are independence and self reliance, neighborhood life boundaries, social interaction, proximity to resources, personal space and privacy, and sensory stimulation and orientation. All successful elderly environments respond to these human needs and consist of people and things interacting.



Independence is critical for the elderly environment. The "idea of self" concept is essential to an older individual. An elderly person needs to have the idea constantly that he is still a positive, creative, and motivating force within his community as well as in his home. It is of particular importance for

do chores by themselves and for other people. The community in which he lives can psychologically and physically motivate the elderly person to maintain his independence and his desire to remain active within his life set. The more sensitive the elderly environment is to the individual's need for independence, the more successful the transition to the health care community will be for the individual.



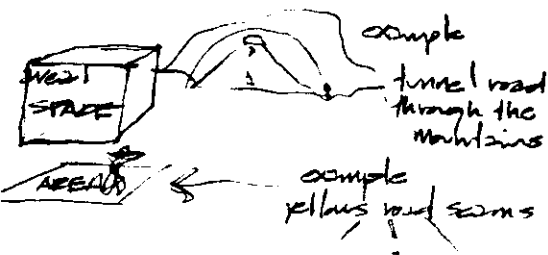
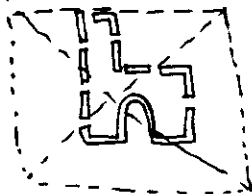
The aspect of social usefulness is critical within the health care community. Frequently, the social usefulness of an individual in our society is based on that individual's ability to provide economic input into the system. This places the elderly individual in an awkward position in our society. Additionally, the United States is a very mobile society, increasing in urbanization and essentially creating a break down of the nuclear family as

the elderly person need to be specifically addressed more sensitively in order to sustain their life boundaries and activate their later years in life.

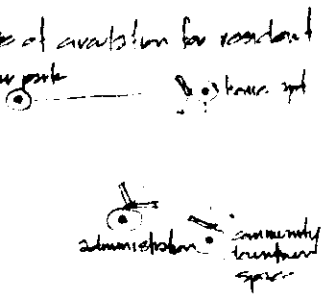
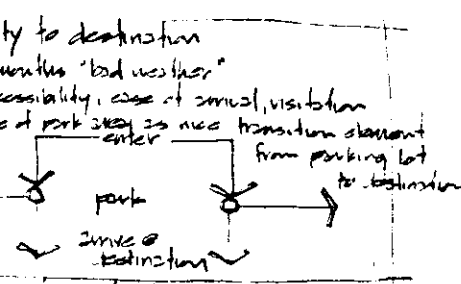
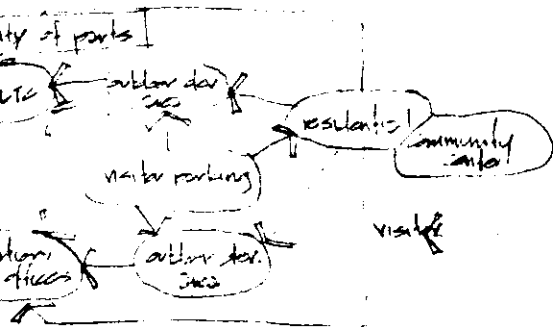
Neighborhood life boundaries are important to an elderly individual, as the elderly individual perceives these boundaries more readily than a person who feels more secure in his life set. Neighborhood is the primary unit of measure for one's perception of self. In some European countries great emphasis is placed on putting elderly who need care in as fairly close proximity to their former home as possible. This sustains their perception of their "home unit" and their physical boundaries thus helping the individual to overcome their psychological boundaries of being in an institution.

ALTERED LIFE BOUNDARIES

Physical Boundaries vs. Psychological Boundaries



Social interaction is perhaps the most critical



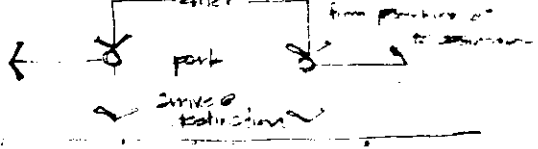
elderly. Elderly people need to be listened to and talked at in order to feel like they are still a part of what is revolving around them. Human beings are gregarious by nature and optimization of the range of natural interactions with various age groups and within different social settings is something to be desired in the health care community.

Physical limitations in the later years of one's life often limit the ability of a person to continue to live as they once did. This can greatly add to the creation of psychological boundaries which diminish the positive attitudes of the older individual. The loss of mobility is a factor to consider at every level in the development of Clark's Creek Health Care Community.

Equally as important as social interaction is

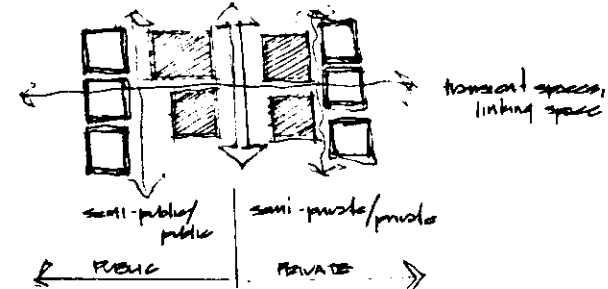
proximity to destination

- Emphasis "indoor spaces"
- accessibility, ease of direct visitation
- use of park space as new transition element - from structure of



It is essential for a person in his later years to be able to retain a certain portion of his privacy. By the creation of "actual" privacy and "psychological" privacy in spaces, the elderly individual can retain his sense of personal space. The ability to call a space or portions of a space one's own is a life sustaining notion.

ORGANIZED IN ZONES OF RELATIVE PUBLICNESS & PRIVACY

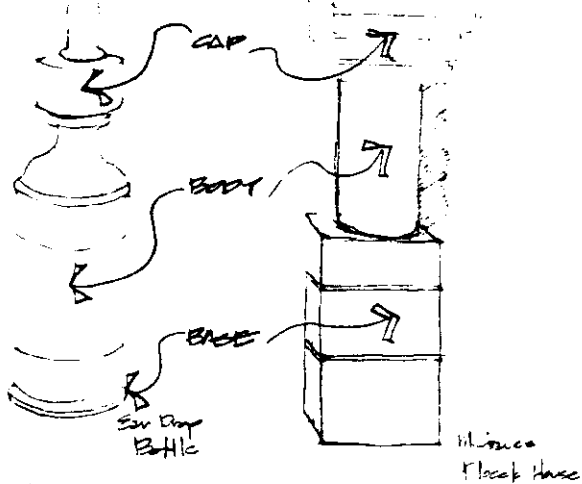


The elderly environment needs to be able to compensate the individual for losses related to his visual, auditory, tactile, vibratory, odoriferous, and thermo factor senses. An elderly person's spacial awareness and orientation greatly diminishes with the losses of these physical assets. Design features should be introduced to increase perceptual comprehension of the environment.

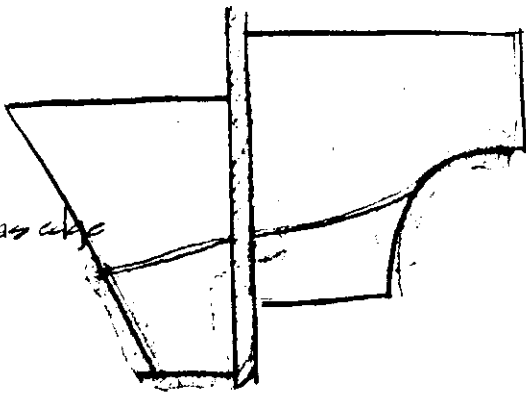
To summarize, all of the mentioned basic needs

relationship to each other in order to make Clark's Creek Health Care Community a successful environment in which to live. The intention of my Thesis design application is to address these basic needs within the parameters of the community's site and building program and create an environment which is sensitive to and identifies with the elderly individual.

SEQUENCES



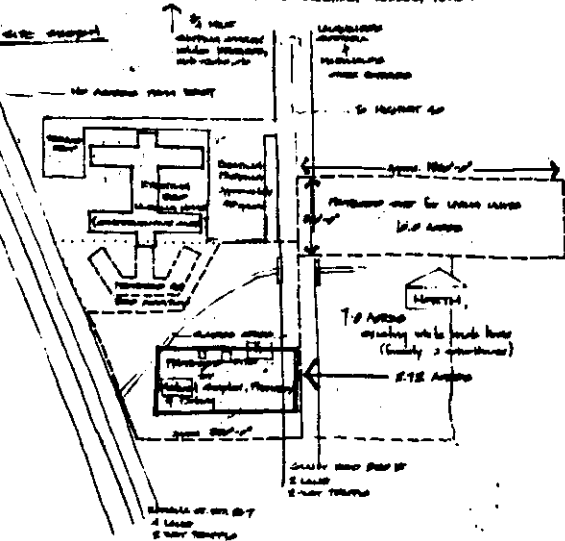
Building as site



Clark's Creek Health Center is a long structure to the north.

Major Programmatic Elements will include:

- Large units for day treatment / ambulatory surgery
- A central control, entrance or a covered walkway connecting ambulatory areas, treatment, & diagnostic patient services
- Diagnostic services: laboratory, radiology, etc.
- Patient rooms: should have view of outdoors, natural light, privacy



Site Sketch and Notes

Clark's Creek Health Care Community is located two miles south of U.S. 40 on County Road 850 East between Plainfield and Indianapolis. It is approximately five miles east of the center of Plainfield and twenty miles west of downtown Indianapolis.

County Road 850 East runs south from U.S. 40 and divides the site into two parcels of land. On the west side of County Road 850 East is the smaller parcel of land which currently has the existing 200 bed Clark's Creek Health Care Facility located on the northern half of this parcel.

On the southern part of this parcel is a remaining 2.72 acres which will be used to build the health and rehabilitative services clinic.

This portion of the site is bounded on the west



- scale
- material
- horizontal exposure
works to my advantage
- natural surroundings

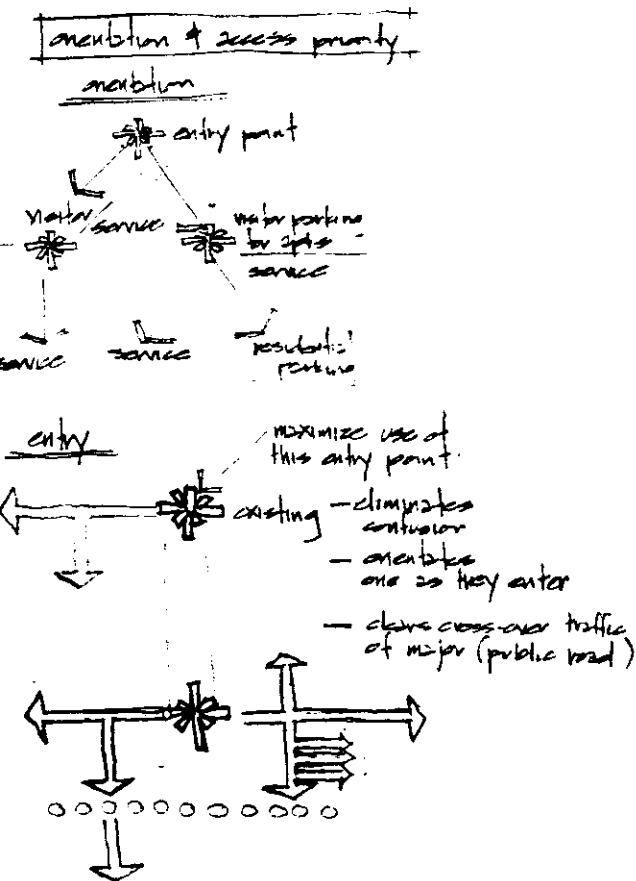
the north and south, lie flat open fields of farmers crops and grazing land, with single family homes dotting the landscape.

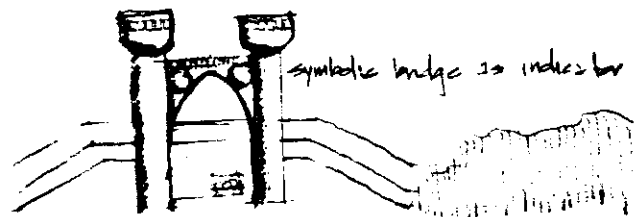
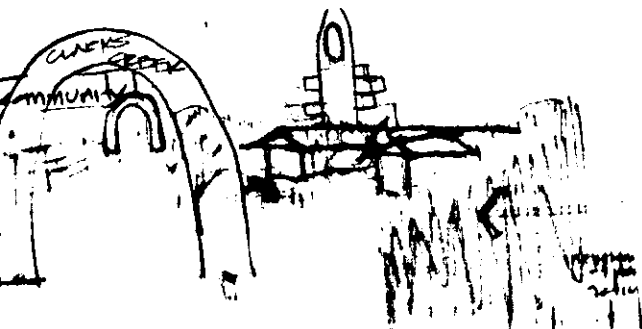
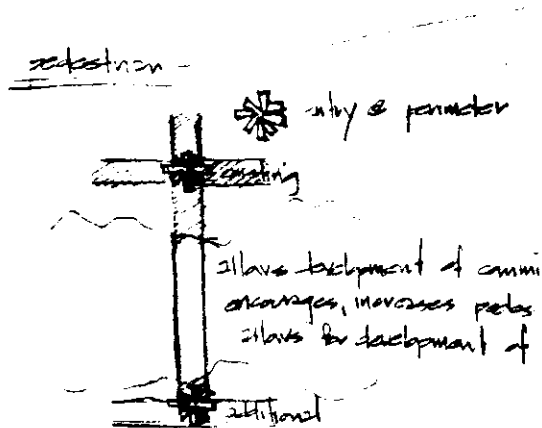
The existing nursing home structure is a one-story, brick veneered, gabled roof structure with six protruding wings. The style of the architecture might be considered colonial, however, it is easier to refer to it as "nursing home vernacular".

The larger portion of the site lies east across County Road 850 East. It consists of a 10 acre tract of land on its north side and 7 acres of land directly adjoining the 10 acres on the south portion of this parcel.

This portion of the site is bounded on the north by a premanufactured home park (permanent housing) and on the east and south sides by

Clark's Creek runs east to west through the site, initially forming the boundary line along the southeast edge of the larger east parcel of land. The site has few amenities to take advantage of on-site or in adjacent to the site. The total site is generally flat with less than 10% slope occurring anywhere with the exception of the creek area where slopes up to 20% occur. Most of the land is currently planted in farmer's crops with the creek line harboring the only forms of tree life and vegetation. In proximity to the site (1 mile) there are quite a number of small outdoor shopping areas, fast-foot restaurants, and miscellaneous services within the community of Plainfield. The development of the site is based on four major considerations. Due to the split nature of the land, the circulation onto the site and through the site was of major

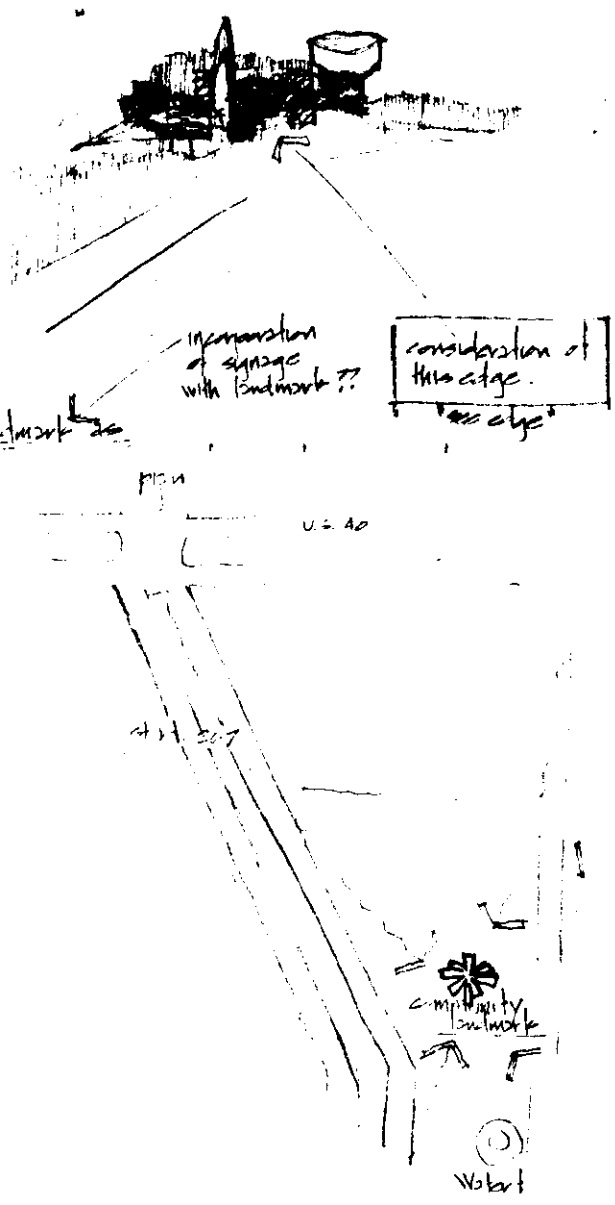




importance. The existing two entries to the west portion of the site were used as entry points for the housing development east of County Road 850 East to minimize vehicular intersections on the frontage of road which splits the site.

Additionally, the relationship of the existing nursing home facility with the program elements of the future proposed phases is critical to the strength of the site development in it's being perceived as a total health care "community". The use of axes, coupled with the concept of "image" will emphasize the "community" development internally and externally. The concept of "image" is translated into the notion of giving Clark's Creek Health Care Community a landmark, which is readily identifiable from all directions and one that identifies the health care community as a positive addition to the larger suburban-farming

community.

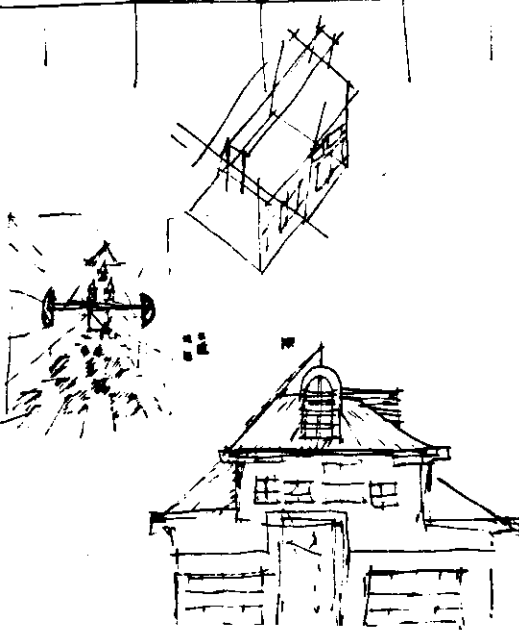
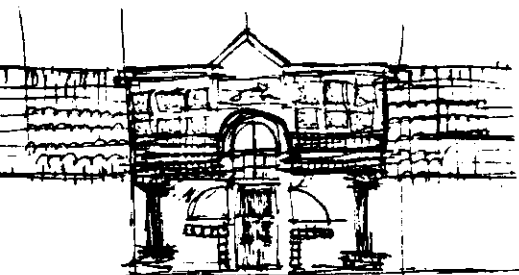
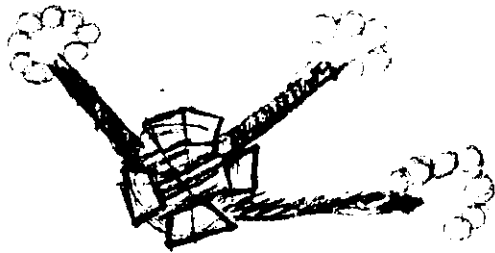


Thirdly, the development of the stream into the unifying natural element it wants to be and the awareness of the sensitivity to the community edge in relationship to the trailer park on it's north boundary is of primary importance.

Finally, the over-all site development needs to address the likelihood of Clark's Creek Health Care Community expanding southward as land is acquired from its current southern property line on the east side of County Road 850 East.

community center

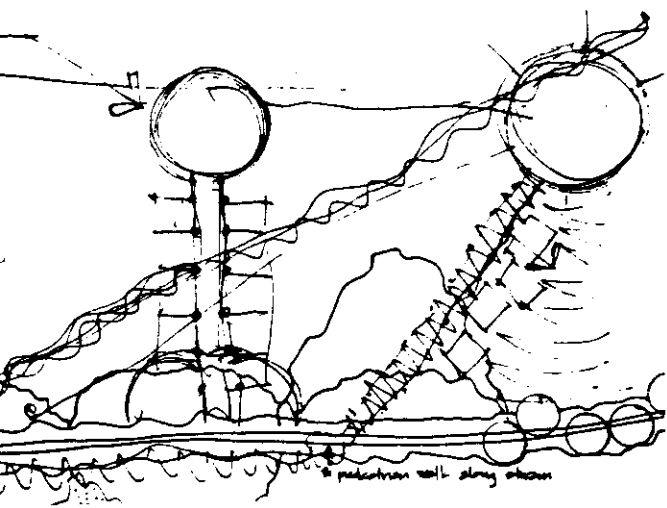
small communities organized around 'towncenter'



linked directly to the community center to attempt to reinforce the idea of independence and self-reliance in the residents. The creation of a highly active space at the center of a community will encourage the resident to participate in the various activities and increase his desire to be active in the community.

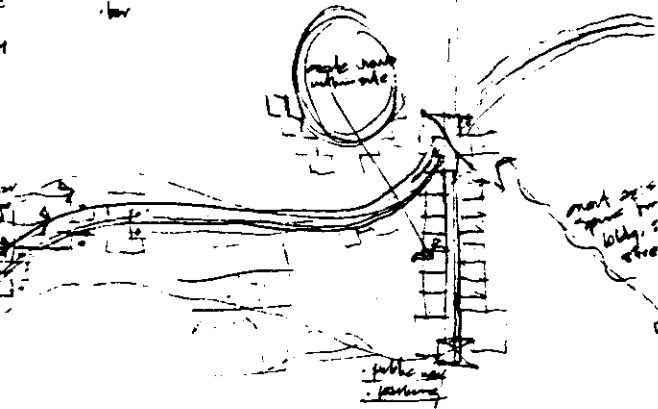
The programmed elements which house defined space are a cafe, a post office, a corner bank, a laundromat, a barber shop, a beauty shop, a bakery, a library, and a Town Hall. Additionally, the design has incorporated a series of separate spaces for social interaction between residents. This is done in a way so as to not create a forced interaction but rather an interaction by choice, thus strengthening the idea of personal space and privacy.

In plan, the community center is set up as a



• walk outside areas & short distance
 around house (to roads)
 sides of buildings

low



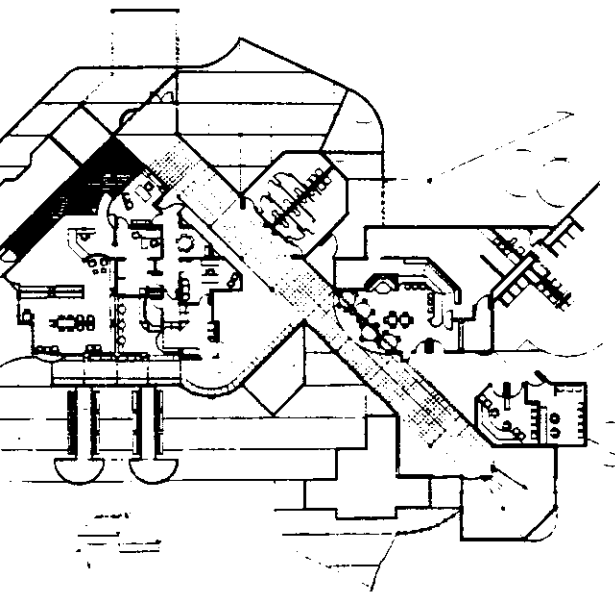
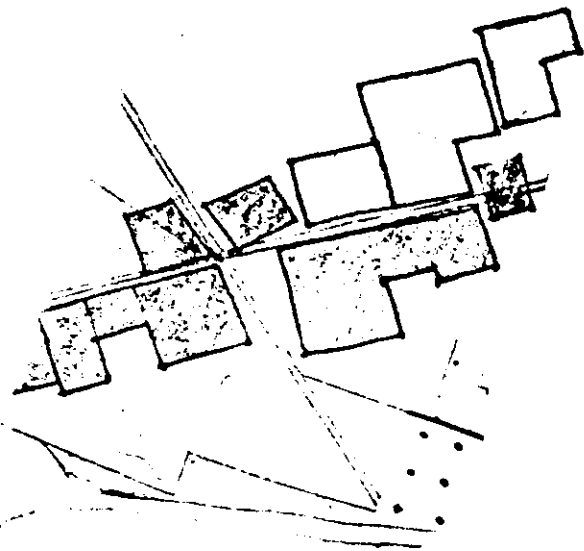
will see definition of space
 and/or privacy, enclosure

pair of two squares, one which has been rotated forty five degrees to facilitate the connection to two housing walls. The major entry from the existing Health Care Facility is on axis with the public entry of the community center. This is the origin of the "community street", which terminates at the Town Hall, the symbolic center of the community. The community center was located on the site in consideration of the possible community development expanding southward with future land acquisition.

The Town Hall terminates on Clark's Creek where the creek has been widened to create a small tree lined lake at the edge of the community center. The lake, a covered fishing bridge, and various intimate meeting places have been created as sensory stimuli for the community residents. The Hillington Civic Center outside of London with its various roof forms and facade detailing created a strong visual image

during the evolution of the design. The treatment of the facades of the community center attempts to retain the scale and form of the housing units but yet create an image which earmarks it as the "center" of the community.

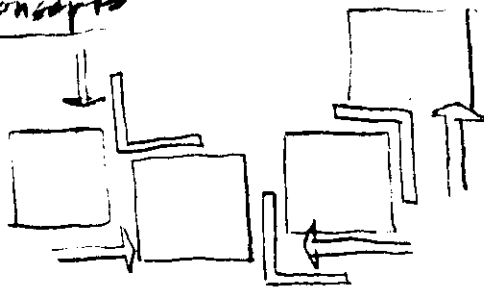
To summarize, the design of the community center attempts to act as a focal point for the residents of Clark's Creek Health Care Community and for the larger suburban community near Plainfield. Additionally, it attempts to enhance the existing beauty and natural conditions around the small stream and create a major public space adjacent to the community center for social interaction purposes.



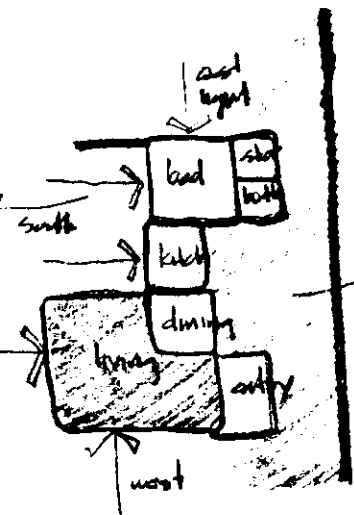
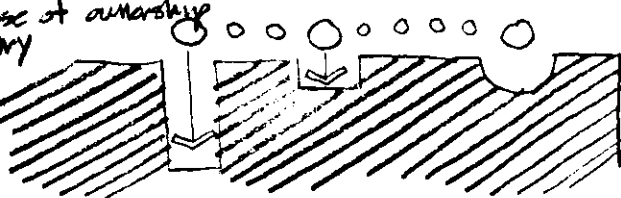
housing

housing concepts

act
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on use



UNITY
use of ownership
ary



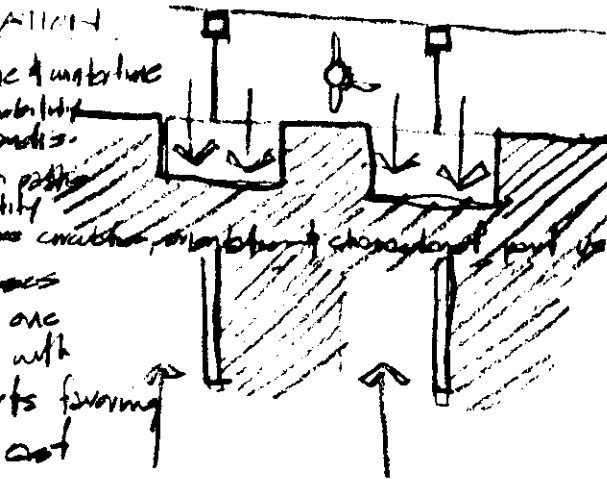
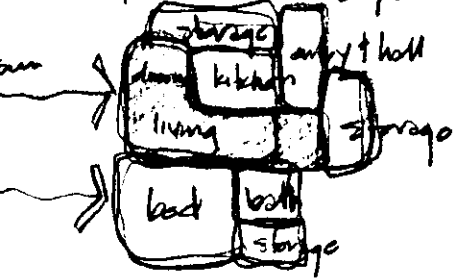
My initial housing concepts originated from the notion of creating a highly flexible living unit cluster arrangement which considered certain design criteria obtained from my research. Design criteria that was influential in shaping the design of Clark's Creek Health Care Community were protected pedestrian circulation, personal space and privacy, security, (both actual and psychological) orientation nodes for the residents, separation of vehicular and pedestrian traffic and the intersection of pedestrian and vehicular circulation at controlled points.

The housing units are designed to attempt to identify an edge and boundary for the community. The Byker Housing Project by Ralph Erskine outside of London created a strong visual image during the development of the housing.

Programmatically, the housing units have been

maximum # of sunlight hours:
living, bedroom, kitchen

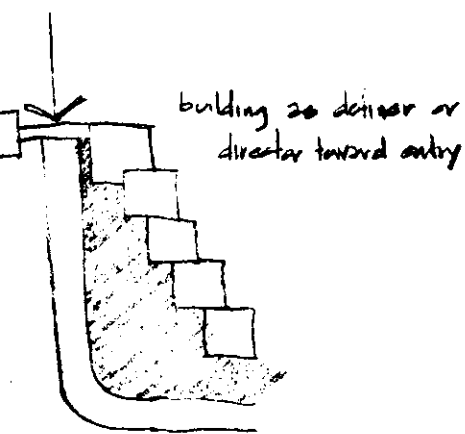
spaces & relationships



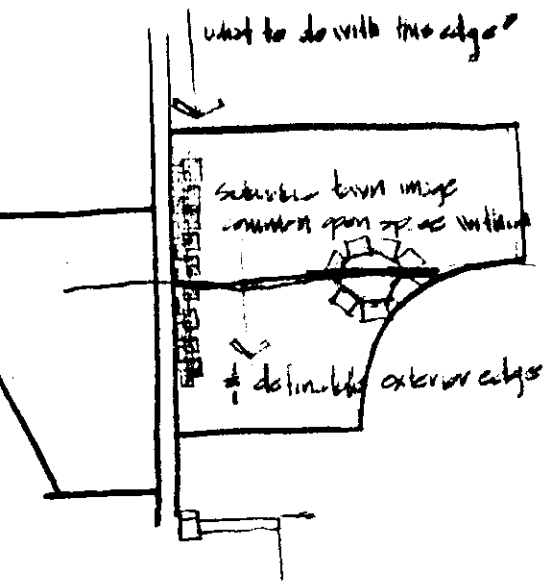
ve formal, less private which enters
ed or protected pedestrian up
time activity!

designed to have at least 10% minimum of two bedroom units and 10% of one bedroom units sized for two person occupancy. The total number of two person - one bedroom units to the smaller one bedroom units shall be 20% of the total units on the site. A minimum of 65 square feet of common outdoor space for every dwelling unit has been provided. One parking space for each dwelling unit has been provided also, with a portion of the parking being covered parking for the residents.

The variety of living units created in the cluster are the one bedroom with an attached bath (two people occupancy), one bedroom with an unattached bath, two bedroom with one unattached bath, two bedroom with two baths, and a communal living unit which would be used for the semi-independent resident. In this communal living arrangement, six bedrooms occur with two baths and two kitchens.



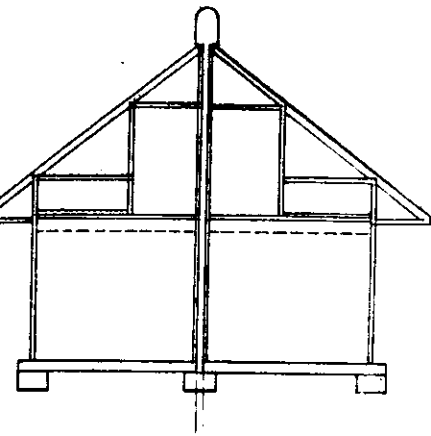
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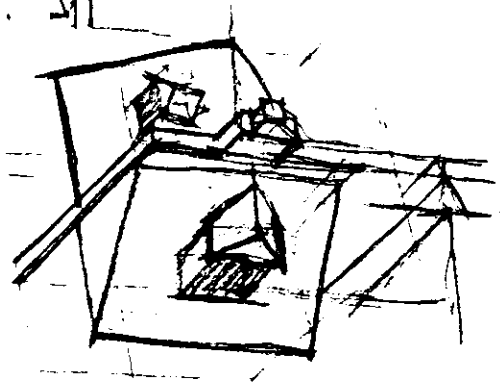
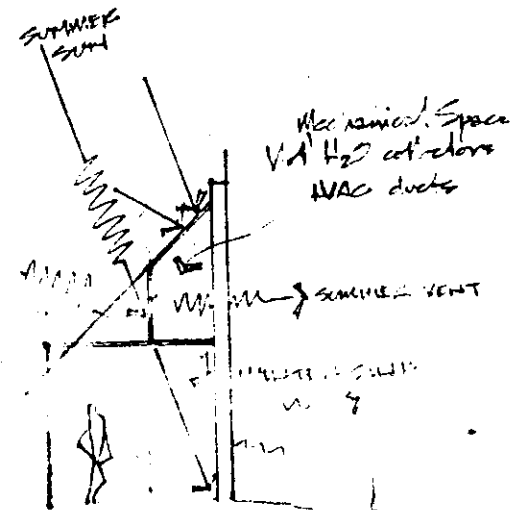
The development of the core module in the housing scheme evolved out of the concept of centralizing as much utilitarian space as possible in the "core" of a unit to allow for the flexibility and openness of the living spaces around it. This concept allows the exterior vertical walls to be punctured for windows and door at almost any location.

The module is a 10 foot by 20 foot prefabricated unit which houses the utilitarian functions; the bathroom spaces and the kitchen spaces. In addition, the module attempts to house most of the domestic and mechanical storage needed for each unit.

Systematically, the module incorporates the use of a roof top solar hot water system, space for the HVAC unit, and the major circulation ductwork. All the main electrical and plumbing lines and vents are prefabricated in this module.

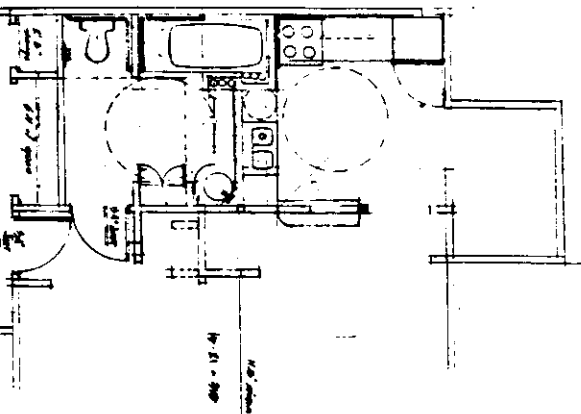
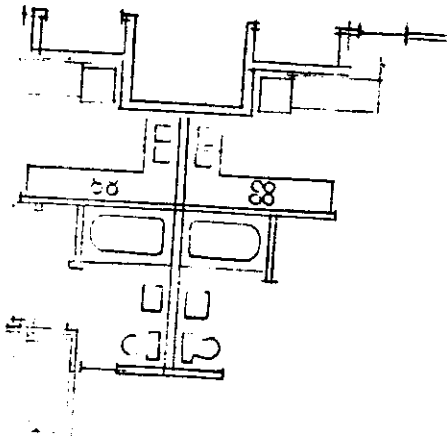
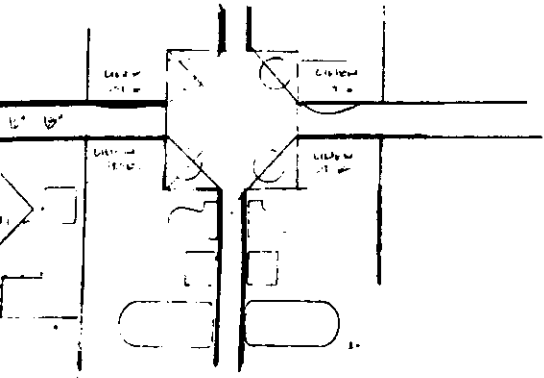


The HVAC unit is accessible from outside of the apartment unit so as to reinforce the idea of personal space, privacy, and security for the user. The lighting is prefabricated in the module for the kitchen, bathroom and storage areas in the factory. Mechanical and electrical stub lines from their respective power sources are built into the module to facilitate the "plugging in" the on-site construction of the living spaces.



Structurally the module is comprised of 4 foot by 8 foot wood frame panelized sections, machine cut and assembled in the factory, and delivered to the site on a semi trailer. One housing module is backed up to an adjacent housing module to create a central plumbing, mechanical, and chase wall. Directly above this wall is a seven foot high pedestrian access space to create an area to access the solar hot water panels and mechanical distribution lines

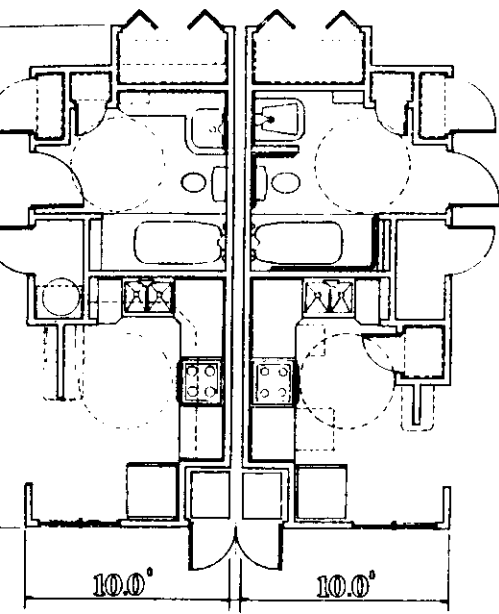
which run above the module.



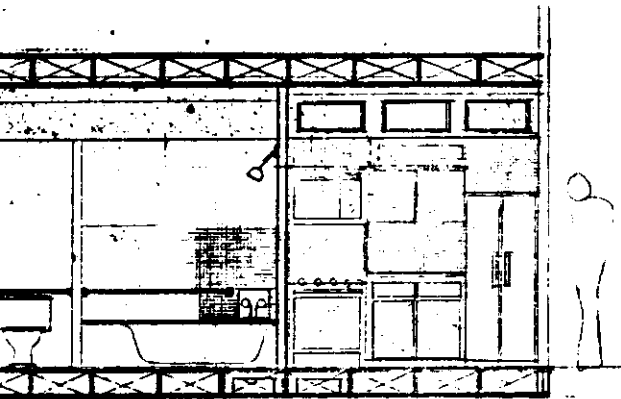
The idea of developing a "prefabricated" module stems from the notion of "specializing" and "centralizing" the areas of special design considerations for the elderly, most of which occur in the utilitarian spaces of a residence.

The economics and quality control of the prefabricated unit was a positive factor in the development of the module. Davidson Industries, Inc. in Indianapolis currently manufacture a prefabricated module unit for cluster housing. In correspondence with them, it was determined that a savings of \$3,000 - \$5,000 per unit could be attained by incorporating a prefabricated unit into the design scheme.

Structurally, the module floor system consists of a 14 inch deep floor truss system built



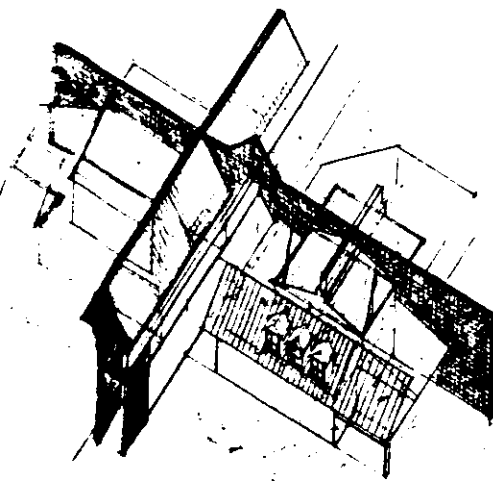
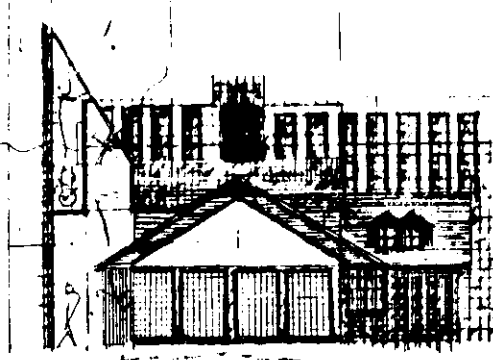
UNIT MODULE



entirely out of two by fours and truss plates. The roof of the module is set at a 10 foot height (8'-9 $\frac{1}{4}$ " finished ceiling) and is built similar to the floor trusses. The truss system allows for the utilization of the clear space within the truss for mechanical duct work and electrical lines and enables larger spans of space between bearing points.

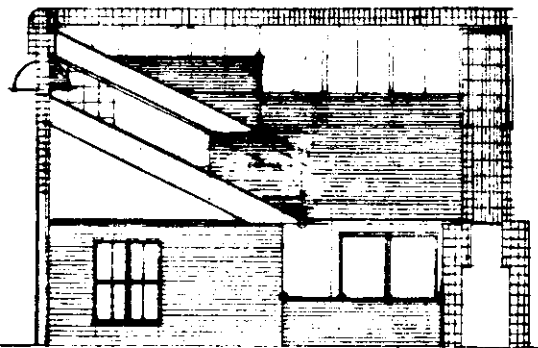
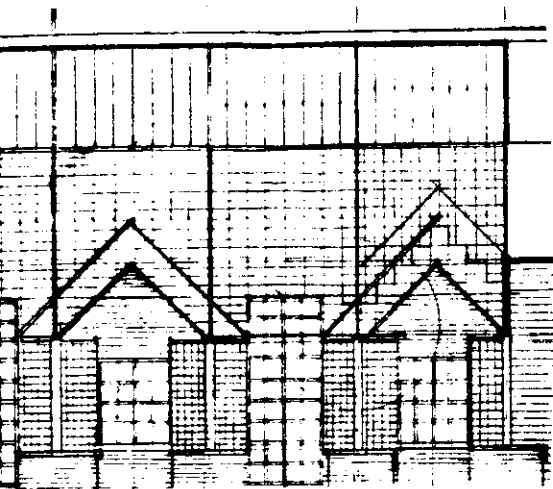
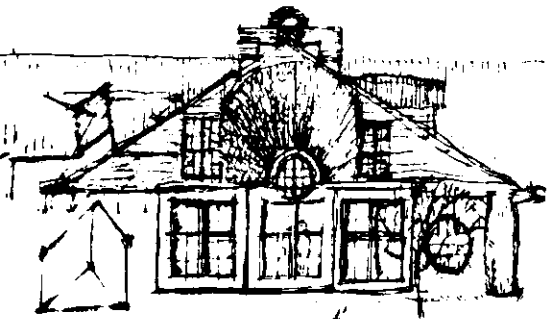
The placement of the living units on the site is designed on a 30 foot grid system. This allows for the center co-ordinate of the module core to be placed on the co-ordinate points of the 30 foot grid system after structural piers and sewer lines have been pre-set accordingly at co-ordinate points and intermediate co-ordinate points as needed to facilitate the arrangement of the living units on the site.

The housing on the Clark's Creek Health Care Community site takes two distinct yet related



forms. One form attempts to externally define and direct the circulation on site from the entry points to the community center, in addition to creating an enclosed pedestrian-way to the community center. This allows for maximum accessibility to the community center at all times of the year.

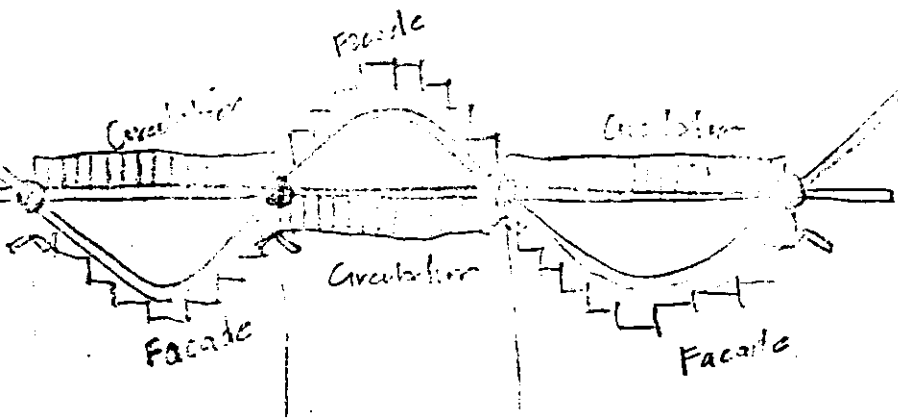
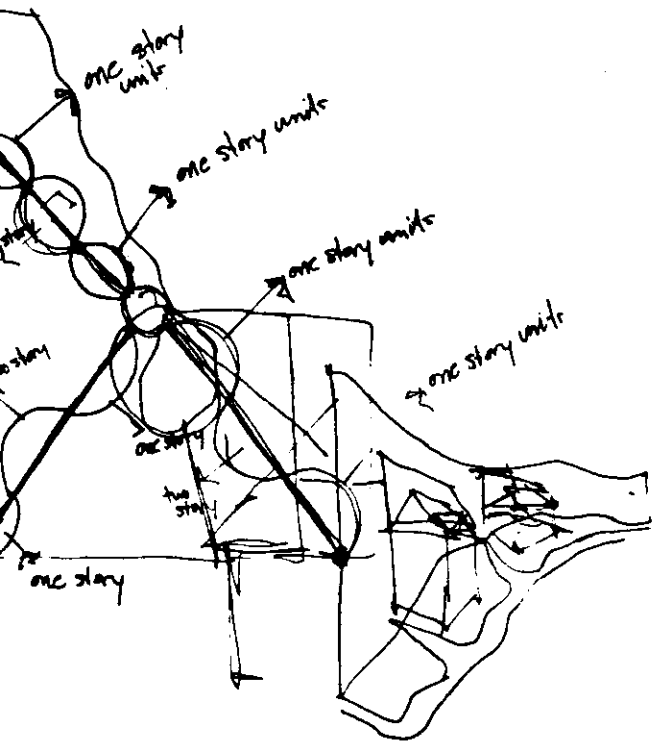
These linear "serpentine" walls which flow out from the community center house approximately sixty units. They additionally house six units which are the communal living units with six bedrooms, two baths, and two kitchens. The communal living units occur at the "orientation nodes" previously spoken of. The "orientation nodes" house the laundry area, vertical circulation, garage parking, public entry and activity areas on the ground level. The vehicular traffic crosses these serpentine walls at control points near the community center and at the terminating end of the housing walls.



The other type of living arrangement is the detached housing unit which utilizes the pre-fabricated module but is separated and not connected to the covered pedestrian way. These units try to create a sense of place for the person who wants to remain independent and self-reliable for as long as possible.

Architecturally, the treatment of the facades of the individual living units attempt to evoke a sense of identity for it's user. Materials and architectural elements typical of the suburban farming community in which the health care community exists are used throughout. The materials and forms of the prefabricated module and the serpentine wall and chimney attempt to solidify the image of the community as a whole. Roof forms used throughout the project attempt to create interest and identify with the traditional housing forms from the community.

The overall effect of the housing development is the image of a continuous circulatory wall that is accessible on one side to vehicular traffic. On the opposite side the wall is lined with single story individual dwelling unit clusters with private gardens attached to shared common garden space leading directly to the community center.



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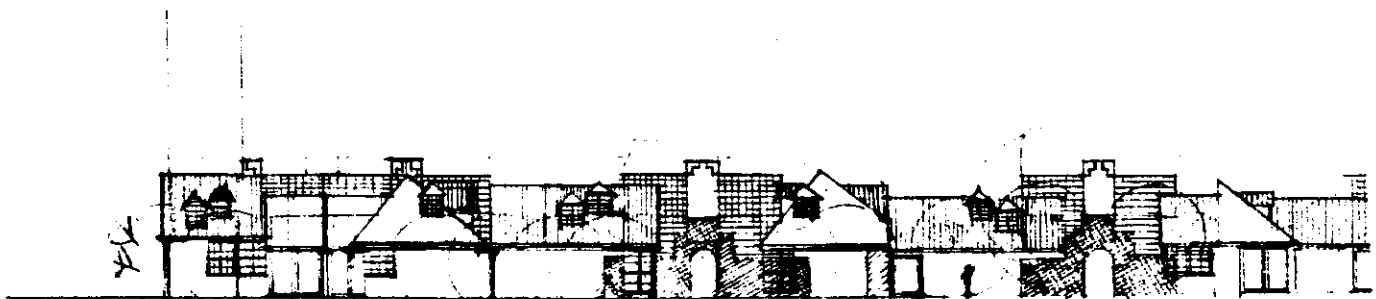
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