

**Integrating Recreation and Wellness into a
Large-Scale, High-Density Housing
Development**

By

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April 30, 1991

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THESIS INFORMATION

Author's name: David W Clevenger Year: 1991
Thesis Title: Integrating Recreation & wellness into
a Large-Scale, High-Density Housing
Development
Location of project: (If rural, nearest town) Indianapolis, IN
Building type: _____
Thesis prof(s): Bon Spangler, Noel Vernon
Type of degree: Bachelor Land Arch Date submitted: 5/1/91

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Abstract

Integrating Recreation and wellness into a large-scale, high-density housing development is a very complicated thing to do. All the different variables relating to recreation and wellness have to be understood as does a strong knowledge of large-scale, high-density housing.

Recreation has to be provided for all age-groups that has variety, choice, and complexity. We, as designers, cannot try to determine what the people living on the site will do, but instead have to provide a variety of activities from which the person can choose. and these choices have to

be complex enough to provide continued enjoyment for long periods of time. Only under these conditions, will people continue to use a recreational area.

By providing a variety of spaces and activities from the small relaxation areas to the central recreation area, this has been accomplished on the site of Lockefield Garden Apartments. And by providing variety, choice and complexity within each of these areas, people should continue to enjoy them according to their own needs.

1.1 Problem statement

The problem statement for this terminal project is: To integrate wellness and recreation into a large-scale, high-density housing development.

1.2 Purpose

To alter the site of Lockefield Garden Apartments to create more recreational amenities that will provide recreational use over a long period of time and create areas to help growth in the five areas of wellness.

2.1 Research

Most large-scale, high density housing developments contain very few recreational amenities and almost no wellness consideration. Those that have recreational areas labeled as such often find that they are very poorly and infrequently used. As M. Paul Friedberg explains: ". . . play facilities are uniformly dreary because of a combination of factors-- apathy, misconception of children's needs, lack of reasonable alternatives as models, lack of children's needs, lack of reasonable alternatives as models, lack of exaggerated emphasis of the management of facilities Obviously, playgrounds are not being designed for the child" (Friedberg

36). Some playgrounds are not used at all as the street are the preferred recreational area, "The street--spontaneous, exciting, and immediate competes with the home, school, and playground for the possession of the child. The street wins hands down" (Friedberg 27); "Playgrounds that deny the child; that offer no chance of involvement, participation or manipulation; that are devoid of choice, complexity, and interaction will be empty of children--and dead ground. The street will be the playground" (Friedberg 29). A study by the University of Illinois at Urbana-Champaign on the use of playgrounds has determined that "Children will play on conventional playgrounds for no longer than fifteen minutes at a time" (University of Illinois at Urbana-Champaign 17). Recreational facilities are often designed more for the desires of the designers, contractors and administrators than they are for the children.

The Play equipment itself is also designed without much consideration to the child. Most of the play equipment used on a conventional playground is one-dimensional, that is, the equipment has only one predetermined use and the child quickly becomes bored of the equipment. It is often found that children prefer drainage ditches and streets to the conventional manufactured playground. The designers of play equipment usually try to make play equipment that is fun and

interesting to the child, but they usually cannot properly determine what is successful and what isn't. This is because as adults we can only guess as to what kinds of activities are fun for the child. And because there is only one use for the equipment, if this guess is wrong, the child isn't going to enjoy the equipment. Even if the child does find the equipment fun and exciting at first, after a while the child will become bored of the activity and want to do something else. If there is nothing else that the child can do with the equipment, then the child will either leave the equipment or use it in a way in which it was not intended to be used. If this happens, then the child could be in danger of getting hurt.

Children thrive on complexity and challenge in a playground.

"Complexity is created by providing a number of elements in an apparatus each of which is different enough so a child can't respond to the apparatus as one simple object" (University of Illinois 18). Children seek challenge because of the inherent, "danger and excitement of attempting to do something they have never done before" (University of Illinois 19). Although danger is involved, because they are challenged, children usually realize their capacities and avoid going beyond them (University of Illinois . 20).

A major part of changing the design of playgrounds is to create

better play equipment. As stated early, "Children will play on conventional playgrounds no longer than fifteen minutes at a time" (University of Illinois 17). This is a result of poor planning of playgrounds and of poor equipment. Swings are the most popular pieces of play equipment, and are also the most prevalent. Although this is true they take up a lot of space and do little to develop the motor skills and physical condition of children and promote individual rather than group play. They are also quite dangerous. Alternatives to the traditional swing include rope swings and tire swings. These swings have the added advantage of promoting group play. Slides provide the thrill of rapid movement, but are simple objects and are easily mastered. Attempts to use them differently cause them to be one of the largest causes of playground injuries. Alternatives include using slides as part of a complex structure, not as a separate element on a playground. Making slides wider and building them on mounds would make them safer to use and allow more than one child to use it at a time. Jungle gyms could also be integrated with other equipment to increase their complexity. Making the bars increasingly further apart to allow several different age groups to use the structure would improve its use.

Safety has been a big concern of playgrounds and their equipment. Play equipment is usually designed to be safe, but that is only if the equipment is used as it is suppose to be used. If the child becomes bored of the play environment and uses it in an non-conventional way, than the danger of being hurt increases. The result is that playground safety is not just having safe equipment, but also equipment that will keep the child's interest in its intended, safe way.

On-site recreational areas for adults are often designed in the same way. As adults, we can better understand our own needs, but we still face the problem of poor and infrequent use in the these areas.

In order to design recreational areas for the different age groups, we have to understand the recreational needs of these different age groups. For recreational studies, there are approximately six different age group categories. These include: preschoolers, gradeschool children, teenagers, adults with children, adults without children and the elderly. Recreational activities vary greatly among all these different age groups and even between each age group.

Preschool children have a short attention span. Their play centers around fantasy and imagination. They are not socially oriented and prefer to explore their own creative urges. Preschool children need their own

area such as a sandbox, or a trickle of water to satisfy these creative urges. They need play equipment that they can climb in, around, under, and through to develop their motor capacities. This area needs to be in view of parents, guardians or other authorized adults.

Grades children are more active than any other age group on a recreational site, "A child looks for challenges in his environment" (Friedberg 75). Gradeschool children needs places to run, explore, imagine and tests their abilities. They need very active areas such as room to run, ball fields and game courts. They also need group play to develop social skills. They need play equipment that they can climb up, slide down, crawl through, and challenge their abilities. Grades children usually know their abilities better than anyone else, including their parents. As a result, they usually will not do things that are beyond their ability.

Teenagers are often neglected in planning a recreational area. They know what they want and should be involved in the planning process. They should be given a measure of responsibility in running the site. Young teenagers want adventure and excitement in addition to game courts and ball parks. They are socially oriented and need areas to develop and show off their physical prowess (University of Illinois 6). They want a place that they can call their own, "Turf is identification and security. Since

society makes no special provision for the teenager, we witness constant conflict over turf. Teenagers need a special place somewhat separate from the mainstream of society, but not excluded from it" (Friedberg 108).

Adult recreation is described as three dimensional, having physical, social and cultural components (Friedberg 117). Adults retain interest in sports and activities but become more involved in passive activities and activities involving the whole family, "The family with young children finds that the recreation needs of the two generations will often merge. The family wants to be together in leisure time, but in such a way that each person is able to do what interests him" (Friedberg 122). They often become involved in family and civic groups. They spend a lot of their relaxation at home and are less active on the recreational site. Adult recreation is not as clearly defined as childrens'. "There is not a clear line between commercial and public sectors of adult recreation. Jogging, dining, movies, theater, education, museum galleries, etc. are the matrices of adult recreation. Future parks may show a marriage of the public and private sectors to provide for adult needs" (Friedberg 117). As a result of adults spending much of their recreational time in commercial activities, less on site space is needed for adults alone.

The elderly want to be stimulated by their own activity. They want access to the world but want to retreat from noise and activity at their own discretion. They don't want to be shut off from the rest of the world, but they do want to be able to pull back, "The elderly must have a productive place in the society today--a functioning place in the physical, economic, and social sense. This place can be forged only out of the realistic evaluation of the new elderly--who they are and what they need" (Friedberg 67). The elderly are in general lonely, and limited in mobility and therefore need a close place in which to use. They are dependent on each other and want places where they can meet and, ". . . be together knowing this is where their action is" (Friedberg 42). They need meaningful activities. They like sedentary activities like chess, checkers, cards, and dominoes, but their primary purpose is to be together.

Overall, most of the age groups have three things in common. They want variety, choice and complexity. People want a variety of activities so that they will have a lot of activities that they can choose from. They want to know that they are not restricted to doing just one thing. They want to be able to choose which activity they are going to do and when they are going to do certain activities. And they want complexity, so that they do not become bored with their environment.

The concept of wellness is becoming more of a concern of designers, teachers and administrators of today. "Loneliness and apathy will be the diseases of tomorrow. A new form of recreation will contribute to the cure. Facilities, institutions, and events will bring people together for shared experience; education will be recreation. Understanding through a knowledge of oneself and others will provide the catalyst to be wasted on standardized, desolate places for loners who sit together, searching for a means of contact" (Friedberg 126). "Recreational activities are critical to the social well-being of all people" (University of Illinois 3). Playgrounds need to be more than just a way to receive physical exercise. Theorists and researchers such as Friedrich Froebel, John Dewey, Rudolf Steiner, Maria Montessori, Jean Piaget, and Susan Isaacs all agree that "Healthy growth and development--including physical, emotional, social, and intellectual growth--is based on stimulation learning experiences that arouse the learners' interest. These principles are based on a belief in the natural curiosity of children and their innate desire and ability to learn" (Eriksen 1). Integrating wellness into a site is done in a very subtle way. Most people would never realize that a site has been designed using the different concepts of wellness. This is simply because wellness is a very complex issue. A person that is not well will not be made well

by living on a site that has been designed for wellness. There are too many other factors influencing a persons personal well-being than just the external built environment. Wellness can be integrated into a built environment, but it's final form will be in such forms as physical, social and intellectual activities on a playground, or other space, or space to relax and contemplate on life.

3.1 Goals and Objectives:

1. To design recreational areas that fulfill the wellness and recreational needs of people of all age groups, including preschool children, gradeshool children, teenagers, adults with and without children, and the elderly.

2. To design areas that can fulfill, to some extent, the six areas of wellness. These areas include: physical, mental, social, spiritual, occupational and psychological.

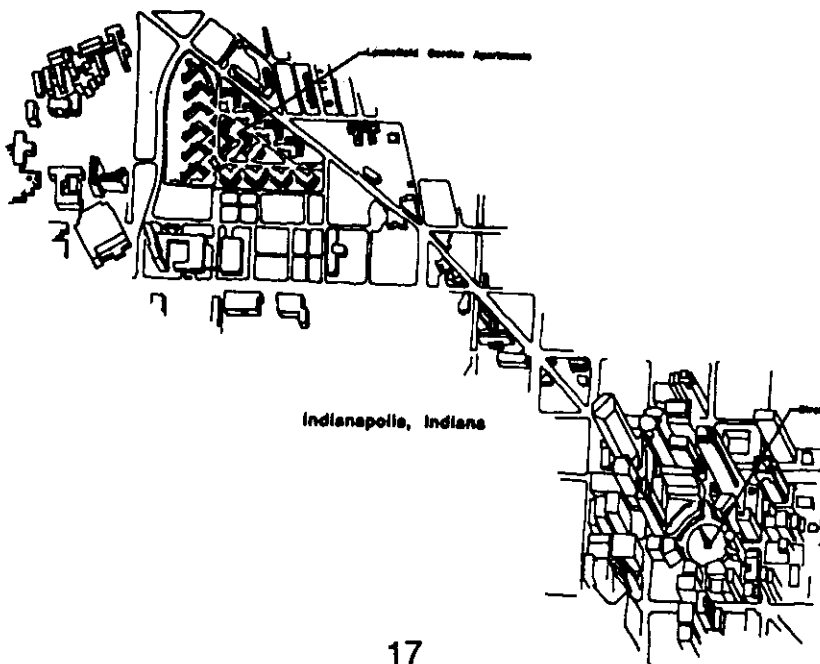
3. To design a play area where children and adults have variety, choice and complexity.

4. To design a site that is more effective and more successful in the combination of housing, recreation and wellness.

4. Site Conditions

4.1 Site Location

Lockfield Garden Apartments is located in downtown Indianapolis near the central business district. The site is on the North-West side of Indianapolis along Indiana Avenue, approximately one mile from the central circle.



2.2 Site History

Lockfield Garden Apartments was originally build in 1936 as two rows of apartment buildings with a walking mall green space in between these two rows. These buildings were designed as four story, art deco style buildings in the shape of an "L." Over the years the buildings deteriorated until in the 1960's, one row of buildings was torn down and replaced by Agnes Street. In 1986, the remaining units were remodeled and modern units were built on land adjacent to the original site, making one large apartment complex of 495 units.

2.3 Site Inventory

Lockefield Garden Apartments consists of 495 apartment units on a triangular shaped site of 43 acres. Of these units, 243 were build in 1936 and have been remodeled. These buildings are four story tall brick buildings that were designed in the art deco style. Attached to most of these units is a small parking structure. There is enough additional parking to total almost one and a half parking spaces per unit.

The remaining 252 units are three story buildings built in 1986. These new complexes are built with tan brick and wood and are modern looking apartment buildings with pitched roofs. They also have small

Original Units
 The original units were built in 1929 on two rows of buildings with a walking mall located in between them. One row was torn down, leaving this straight row. These brick buildings are four stories tall and were designed in the old "dorm style." In 1959 they were rehabilitated with fully modern facilities.

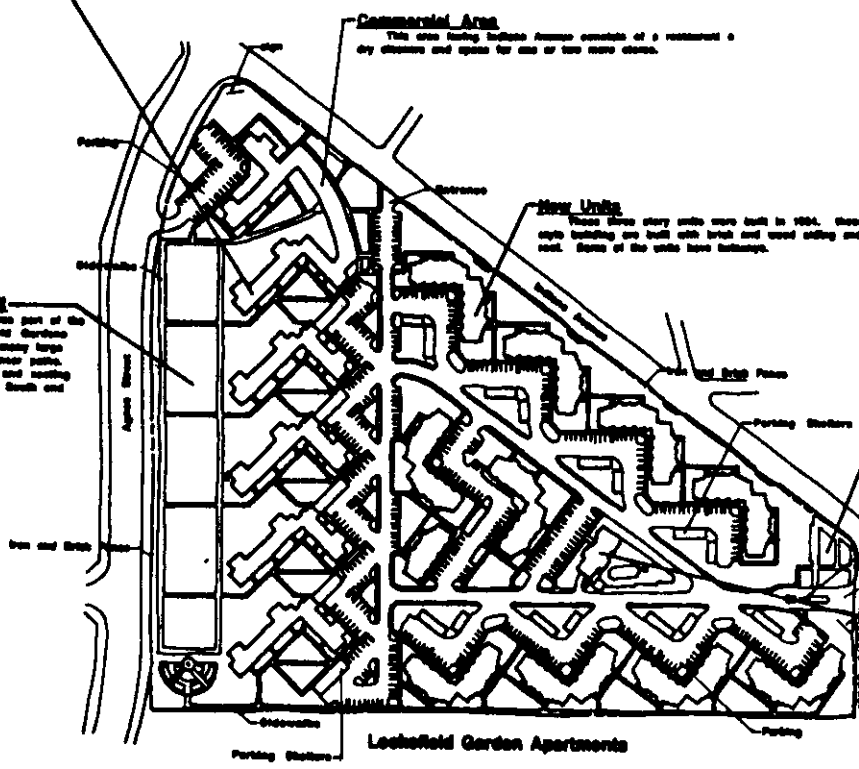
Commercial Area
 This area facing Indiana Avenue consists of a restaurant & dry cleaners and space for one of the more shops.

New Units
 These three story units were built in 1964. These modern style buildings are built with brick and wood siding and a pitched roof. Some of the units have balconies.

Walking Mall
 This area was part of the original Leekfield Gardens and consists of many large oak trees and flower paths. A water feature and seating is located at the South end of this mall.

Entrance Feature
 At the main entrance is a fountain made out of stacked stones. This fountain pays tribute to the four buildings of Indiana Avenue.

Office/Clubhouse and Pool
 This area consists of one single-story brick building with office space, a game room, a meeting room and changing facilities. In back of this building is a small swimming pool and a pavilion with a paved patio area and seating.



Site Inventory

parking shelters in front of each site and enough additional parking to total one and a half spaces per unit.

In addition to the apartment units, there is also an office building/clubhouse, a pool, a commercial area and a walking mall. The office building/clubhouse and pool are located next to each other on the east side of the central portion of the site. The office building/clubhouse

consists of several offices, a game room with a pool table, television, VCR and stereo and changing rooms for the pool. The pool is a small rectangular shaped pool with a small water fall flowing into it and a jacuzzi.

The commercial area consists of a restaurant and a dry cleaners. There is also space for one or two other stores where a convenience store was once located.

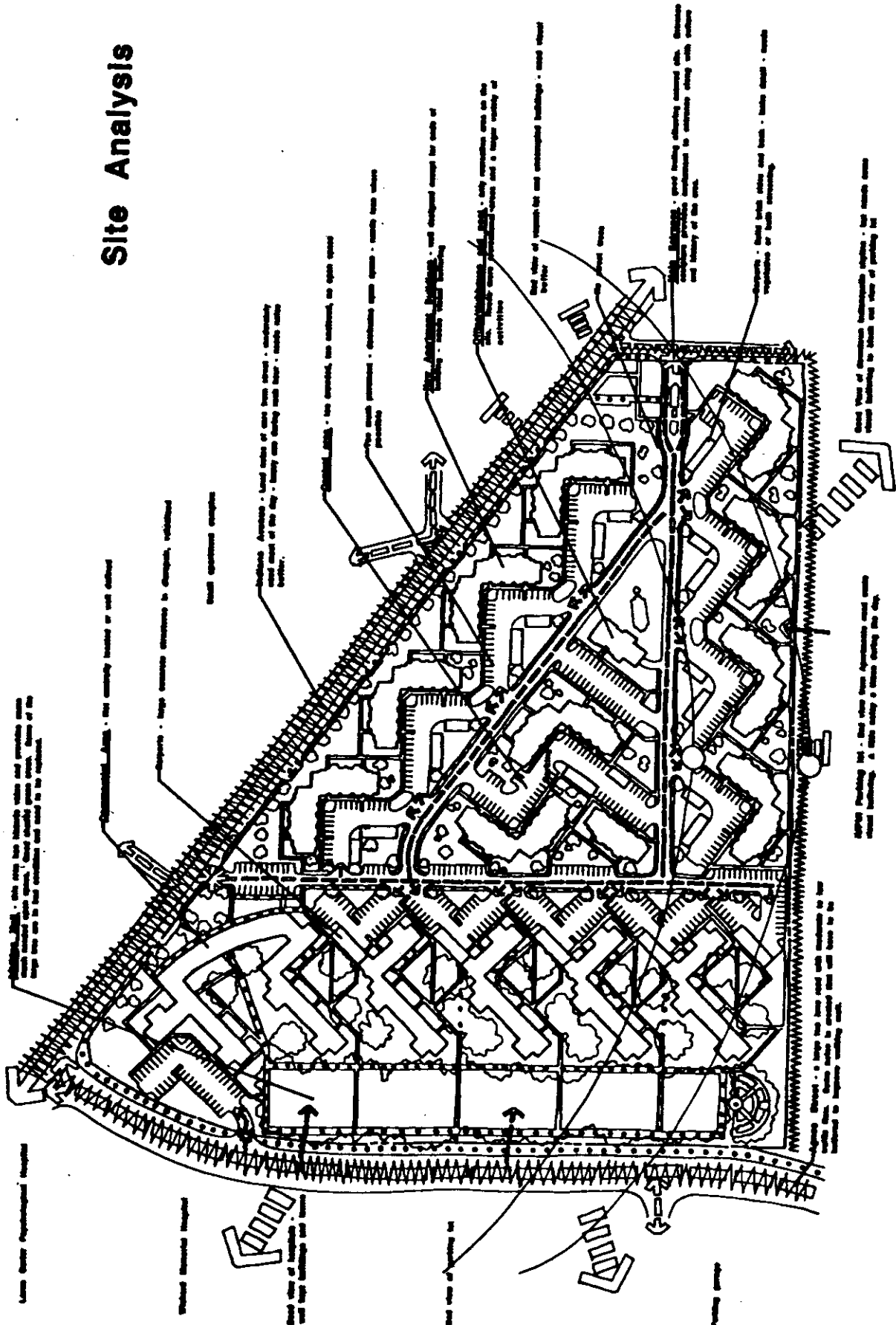
The walking mall is located along the western side of the site. This area consists of several linear sidewalks located under large oak trees. There is some seating and a small fountain located at the southern end of the walking mall.

Other on site features include an iron and brick fence which surrounds the site and a guardhouse at the main entrance to the site. There is also an entrance feature at the main entrance of the site. This feature consists of a sculpture made from musical instruments surrounded by fountain jets. This fountain pays tribute to the jazz heritage of Indiana Avenue.

4.4 Site Analysis

The site has many good and bad features on it. Overall, the site seems to be too crowded. The three and four story buildings are too close together leaving no open space that can be used for active recreation. There is also too much pavement, although there needs to be enough spaces for each unit. There are no street trees on the site except for in a few places. The older buildings on the site are in decent shape, but because of their age, they don't fit in as well with the rest of the city. The newer buildings are well designed, except for the ends of the buildings. These ends consist of three story solid brick walls that will need some sort of

Site Analysis



visual buffering. The carports that are spread throughout the site need some visual buffering, as they consist of solid brick walls. The office and clubhouse and pool area is a good site amenity, but it is the only recreational area on the site. The site needs more recreational areas and a larger variety of activities. The walking mall has historic significance and provides some much needed open space. It also provides a good open shaded grass area although some of the large oak trees on the site are in bad condition and should be replaced. The main entrance of the site shows a good feeling of having entered the site. The entrance sculpture provides excitement to the entrance along with culture and history of the area.

The site is surrounded by streets on three sides and by a parking lot on the fourth. Indiana Avenue, on the North-East side of the site consists of a four lane road heading diagonally from the city. This Avenue is very busy and can be very noisy during the early morning and evening rush hours as people are moving to and from the central business district. Agnes Street to the West is also a four lane road but is not near as busy nor as noisy as Indiana Avenue. Blackford Street to the East is a two lane road which isn't very busy, having one or two cars go by every couple of minutes. To the South of the site there is an IUPUI Parking lot. This lot can be a little noisy but is mainly just a bad view from the apartment

units. Some visual buffering should be used.

To the West of the site there are several Hospitals and IUPUI buildings. These include the Larue Carter Psychological Hospital, the Wishard Memorial Hospital and the IUPUI Hospital building. These buildings are fairly well maintained and have well kept lawns. A parking lot and a parking garage can also be seen from the site and could be buffered. To the North of the site, on the other side of Indiana Avenue, there is a variety of different features. This includes everything from vacant lots and abandoned buildings, to a small well kept apartment complex. There is also a good view of the Indianapolis skyline from the South-East Portion of the site.

4.5 On Site Recreational Amenities

The site presently contains only one area built for active recreation. The outdoor swimming pool is that feature. Other recreational amenities include the clubhouse consisting of pool tables, televisions, a vault and a stereo.

The walking mall is the largest open space presently on the site. This area could be used for walking, sitting and relaxing. The grass areas could also be used to run around and play games, although because of the close proximity to Agnes Street, this would have to be closely supervised.

Smaller spaces are located in between the buildings of the

remodeled area but are accommodations only be an outdoor barbecue grill, a trash can, and a lamp post in the center of the space. There is no shelter and only one bench located in the corner of the space. There is also no privacy or protection for the wind through the use of trees and other vegetation. Two or three large trees are located in each area, but with very few smaller plants.

Small spaces are also located in between the newer structures on the site. They are triangular shaped spaces bordered on two sides the three story apartment buildings and on the third side by a fence along Indiana Avenue. These areas contain no recreational features and contain only a few small trees. They are also quite noisy in places due to the traffic along Indiana Avenue.

5.1 Assumptions

1. The people presently living on the site and those wanting to live on the site want and need more recreational amenities.
2. There is a need for family and professional housing with more on-site recreational and wellness amenities.
3. It has been found economically feasible to destroy some of the apartment units if quality recreational areas can be created to replace them.
4. There are no nearby off site recreational amenities.

5.2 Restrictions to Site Improvements

Because of cost, nature of site, or lack of significance, certain restrictions are placed on what can and can't change on the site.

1. Buildings cannot be changed in either character or location

Unless there is a justified reason to do this.

2. Boundary lines and features outside the site cannot be changed.
3. Parking spaces cannot be changed
4. All large trees must remain on the site as it is impossible to

replace them.

6. Program

The site will be split into two main sections in order to separate the two different types of tenants that occupy the site. One area will be occupied by families with children, and the other will be occupied by students, young professionals, and the elderly. This is in order to separate the different recreational needs along with the different housing and accommodational needs that the two groups require.

Program

Open Mall Area

The Open Mall Area is a central hub for the community, providing a space for social interaction and commerce. It features a series of interconnected walkways and open spaces, designed to encourage pedestrian activity and provide a vibrant atmosphere for residents.

Commercial Space

Commercial space is strategically placed throughout the development to support local businesses and provide convenient access to goods and services. This includes retail stores, cafes, and professional offices, all designed to be easily accessible and integrated into the community fabric.

Family Housing

Family housing is designed to provide comfortable and functional living environments for families of various sizes. The units feature open floor plans, ample storage, and access to outdoor spaces, ensuring a high quality of life for all residents.

Small Play Areas

Small play areas are scattered throughout the development to provide children with safe and engaging spaces for recreation. These areas are designed with age-appropriate equipment and are surrounded by landscaping to create a pleasant and secure environment for play.

Professional Housing

Professional housing is designed to attract and accommodate high-income earners and professionals. The units offer premium finishes, modern amenities, and a prime location, providing a sophisticated living experience for discerning residents.

Relaxation Areas

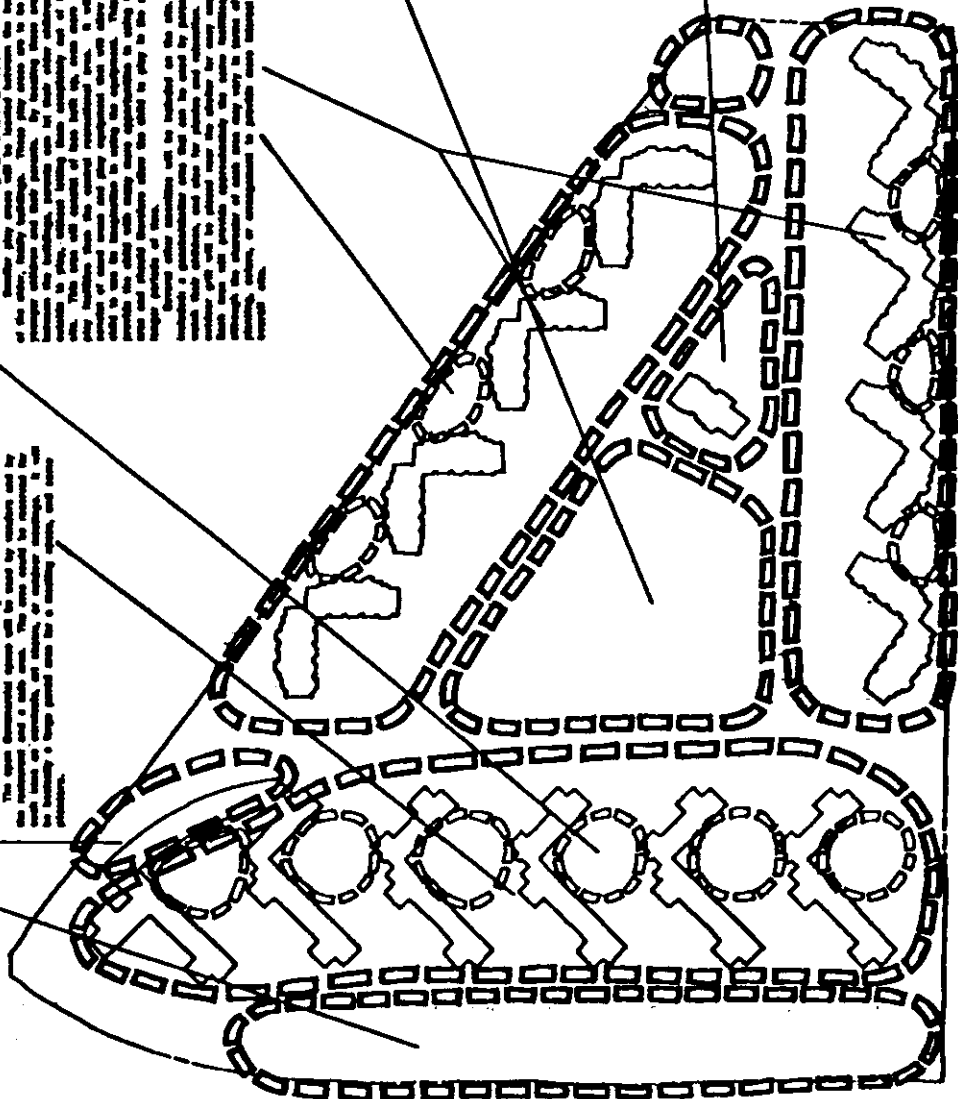
Relaxation areas are thoughtfully designed to provide residents with spaces for leisure and stress relief. These areas include landscaped courtyards, seating areas, and quiet zones, offering a peaceful retreat within the community.

Central Recreation Area

The Central Recreation Area is a large, multi-use space designed to cater to a wide range of recreational activities. It features a mix of open fields, walking paths, and structured play areas, providing a comprehensive recreational hub for the entire community.

Pool and Office Area

The Pool and Office Area combines leisure and professional amenities in a single location. It includes a swimming pool, lounge area, and office space, providing residents with a convenient and enjoyable environment for both work and relaxation.



6.1 Family Housing

The families with children will live in the remodeled section of the site. This area provides more space for children and will allow facilities to handle children better. The buildings are set up in a way that will allow small recreational spaces to be built in between each building. These spaces can be designed in order to better accommodate families with children.

6.2 Professional Housing

Young professionals, students, and the elderly will live in the remaining two sections that are located along the south side of the site and along the North west side. This will allow them to be partially separated from young children and will also allow recreational facilities to be designed that will better meet their needs. In addition, students, young professionals, and the elderly will be partially separated into different buildings or groups of buildings in order to meet their exact recreational needs.

Along with the individual spaces that each building, group of buildings or area will have, 60 units making up the central part of the site will be torn down and replaced with a central recreational area. This area

will be used by all groups on the site as it will provide activities for each of them.

6.3 Open Mall Area

Because of the historic significance of this area, and the large trees that it contains, This area should stay very close to its present condition. The long straight walkways under the canopy of the large trees contained in the mall make for an area that could be used more with minor improvements. These improvements include: More seating, a buffer area along the street side of the mall, and a better connection between the mall and the rest of the site.

6.4 Central Recreation Area

Because of the lack of large open space that can be used for recreational activities, 84 units in the central portion of the site will be demolished. This will provide a significant area to place recreational amenities. The central recreational area will be designed to provide easy access from all areas of the site. It will include recreational amenities for older children, teenagers, adults with young children, young professionals, and some amenities for the elderly. The central

recreational area will include large open spaces for such field sports as: softball, soccer, kickball, baseball, etc. It will also include a built up playground with abstracted play facilities to provide children with the opportunity to use their imagination. Near this area will be places for parents to sit and watch their children. This area will be shaded through the use of large shade trees, and shelters. Picnic shelters will also be provided for individual, family and group use. Other amenities such as tennis courts will also be placed on this area.

6.5 Small Play Areas

Smaller play areas will be located between the buildings of the older, family buildings. These play areas are to be use by younger children and their parents. By locating these areas between the buildings, parents can let their older children go outside to play, without letting them completely out of their sight. This area will consist of less built up, even more abstract play facilities than the central recreational area. It will consist of sand areas and play equipment that will allow the child to use its imagination in using the equipment. This should provide the child with many more opportunities in using the play area and should therefore allow the child to play in the area for longer periods of time.

Several other amenities will be included on the site. These included: a gazebo/shelter area that can be used by parents to watch their children, and also for picnics and relaxation. An outdoor grill will be placed near the shelter for easy access. Each area will provide approximately the same facilities, although the character of each area may vary in terms of planting, colors, or arrangement to provide more interest to the overall site.

6.6 Small Relaxation Areas

Small outdoor spaces will also be provided near the none-family units on the site. These areas will be located between the buildings of the none-family area. Because of the close proximity to both the street and the apartment units, these areas will be heavily planted to buffer the noise and to provide some privacy. These area will consist of a gazebo or other facility for shelter, seating, and a variety of both shaded and sunny open spaces. These areas will also vary in terms of planting, colors, or arrangement to provide more interest.

6.7 Commercial Space

The open commercial space will be used by vendors and by the

restaurant as a cafe area. The area could be reserved for such uses as carnivals, art shows or outdoor meetings. It will consist of a large paved area for a meeting space, and some planters.

6.8 Seating/ Waiting Areas

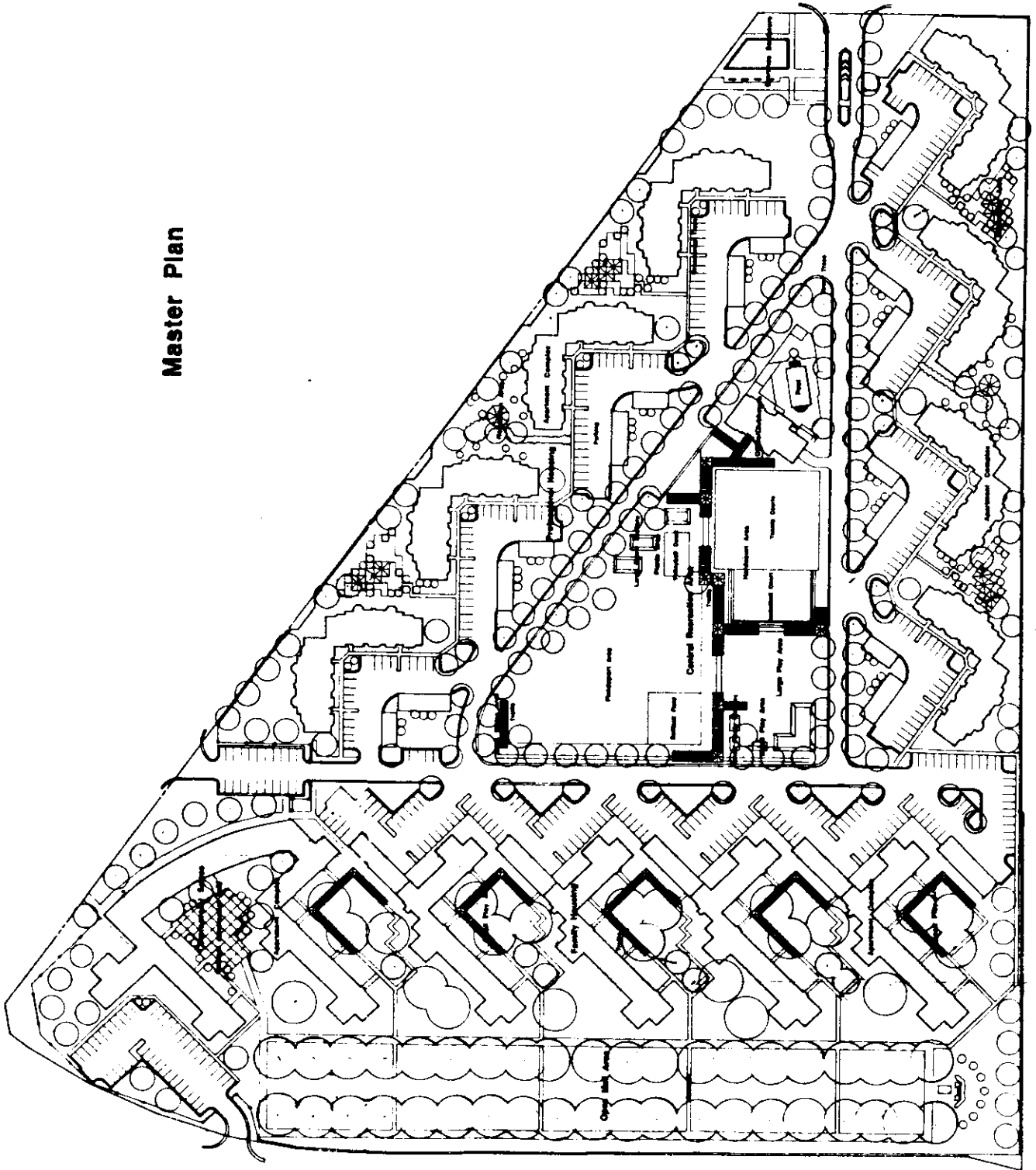
These areas consist of very small spaces located at the front of each building to be used for people waiting to be picked up or as another outdoor space. The area will consist of seating and plenty of shade from shade trees and shelters.

6.9 Pool and Office Area

This area will stay basically the same. Both area centrally located and fit well with the proposed recreational areas. Minor planting changes will be the only exception to this.

7. Master Plan

Master Plan

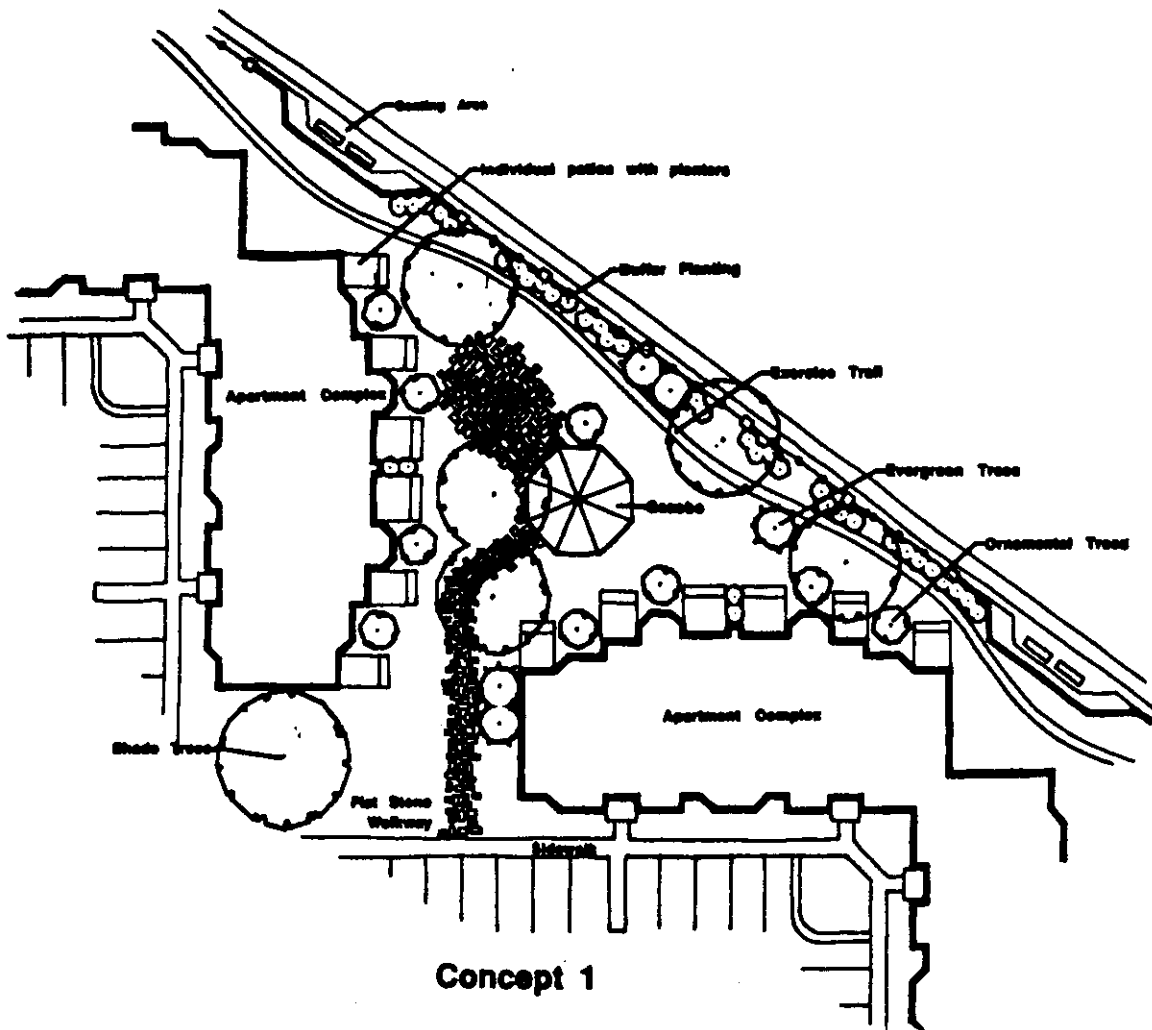


7.1 Relaxation areas

The relaxation areas are designed in between the apartment buildings on the professional housing area of the site. Two different concepts were designed to fit the needs of the different people that will live on the site. These concepts include a design that fits in the urban grid of the site, and a concept that contrasts that urban grid. These two concepts are both being used on the site, as different people will prefer different environments. Some people will prefer the design that fits the urban grid, while others prefer the contrast. By providing both concepts, the people living on the site have a choice as to which environment they would prefer to live in.

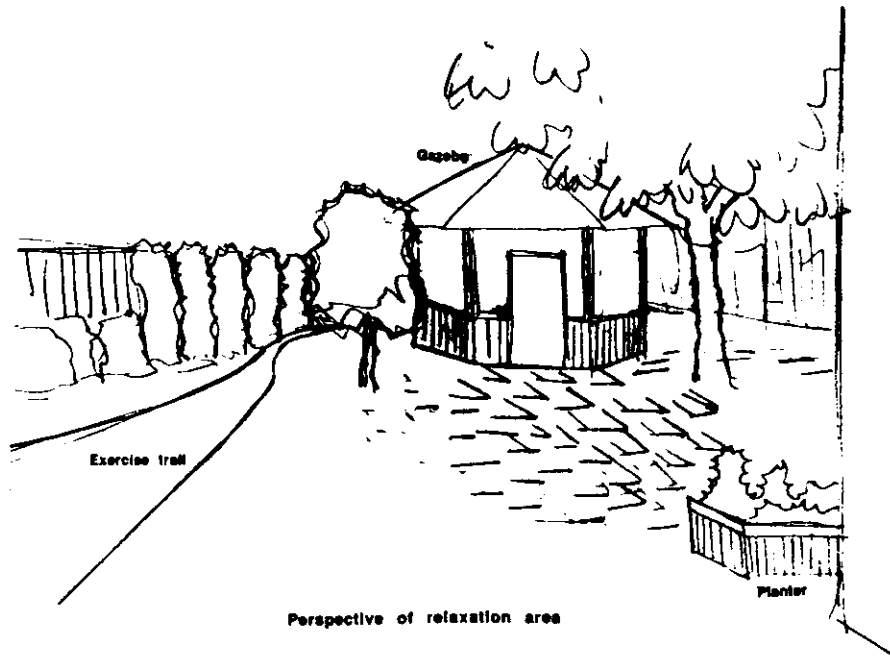
7.11 Concept One

Concept one contrasts the urban grid. It is designed as a more pastoral environment, consisting of a large gazebo, a flagstone walkway, grass-covered berms, and shade and ornamental trees placed at different points through-out the site. The gazebo is thirty feet in diameter and can fit a large group of people. It has eight sides to it and has three doors to enter and exit the gazebo. The three doors allow a multitude of different uses for the single structure. The first door faces the entrance walkway. This walkway starts out as a straight walkway and then curves into the gazebo. From there a person could either enter the gazebo, or walk along the walkway around it. This walkway leads to an open patio area where the second door is located. This patio is a paved flagstone area that can be used for outdoor dinners, games or other activities. A third door faces and open grass area. This area could be used for a picnic or other less formal activities. The gazebo itself could also be used for medium sized groups or in case it rains. This gazebo gives people a lot of different uses and choices as to how they will use it and what activities will be performed. For instance, if a group wanted to have an outdoor formal dinner, they could close the door leading to the grass area, put the food in



the gazebo and eat at tables that have been set up on the patio area. Or the patio door could be closed for a picnic. Or both doors could be closed, if people wanted to stay inside.

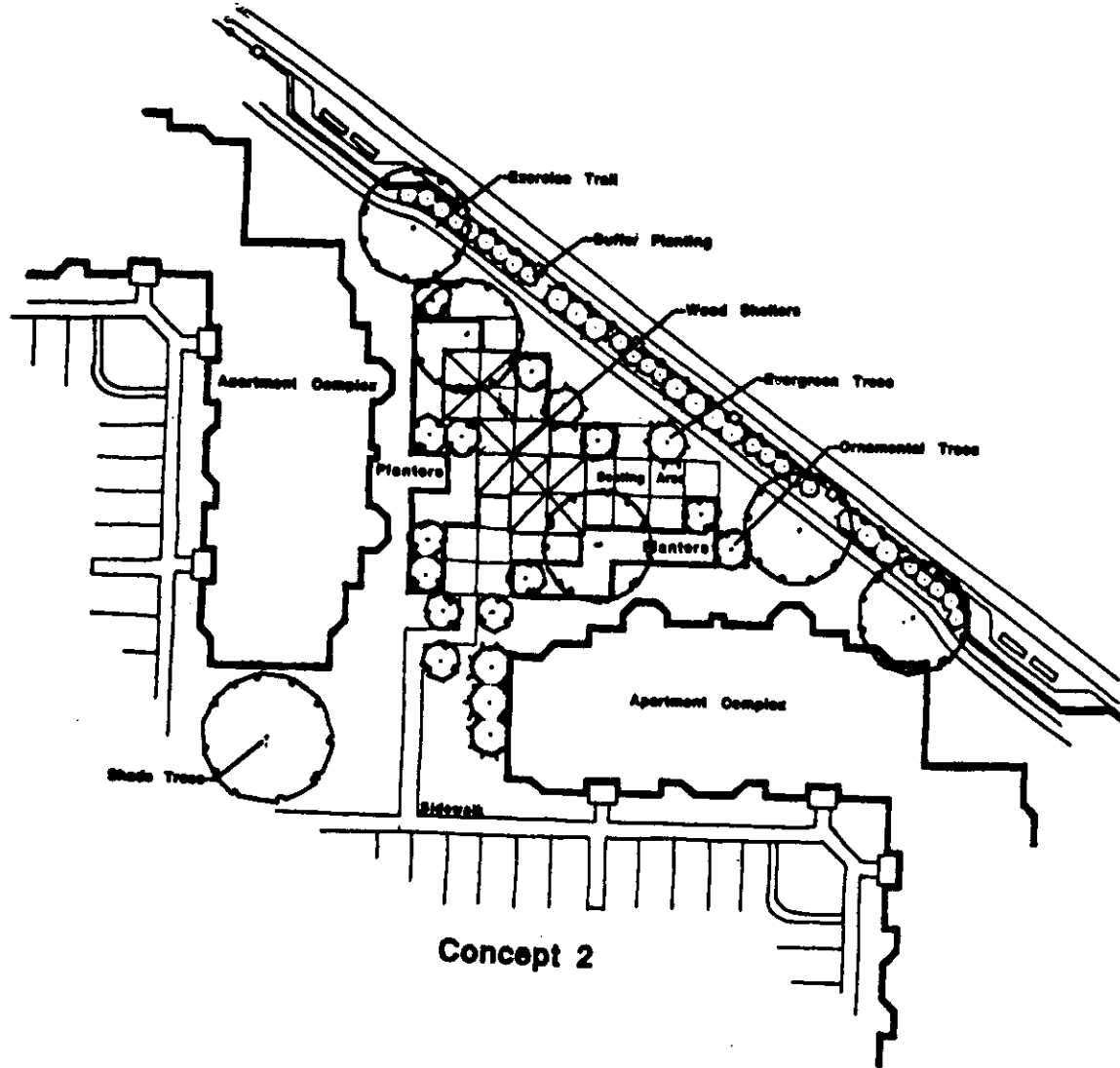
Other features on this area of the site include individual patio areas and an exercise trail. Each ground floor unit will have its own patio area with a planter at the outer edge to improve privacy. These planters can either be planted with evergreen or ornamental shrubs or left for the



tenants to plant whatever they would prefer. This give the tenants the choice as to what is planted in their planter and whether they want to take care of it or not. An exercise trail also goes through this portion of the site as it makes its way around the site. Possible exercise stops could also occur in this area. Evergreen and ornamental shrubs will be used to buffer the noise and view of Indiana Avenue.

7.12 Concept Two

Concept two fits within the existing urban grid. This concept consist of a shelter area made of connected square shelters with seating areas both underneath the shelters and in the open. These paved areas are buffered from the apartment complexes by large concrete planters planted with a variety of groundcovers, shrubs and trees. There are many



ornamental trees and shade trees throughout the site along the grid. This creates three different areas, seating and paved area under the shelters, seating and paved area shaded by the shade trees, and seating and paved area in the open sun. This allows people to decide what type of environment they prefer. The exercise trail moves through the site in more of a straight line in this concept to keep with the linear movement of the grid. Buffer planting is used to buffer the area from the noise and sight of Indiana Avenue.

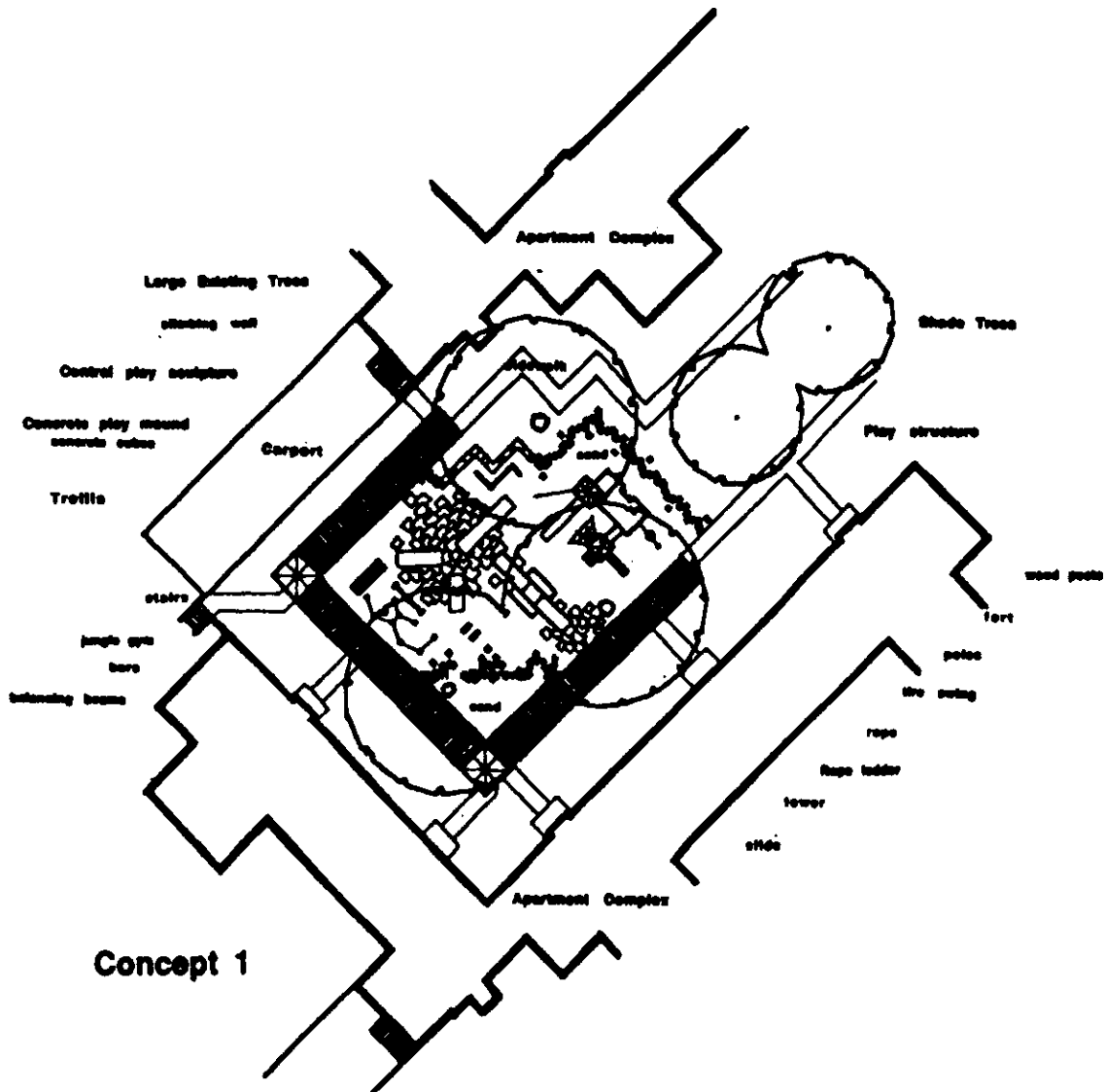
7.2 Small Play Areas

The small play areas will be built in between each unit in the family housing unit. These areas will be in this area so that they are as close to the apartment units as possible. This way the parents of very young children will not have very far to walk in order to watch their children and parents of older children can watch their children from the window of their apartment unit. Two concepts were designed for this area. One concept follow the more built up, urban feel of the site while the other concept contrasts the urban grid with a more pastoral feel.

7.21 Concept One

Concept one follows the more built up, urban feel of the site. It consists of a trellis surrounding most of the play area, a small childrens' area, a concrete play mound, a central play sculpture, and an older children's play area with a small play structure. The trellis surrounds most of the play area and is used to shade the walkway and seating areas around the site and to form visual boundaries for the play area. The small play area is mainly an open sand area for very small children to play in. This area is surrounded by large wooden post which prevent young children from leaving the area, prevent older children from running through the area, and provide a place for parents to sit for a short time and watch their child. This area will also have small sand moving equipment and simple elements that the child can crawl through and over.

Next to this area is a play area consisting of jungle gyms, bars, balancing beams and similar equipment. This is for young children that have become more active. Bordering one side of this area is a large concrete mound and the central play structure. The large concrete mound consists of a mound of concrete cubes placed in such a way that children can climb up them or go through a tunnel created by them. Going down the mound is three slides of different lengths and angles. In this way, a child



can climb up the mound in any place he wants to and either climb down, jump down, or slide down on of the three slides. The child can also crawl through the tunnel created by the cubes. Research has shown that children can spend hours imagining different activities while playing on the mound. The central play sculpture is named as such because it is a tall element located in the center of the site. It consists of a concrete wall of varying

lengths and widths with a tunnel going through it. The wall can be used to climb on in addition to the concrete play mound. The tunnel is about four feet in diameter and about five feet long and is a transition from the small childrens' area to the older childrens' area. After a child reaches a certain age, the child is allowed to go past the concrete play mound or through the tunnel to reach the older childrens' play area.

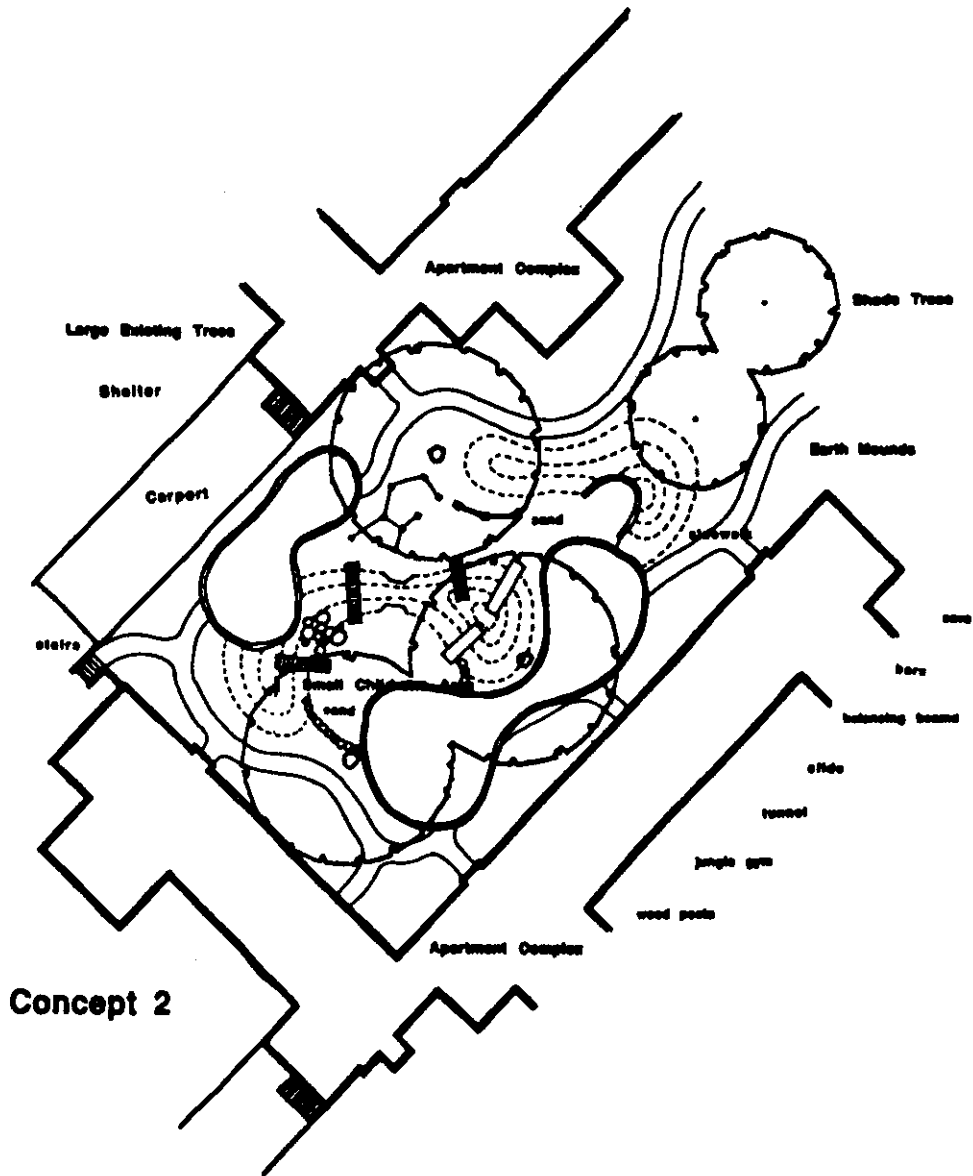
The older play area consist of one main play structure, a climbing wall and a couple of other play devices. The play structure in a series of wooden platforms of different sizes and heights. Branching off of this play structure is different play equipment including rope ladders, poles, tire swings, rope swings, stairs, ladders, slides and many other forms of play equipment. This equipment is spread throughout the play structure. This allows the child to decide which activity that he would want to do. The child can choose several different ways of going up and down the structure. In this way, the child will not get bored of doing the same thing over and over again. The child can slide down the side, climb up the stairs, climb further up a ladder and then slide down the pole, or any of the other many paths that could be taken. The play structure is also designed to have as little character as possible. It is designed to look aesthetically pleasing, but not to look like anything in particular. As

designers, we are tempted to make a play structure look like a pirate ship or an Indian fort. This is good if the child wants to pretend to be on a pirate ship or in an Indian fort, but it would stifle the child's imagination if the child wanted to play war, or any of the other almost limitless number of imaginary activities that the child could think of. By having very little character of its own, the play structure will not influence the child's imagination and will allow the child's imagination to be free to pretend.

This play area is surrounded by wooded post and a climbing wall. This helps to contain the sand and also provides other areas of play. The climbing wall can be climbed on, balanced on, sat beside, hid behind or sat on. The wooden posts can be sat on, balanced on, and whatever other activities the child can think of. Existing large oak trees help to shade the entire site.

7.22 Concept Two

Concept two contrasts the built, urban structure of the rest of the site. This concept consists of curvilinear walkways and shelters, large earth mounds, and a variety of play equipment. A curving walkway surrounds the site and acts as the boarder of the site. Two large shelters

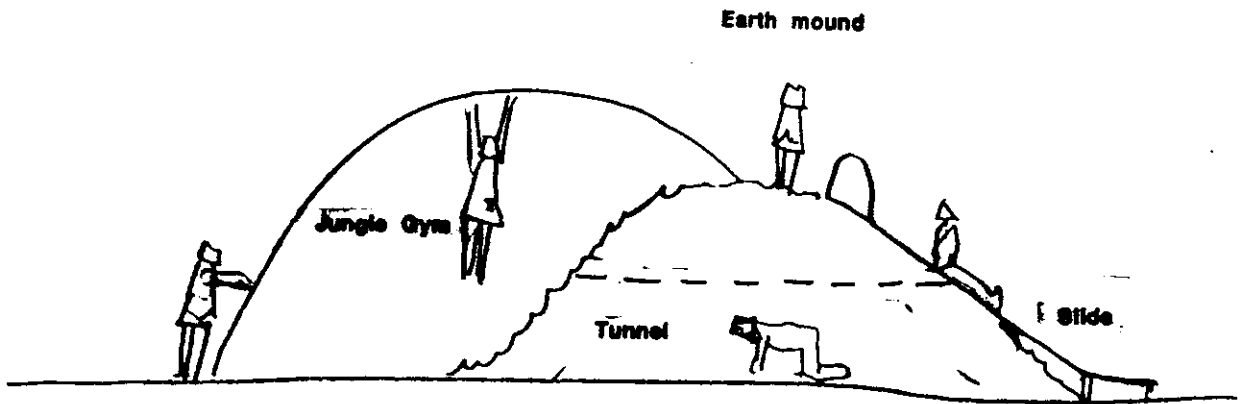


Concept 2

are placed at the east and west sides of this area. This helps shade the walkway and provide shaded seating for parents to watch their child.

Large earth mounds help separate the spaces on the site. The small play area consists of a sand area and sand moving equipment. This area is surrounded by a mound on two sides and by wood post on the other two

sides. The wood posts provide the boundary for the area and provide seating for parents.



Section of mound on small play area

Most of the play equipment is placed on top of, besides or over the large earth mound. Slides of various lengths are placed directly on top of the mound. The child uses the sides of the mound to climb to the top of the slide and then slides down. In this way, the child has virtually no distance to fall if the child falls off the slide. Jungle gyms are placed going over and up the earth mounds. This reduces the distance of falling and thus reduces the possibility of getting hurt. A tunnel goes through the mound from the small childrens' play area to the older childrens' play area. This allows children to have something to crawl through and also provides an entrance to the older childrens' play area. Other equipment on the site includes: balancing beams, bars, and a small concrete cave.

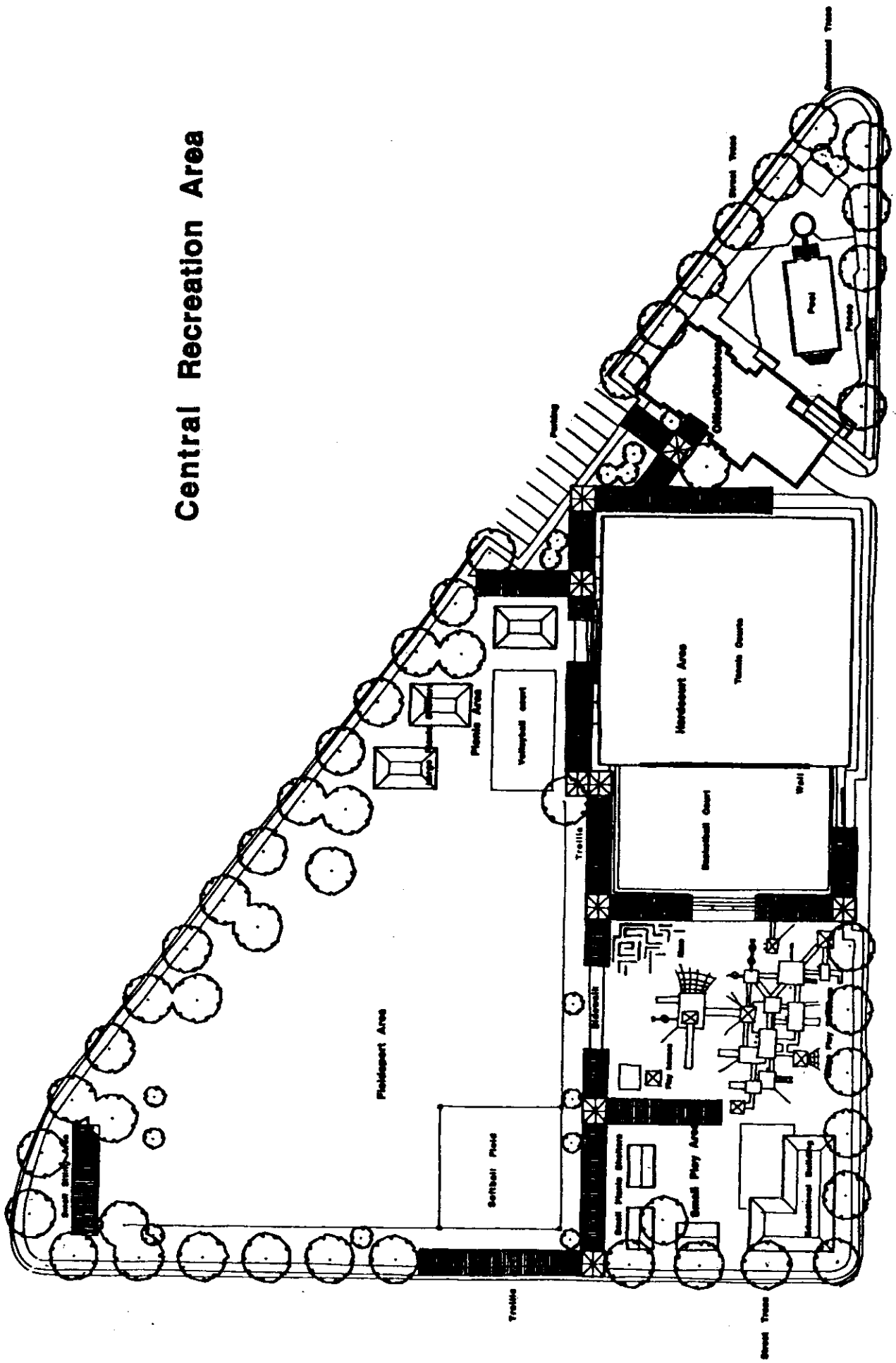
The large existing oak trees will shade a large portion of the area.

This second concept is less built up and provides less play activities, which requires that the child use more of his imagination. It is a safer play area because of the mounds, but because it does not consist of as many play activities will not be as effective as a play area. It could also cause erosion problems if the earth mounds are not maintained.

7.3 Central Recreation Area

The Central Recreation is located in the middle of Lockefield Garden Apartments completely surrounded by the different types of housing on the site. This area includes a field sports area, a small play area, a large play area, a Hard court area and the office/clubhouse area. A trellis system is provided throughout the area to shade the walkways and seating areas on the site and to improve the continuity of the site. This area was designed to provide the most recreation possible for every age group in one centrally located site.

Central Recreation Area

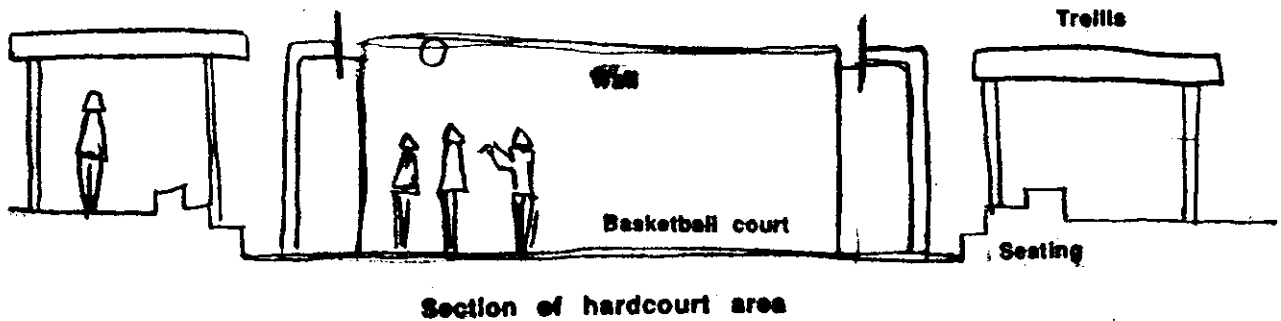


7.31 Field Sport Area

The field sport area consists of an open field in which a variety of field sports can be played. These include football, softball, soccer, kickball, ultimate frisbee, catch, and any other sport that requires a large area. In addition, permanent, ground level bases are provided for softball. Columnar, ornamental trees are used to provide suggested boundaries and goals for such sports as soccer, football, and ultimate frisbee. Seating shaded by the trellis is located near the infield of the softball field and can be used by team and by spectators.

7.32 Hardcourt Area

The Hard court area consists of paved surfaces for two tennis courts and a basketball court. The tennis courts are two conventional tennis courts with a fence containing the courts. Seating shaded by the trellis system is provided on the outside of the fence. The rest of the court is partially buffered by evergreen shrubs. The basketball court is a conventional basketball court bordered on three sides by concrete steps. These steps serve two purposes. First they help contain the game and stop the ball from leaving the court. This eliminates the necessity of fencing



the court in or constantly losing the ball. Secondly, the step can be used as seating for team members and spectators. The steps are also shaded by the trellis. A concrete wall separates the basketball court from the tennis courts. This wall can be used to hit a bounce a ball off of to practice tennis, racquetball, passing, handball, or any other game or activity requiring a wall. The wall can also be used as a backdrop for plays or small musical performances. People can sit on the steps, or if more seating is needed, chairs can be set up on the steps and the basketball court. If a larger area is needed, the tennis nets can be removed and the tennis courts can be used for seating.

7.33 Large Picnic Area

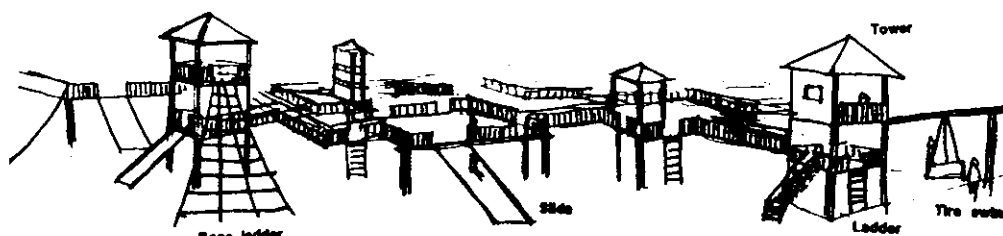
Near the field sport area is the large picnic area. This area consists of large picnic shelters, a volley ball court, and space for activities that require a small grass area. The large picnic shelters can hold up to forty people and can be used by one large groups, or several smaller groups at one time. The shelters are in view of the field sport area and near the

Hard court area so that groups can have picnics, play field sports, use the Hard court area, and also play volley ball or other activities within the large picnic area.

7.34 Small Play Area

The small play area consists of a small sandy area for children to play in, small picnic shelters for families or small groups, and an educational building. The small sandy area is a larger version of the small childrens' play area in the family housing area. It has plenty of sand, sand moving equipment, and some play structures that can be climbed in, crawled through and explored. Picnic shelters are located near this area so that parents can sit and eat and still be near their children. A seating area is also located under the trellis bordering one side of the play area and separating it from the large play area. An educational building is built at the south end of the small play area. This building will have several different sized room for activities varying from boyscout meetings and craft classes, to day care for working parents. This can be used as a place of small children to go when they get out of school.

7.35 Large Play Area



Perspective of large play structure

Next to the small play area is the large play area. This area is for older children and consists of a large play structure, several play houses, and a maze area. The large play structure consist of a series of different sized platforms connected by bridges and other devices. The platforms are located at two different levels forming a sandy ground level, a first level which is the main portion of the built structure, and a second level consisting of towers located throughout the structure. A varying number of bridges connects the platforms providing the child with a large number of choices as to which way to go. Branching off of every portion of the play structure is a large amount of play equipment including slides, tire swings, steps, stairs, poles, rope ladders, jungle gyms, rope swings, ladders, monkey bars, and other climbing, sliding, and crawling devices. In this way, the child has an almost infinite number of choices as to what to do and which path to take. Children can play individually or in groups. The structure is aesthetically pleasing, but has a little character as possible

to allow children to imagine whatever they could imagine. The different spaces created by the play structure will allow the child to imagine everything from being on a boat or ship, to being on the space shuttle without trying to influence one or the other. Two play houses are built away from the large play structure to allow for quieter play. These play houses also have little character as not to influence the child's imagination.

Height increments, numbers, letters and words will be placed throughout the large play area to help the children in their educational process. For instance, a post or other vertical element could be marked with numbers representing height. A child may suddenly discover this one day and learn and grow as a result. With learning devices such as this integrated throughout the play structure, a child could possibly learn as a result of the play activities.

A maze area is the third area of the large play area. This maze area consists of concrete walls of varying lengths, widths, and heights. This area can be used as a maze, but also as a seating area, or a place to chase, hide or anything else the child can imagine to do.

8.6 Office/Clubhouse and Pool Area

The office/clubhouse and pool area will have very few changes made to it. Parking will be limited to the outer portion of the central recreation area to decrease the impact of paving on the site and to allow more space for recreational areas. Part of the trellis system will become the main entrance with planting areas located around the trellis, main entrance and parking area. Shade and ornamental trees, and shrubs will be planted to shade and buffer the pool area.

9.1 Conclusions

After studying many different recreational areas, and observing their strengths and weaknesses, and studying the writings of many different authors on the subject, I have concluded that I have found a better method of integrating recreation and wellness into a large-scale, high-density housing development. By providing variety, choice, and complexity into the recreational environment for both the different spaces and within the spaces themselves, the integration of recreation and wellness into Lockfield Garden Apartments was successful.