

# An Intergenerational Community



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# An Intergenerational Community

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# An Intergenerational Community

An examination of the way Americans deal with aging shows that we are much different than other cultures. It seems that Americans render a person useless when they enter into a certain age group. The result of this way of thinking casts our seniors into segregation. Our system takes them away from society and relies on healthcare and other professions to care for our elders. A close look at other cultures shows a different attitude and treatment of elders. These societies revere seniors for their wisdom and experience rather than discard them. It is not unusual to find three, four, or five generations living under one roof.

The challenge of this thesis project is to exam the way in which we as designers can use the built environment to improve this situation. As the project progressed, other issues became apparent. A breakdown and close analysis of the issues such as 1) the baby-boomers coming of age; 2) aging as a process; 3) the isolation of generations; 4) the weak link of elderly to community and family; and 5) how environments can be harsh on the elderly, can be a solution to the general problem of how we treat our seniors.

Research and precedents have played a large role in the beginning phases of this



project. Before a design solution can be implemented, it must be understood just what the current norms are in regards to existing facilities. A site visit and analysis of the Four Seasons in Columbus, Indiana set the stage for the conceptual design of the intergenerational community. Local and social contextual issues make

Noblesville, Indiana an ideal site choice. Located within walking distance of parks, healthcare, shopping centers, and the city's civic square, this area contains all of the necessary ingredients for a successful intergenerational community. Along with the physical amenities, Noblesville is home of great civic pride.

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## Baby-boomers will soon be coming of age

**Baby-boomers will soon be coming of age.** By the year 2030, the number of seniors in the US will more than double thanks to the baby-boomer generation. Before the issues can be presented, some standards must be defined. Throughout this thesis, the terms “seniors” and “elderly” will refer to the definitions stated by the U.S. Bureau of the Census which says that these terms refer to persons aged 65 or older. Today the number of persons aged 65 or older is approximately 34.8 mil. By the year 2020 it is projected that the number of persons over the age of 65 will be around 65.6 mil. This is an issue that will affect everyone. What provisions are we making now to insure a safe and comfortable environment for our future elders?

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## Aging is a process

**Aging as a process.** As we get older, our dependence on others is gradual. A look into the process of aging shows that independence slowly deteriorates. This thesis will divide our seniors into five phases defined in the program outline and investigate how we provide for each phase of the aging process. Not only must we address the physical needs of the elderly (we do an adequate job of this today), we must also consider their mental and emotional needs. Determining which phase they are in and how to take care of them at this level is one way to comfort society as a whole.

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## Isolation of generations

**Isolation of generations.** In our country, there is a tendency to group the elderly together and place them in communities that are “out of the way of our progress into the future”. In comparing our attitudes towards the elderly to other cultures, specifically those in Europe and the Far East, it is evident that the degree of respect and reverence we show seniors is far less than that of other countries. Generally, we regard the elderly as non-contributing and place them in homes where professionals take care of them. Our opinion of them is that they are weak and feeble, as well as outdated. There is so much we could gain from their experience and wisdom. It is said that to forget history is to repeat it.

# An Intergenerational Community

## Currently a weak link between elderly and community

**Weak link to community and family.** This issue is parallel to issue three, however its scope is more focused on individuals rather than groups. Once an elderly person enters a nursing home they are confined to this environment for the majority of their stay at the facility. They are literally at the mercy of their friends and family members to keep them connected to community. This is partly due to the location of the facilities and partly due to the design of such facilities. It is possible to create a better link between these facilities and the community through architectural design and site determination.



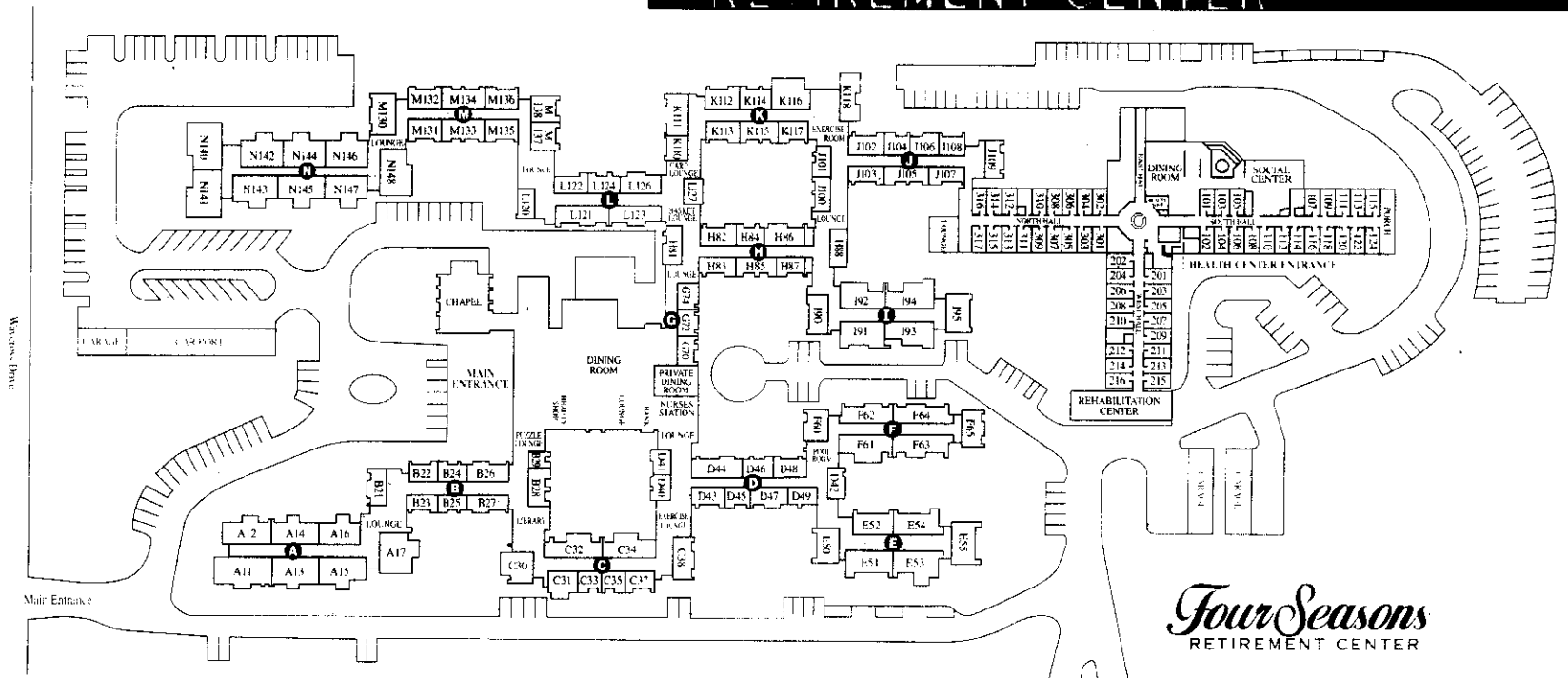
# An Intergenerational Community

## Environments can be harsh on the elderly

**Environments can be harsh on our elders.** The fact that older people migrate to areas of the country that are warmer (such as Florida and Arizona) is evidence that they prefer these types of environments. The physical changes that take place as the aging process occurs make the elderly more susceptible to death and disease caused by harsh environments. It will not be possible to send all the elderly to these more desirable locations. There is not enough room and it breaks the link between our seniors and their friends and family. Any facility designed in the future must take this into account. It is possible to create warm or tropical environments in the areas of the country where these environments do not naturally exist.

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## Four Seasons RETIREMENT CENTER



The main precedent examined for this project has been the Four Seasons Retirement Center. The center, located in Columbus, Indiana, was conceived in 1967 by the Architects Collaborative, Inc. The principal architect was Norman Foster. Created in a campus style, the facility occupies 25 acres of landscaped grounds.

The design concept is a facility that allows the resident the ability to choose the lifestyle they want. Located on the campus are apartments for independent seniors, assisted living for those who require it, and a large number of amenities to make life a little more pleasant.

# An Intergenerational Community



**Main Entrance**



**Chapel**



**Campus View**



**Typical Apartment**

From the parking area, the main entrance and the chapel entrance draw the attention of the user. The Four Seasons was generous enough to give a complete tour of the facility. The tour began at the main entrance. Most amenities were located in this general area. Some amenities that are noteworthy, although not pictured, are the bank, beauty shop, and lounge. A dining room with the quality of a fine restaurant and a large chapel are tremendous assets to the center. From the reception area we walk to the apartments that are linked by spacious corridors. One of the major strengths of this facility is the sense of scale. The corridors are spacious; yet not so large that one loses the feeling of being in someone's home. Walking through the network of corridors, the first thought is that the layout is rather complex. However, after further investigation, it is revealed that there is a simple organization of the spaces. All the independent resident apartments are located in a variety of wings. The individual units are not all identical. A range of apartment sizes makes the number of units in each wing different. This, along with the idea of activity nodes located at the connection of



**Dining Room**



**Computer Area**



**Puzzle Room**

each wing, makes it easier to identify a person's location within the campus. Some examples of activities that transpire at the nodes are: a library, a puzzle lounge, a poolroom, an exercise lounge, and a variety of soft lounges. Each apartment has a porch or sunroom. Since the resident owns the apartment, they are able to make modifications within reason. One important characteristic of the campus is the ability to move from any point to any point without having to go outside. This allows and encourages interaction between independent residents and residents in the Healthcare Center. The Healthcare Center is very much a part of the campus, however provisions have been made to accommodate the assisted and dependent living residents. The Center connects to the corridor, but there is an electronic touch pad security lock that allows assisted living patients access while preventing certain patients, such as those who suffer from Alzheimer's, from wandering through the complex. The Healthcare Center is self-sustaining due to amenities such as a large kitchen and dining area, a social center, a screened-in porch, patient rooms, and a lounge. Located in the Healthcare Center is a rehabilitation center used by residents and outpatients alike.



**Nurse Station**

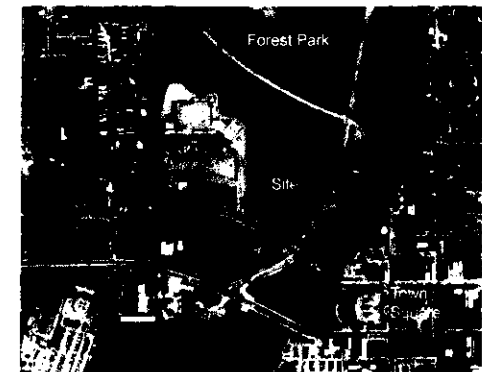


**Social Center**



**Health Center**

# An Intergenerational Community



## Social Context

Due to the nature of the project, the social context is extremely important to its position. The selection of the community was based on the demographics and amenities. Noblesville is a community where there is a good mix of current seniors and younger nuclear families. The

infrastructure is solid and community pride is evident. There is a sense of old-style traditionalism mixed with contemporary goals. One example of such is the town square. Many civic activities transpire in the context of the renovated courthouse and the modern government building. The

proposed site is within walking distance of the Town Square, hospital, Forest Park, Stony Creek, and shopping centers. It is essential that this project exist in a community that possesses these amenities and one that encourages civic pride and participation.

# An Intergenerational Community

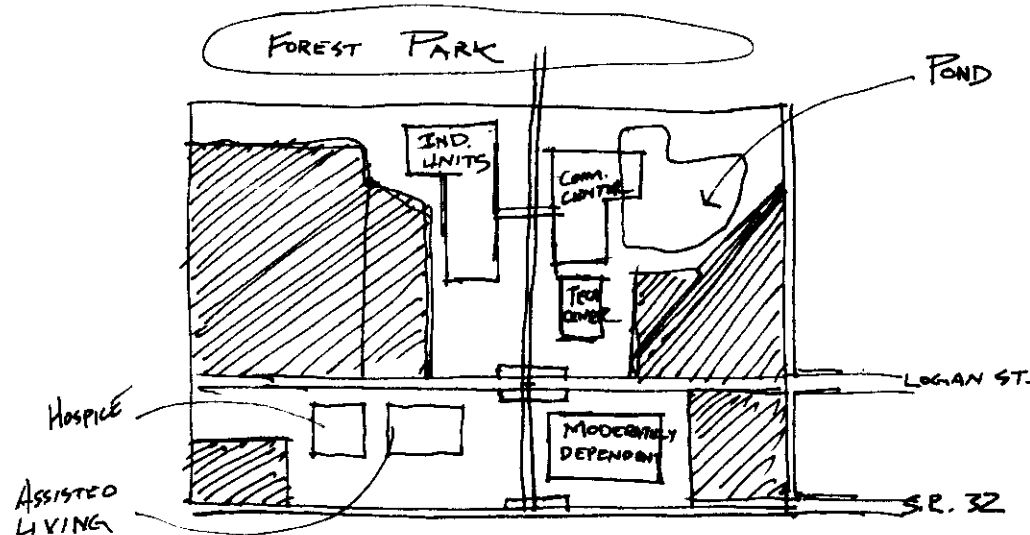
## Physical Context

Located at the intersection of Logan St. and Nixon St. in Noblesville, Indiana, the site seems to have plenty of space for building. There is land available on both sides of Logan St. for purchase. One issue that must be addressed is the existing retention pond. There are two initial thoughts on the resolution of this dilemma. The first would be the relocation of the pond. There is enough area in the immediate west to relocate the pond behind an existing strip mall. An alternative to this idea is to integrate the pond into the design. This could happen through the construction of an indoor-outdoor pool / fountain. Public access to the site is not a problem. Conner St. is a main thoroughfare in the City of Noblesville. Not only is the location easily accessible, but also the choice of this site would become a landmark or gateway as one enters the downtown from the West.



# An Intergenerational Community

CONCEPT # 1 ◆ DIVIDE SPACES UP ACCORDING TO AGING PHASE



## BLDGS

- CLIMATE →
- INDEPENDENT SENIOR RESIDENCE
  - COMMUNITY CENTER
  - ASSISTED LIVING
  - ALZHEIMER OR HOSPICE
- ACCESS ROAD DISSECTS SITE.
- PATHWAYS FOR WALKING/BIKING
- MODERATELY DEPENDENT
  - CHAPEL
  - RESTAURANT

### one

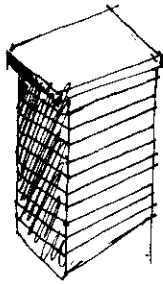
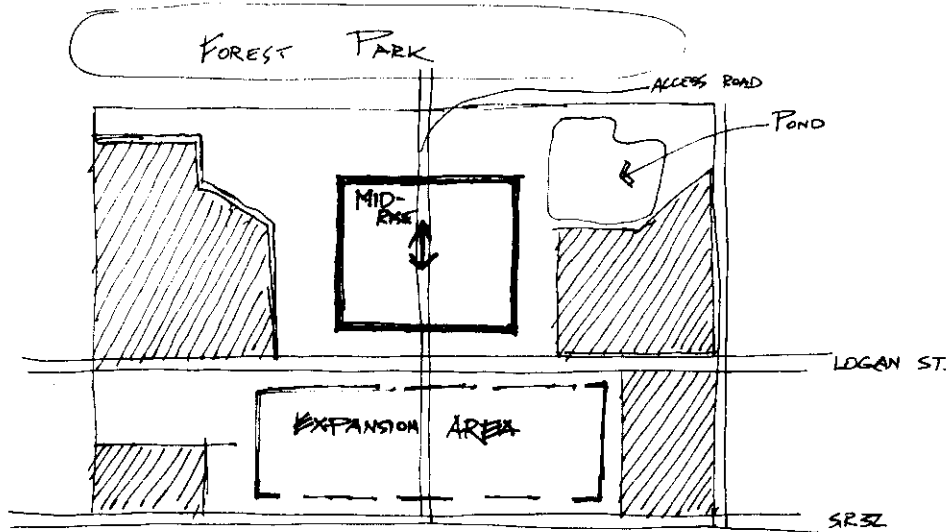
The essence of the first concept is to divide the spaces up according to the phase of aging. Before this can be done the term elderly must be defined. A study done by Laughlin and Moseley divides seniors into five levels of lifestyle according to the relative health status of each group. This thesis will also use the following categories to examine the process of aging:

- 1) Fully independent elderly people who are able to perform all daily living tasks without assistance and who this can live anywhere they can afford.
- 2) Semi-independent seniors who require some support, such as home management, transportation, housekeeping, meal preparation, and maintenance.
- 3) Moderately dependent seniors who require supervision or assistance with such daily activities as dressing, bathing, taking medicine, and moving about.
- 4) Seniors who need intermediate care, such as administration of medication and restorative services to prevent further loss of independence.
- 5) Seniors who need skilled nursing care, with 24-hour supervision and medical assistance

# An Intergenerational Community

## ORGANIZATION CONCEPT #2

◆ EFFICIENCY OF SPACE → PHASES OF AGING CAN STILL BE ADDRESSED, ONLY WITHIN ONE BLDG.



← MID-RISE RESIDENCE,

• ALL BUILDING FUNCTIONS OCCUR IN ONE BUILDING

→ 1ST LEVEL PUBLIC SPACE →

- SHOPS
- ACTIVITIES
- BILLIARDS
- BOWLING
- PLAYGROUND (INTERIOR)

### two

The second concept concentrates on the idea that the baby-boomer generation will become senior status within the next ten to twenty years. With a significant rise in the population of seniors, we must address the space issue before we are faced with too many seniors and not enough units to house them. Ideally, a facility that is entirely on one level might be in the best interest of the elderly, however, it is not a proper solution in this case. Located in an urban setting, the site does not have the opportunity to envelope a large area of land. The best solution in this case is a multi-level facility. The context will play a large role in determining the number of levels. Since the site is in Noblesville, a city that does not have mid to high rise buildings, the taller elements should be three levels. This is an appropriate height according to the what the surrounding buildings dictate. Because the land is relatively flat, the buildings in the town square will be the major factor dictating the height of the facility. Trees and landscape can help to blend the intergenerational buildings with any smaller buildings that lie on the perimeter of the site.

# An Intergenerational Community

## three

The third concept relates to the interests and activities of the seniors. As we look into the future, we must acknowledge that the interests of seniors in twenty years may be much different than the interests of the seniors of today. Both expanding technology and changing social norms make this a reality. The baby-boomer generation is unique in that it is a generation that began without microwaves, compact discs, computers, and other items we take for granted everyday. The baby-boomer generation birthed the age of technology we live in today. Exposure to personal computers is essential to the daily life of many of the baby boomers. Currently there are few places that a senior can go and have access to the latest technologies. Even though many seniors could have a personal computer if they wanted, they are not exposed to a facility that would help educate them about new technology. This is essential to keeping seniors connected to society. A technology center that provides for the education of technology and a place to utilize tech functions is needed for the next generation.

Our culture is constantly changing. The norms, values, and activities of today's society are different today than yesterday. There is a big focus on healthy living today. People eat light and exercise on a daily basis. They have made it a way of life. People engage in physical activities as a form of socializing. This need must also be present as a part of the program.

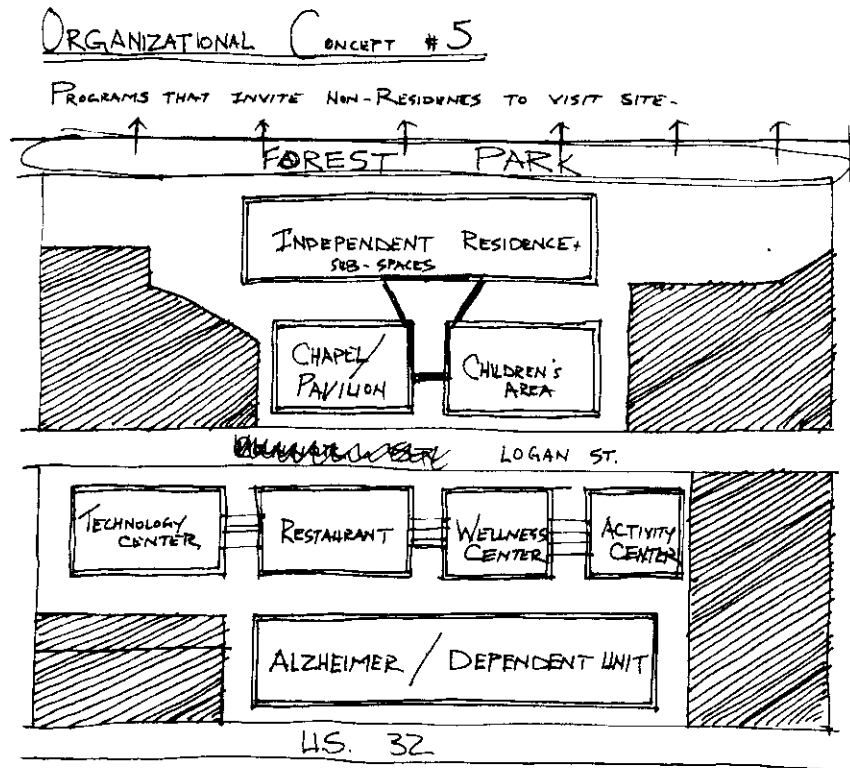
The concept is to create a building space that can accommodate these two important social activities.

## four

The fourth concept relates to the physical needs of seniors. As we grow older, our bodies change. Our metabolism and blood circulation slows down. It is more comfortable to be in a warm environment than a cold one. A look at residential demographics shows a large population of seniors and retired persons that live in warmer climates. Since it is not possible, nor would it be desirable, to move all elderly people to Florida or Arizona, we must design facilities that appeal to the senior as well as provide protection from the elements. Indiana is a state that experiences four seasons. It is quite pleasant out during the spring and fall. The environment can be extremely harsh during the summer and winter. The objective of this concept is to design a facility that is flexible. It must have spaces that encourage outdoor activity and create a means of circulation that allows the resident to move around the facility without having to brave the elements.



# An Intergenerational Community



◆ CAMPUS STYLE LAYOUT  
 ↳ SEPARATE BLOCS W/ CONNECTORS

## five

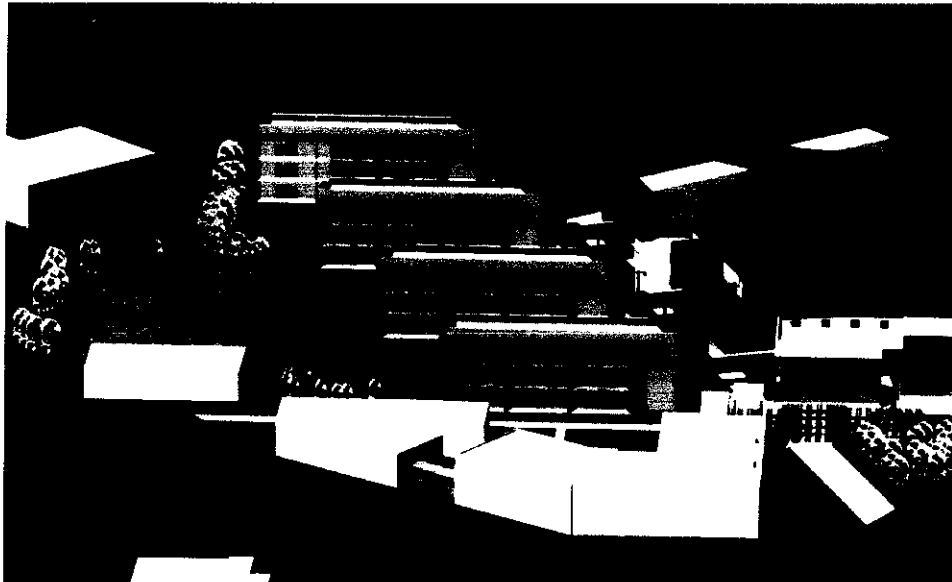
The fifth concept is to create an environment that houses amenities for residents, non-residents, seniors, and young people. In order to create association between these people, there must be a unifying element. The unifying element for this project needs to be an item that benefits both the community and the facility. An analysis of the city of Noblesville shows that the conditions are prime for retail development. Using the site as a residential and retail function is a positive way to integrate the community. Amenities can be created within the facility that provide a service to the community while benefiting the facility both financially and physically.

# An Intergenerational Community

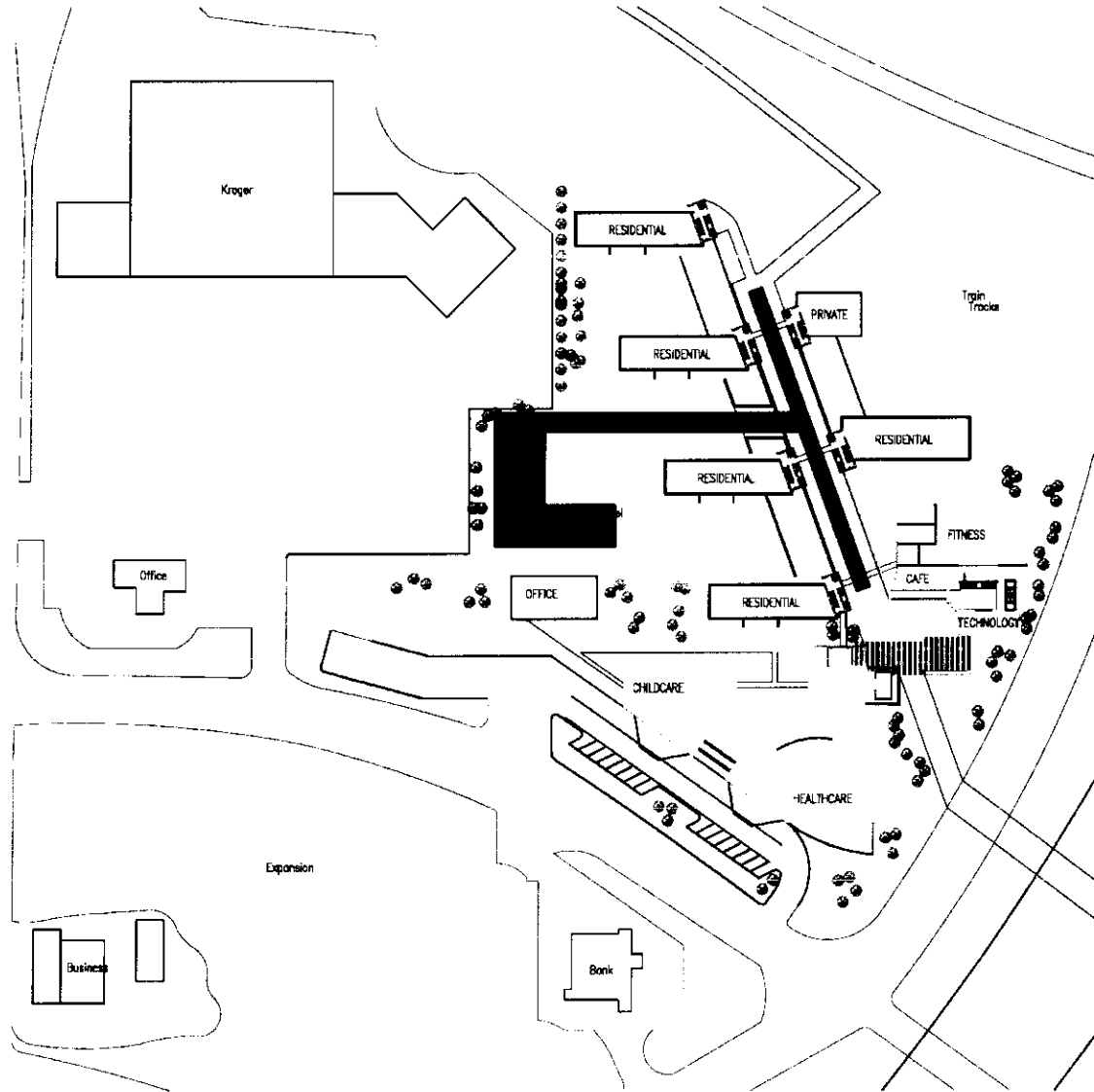
The process of design has led to a facility that incorporates all of the preceding concepts to address the given issues. This project solution is much more involved than a mere building to house retired persons. This design objective can best be achieved through a campus plan that includes apartments for all members of the community, a healthcare center, a children's daycare center, a community activity center, and desirable outdoor spaces located on a canal walk that links Forest Park to Downtown Noblesville. To achieve the overall goal of joining together

generations, the concept of dividing up spaces according to aging phase cannot be fully integrated. However, the spirit of the concept must be realized to address the needs of the seniors as they continue to age. The healthcare center meets the needs of those who are semi-dependent and fully dependent on professionals with a medical background. Along the canal walk are campus activity centers and vertical circulation towers that create an entrance to the three level apartment buildings that line the promenade. In keeping with the fourth concept, each apartment,

activity zone, building, and space is interconnected by a bridge or special node. This allows access to all the spaces without exposure to the elements. The canal walk entrance at the south flows between the Healthcare Center and a Technology Center which is designed for use by residents and non-residents alike. The Technology Center is more of a community center than a computer station. The two level building is divided into two main activity areas separated by an atrium space that can be used for civic or private gatherings. The large area of the Tech Center is primarily used for health related activities. There is a gym, fitness area, locker rooms, and a healthbar café. The smaller section of the Tech Center is comprised of computer stations and a conference room. The computer station area and atrium space spill out onto an outdoor terrace that overlooks the plaza. A trellace marks the gateway into the site.

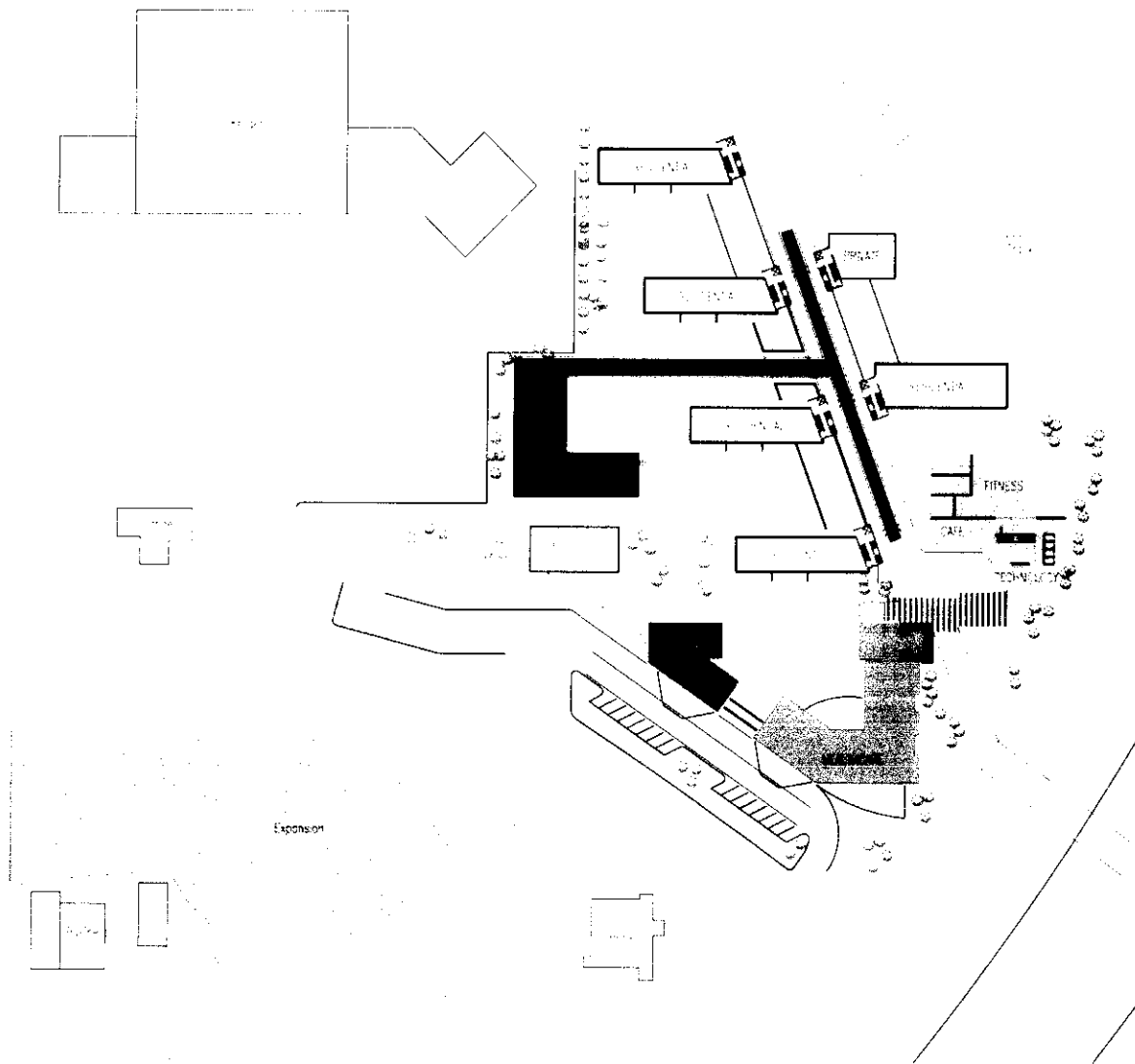


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The facility master plan relies heavily on the plan and growth of the surrounding community. The canal walk should act as a catalyst for bringing pedestrians into downtown Noblesville. Highway 19 and the White River lie on the southeast of the campus. There is one block that separates the river from the main town square. The canal walk trail will extend over the White River and through the adjacent block to link to Noblesville Town Square. A focus on retail will provide more opportunity to draw the general public into this area. To the north of the campus lies Forest Park. With the park to the north and retail to the south, the canal provides the perfect opportunity to link the community to the residents of the intergenerational community. The main elements of the campus will be constructed at the onset of the project. The expansion space to the southwest provides ample opportunity to phase in amenities such as a chapel, restaurants, and other business.

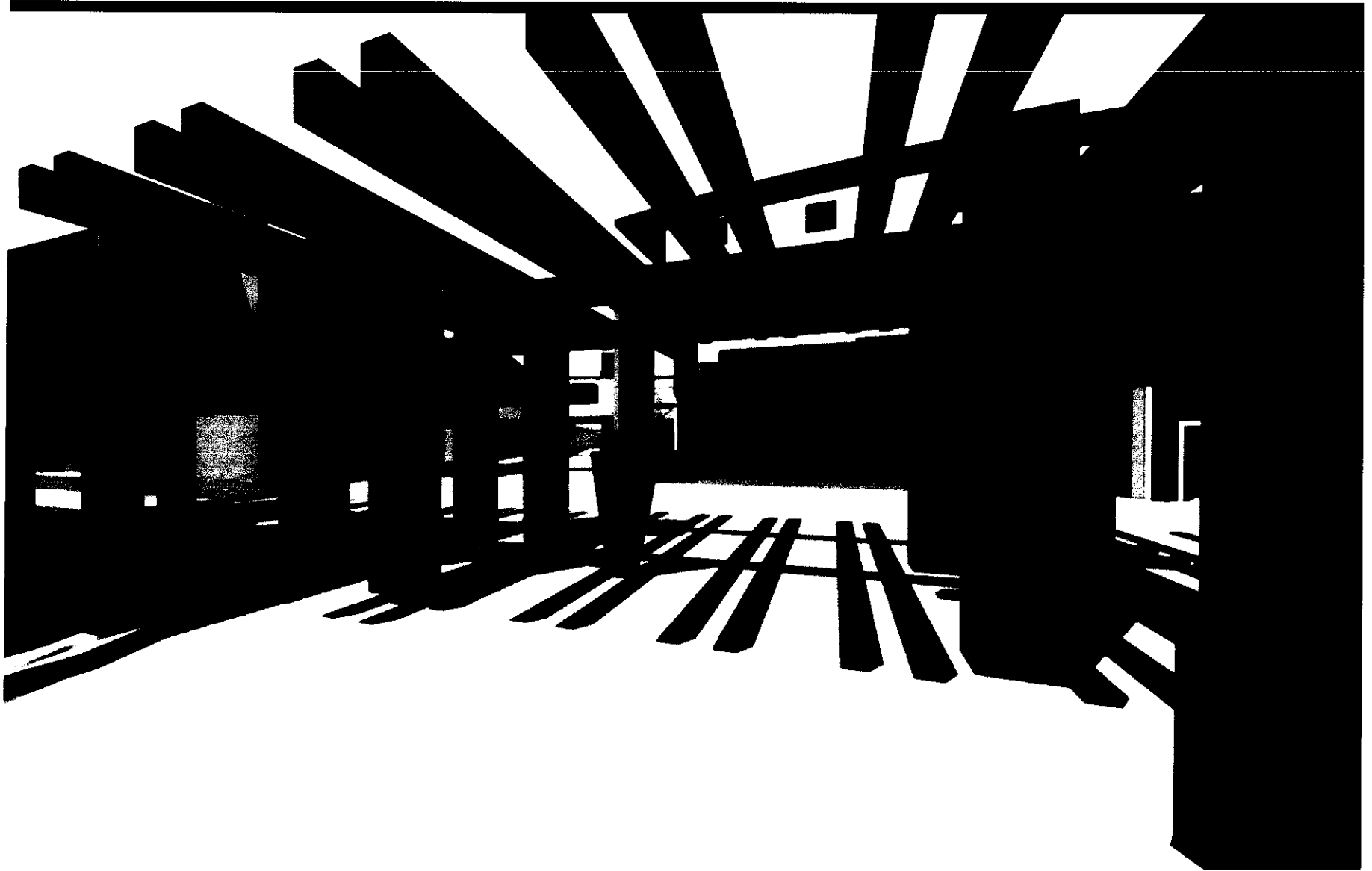
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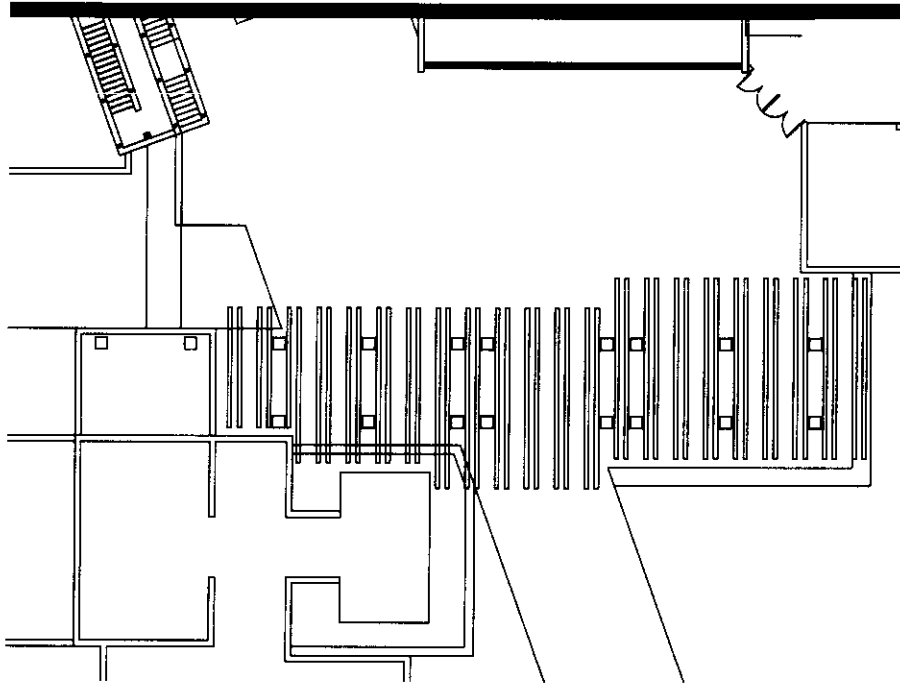
The Healthcare center and Children's Daycare center are located at the south of the site because they require child and patient pickup/drop-off entrances as well as possible ambulatory access. The Healthcare Center and Tech Center provide an edge for the east side of the campus. A trellis covered plaza links the two centers and acts as a gateway into the site. The trail that links Noblesville's town square to Forest Park bisects the site diagonally from the southeast to the northwest. Once on the property of the campus, a canal divides the path. A series of overhead bridges provide opportunity to cross the canal at certain points. The individual apartment buildings are offset 75 feet and are separated by activity zones. The activity zones are adjacent and parallel to the pathway. At the north end of the walk, a tunnel through the existing ridge connects to Forest Park.

- Activity Area
- Childcare Center
- Expansion
- Healthcare Center
- Office
- Residential

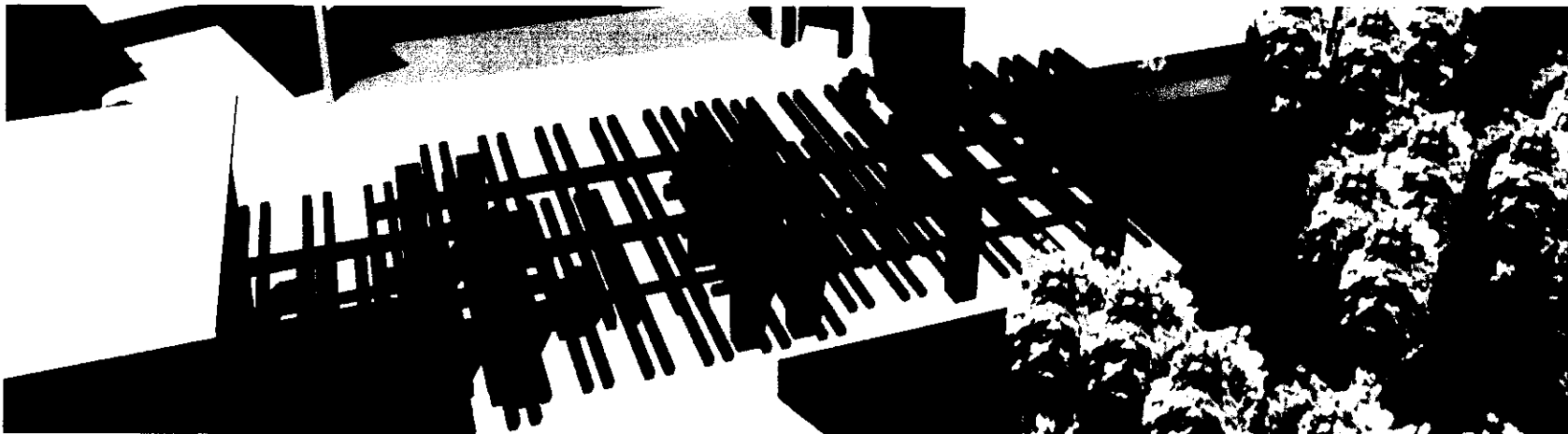
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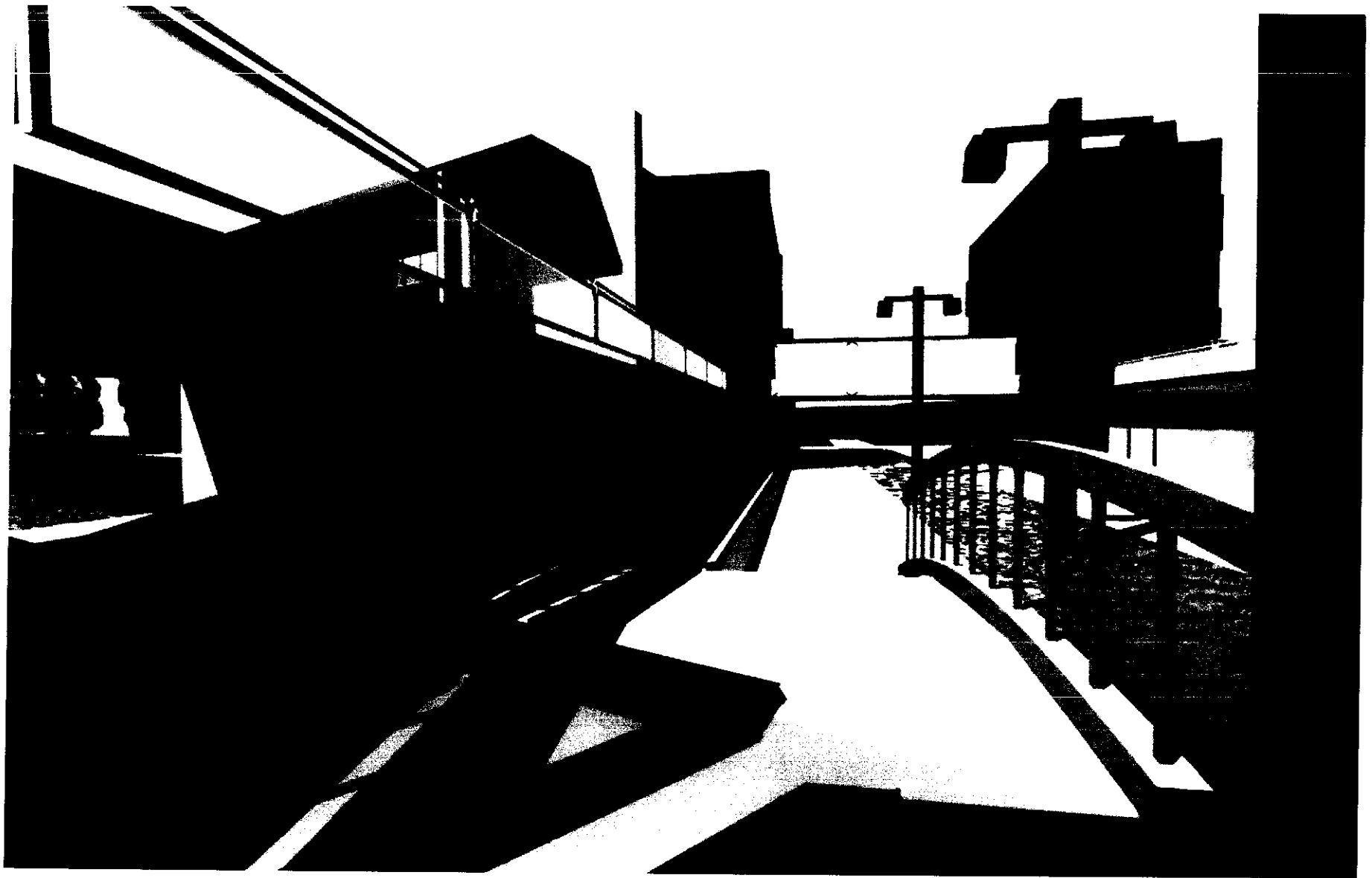
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As the walking path flows from the White River to Forest Park, there must be a distinct entrance into the campus. This entrance piece is a combination of several elements. Upon approach, a pool and fountain line the left side of the path. In the pool and behind the fountain stands an art piece made of two partially opaque panes of glass. The two panes make a slot that allow for images to be placed in between and viewed from the path. The right side of the path consists of trees and landscape that provide a natural aesthetic and filter traffic noise from the nearby roadway. A trellis defines a distinct entrance into the campus. This is an appropriate choice for a gateway because the form of the whole is oriented east to west and provides an overhead plane while the individual elements are oriented north to south and change in appearance upon approach. The trellis is shaped so that a soft alcove is formed for a node space and the path spills into a plaza for congregation.

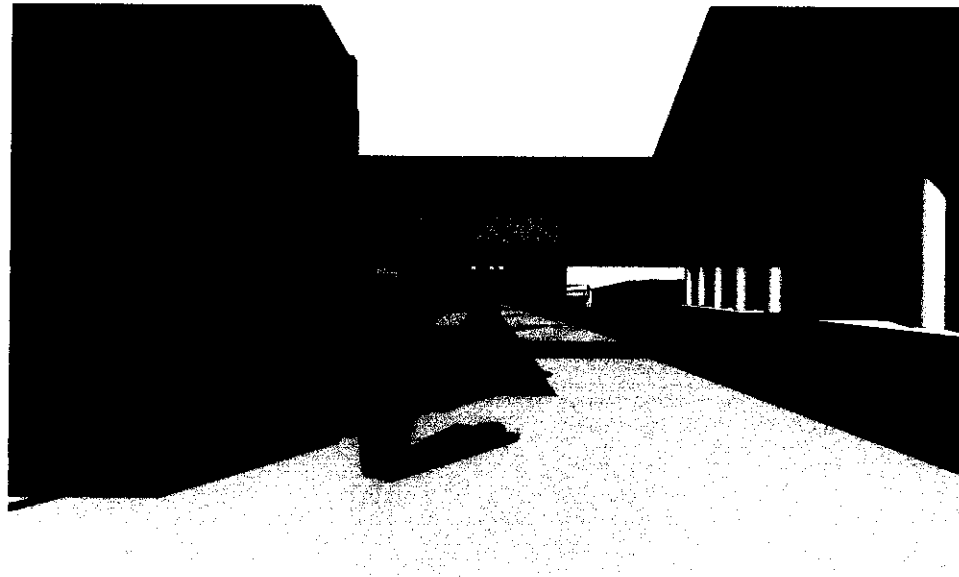


# *An Intergenerational Community*



# An Intergenerational Community

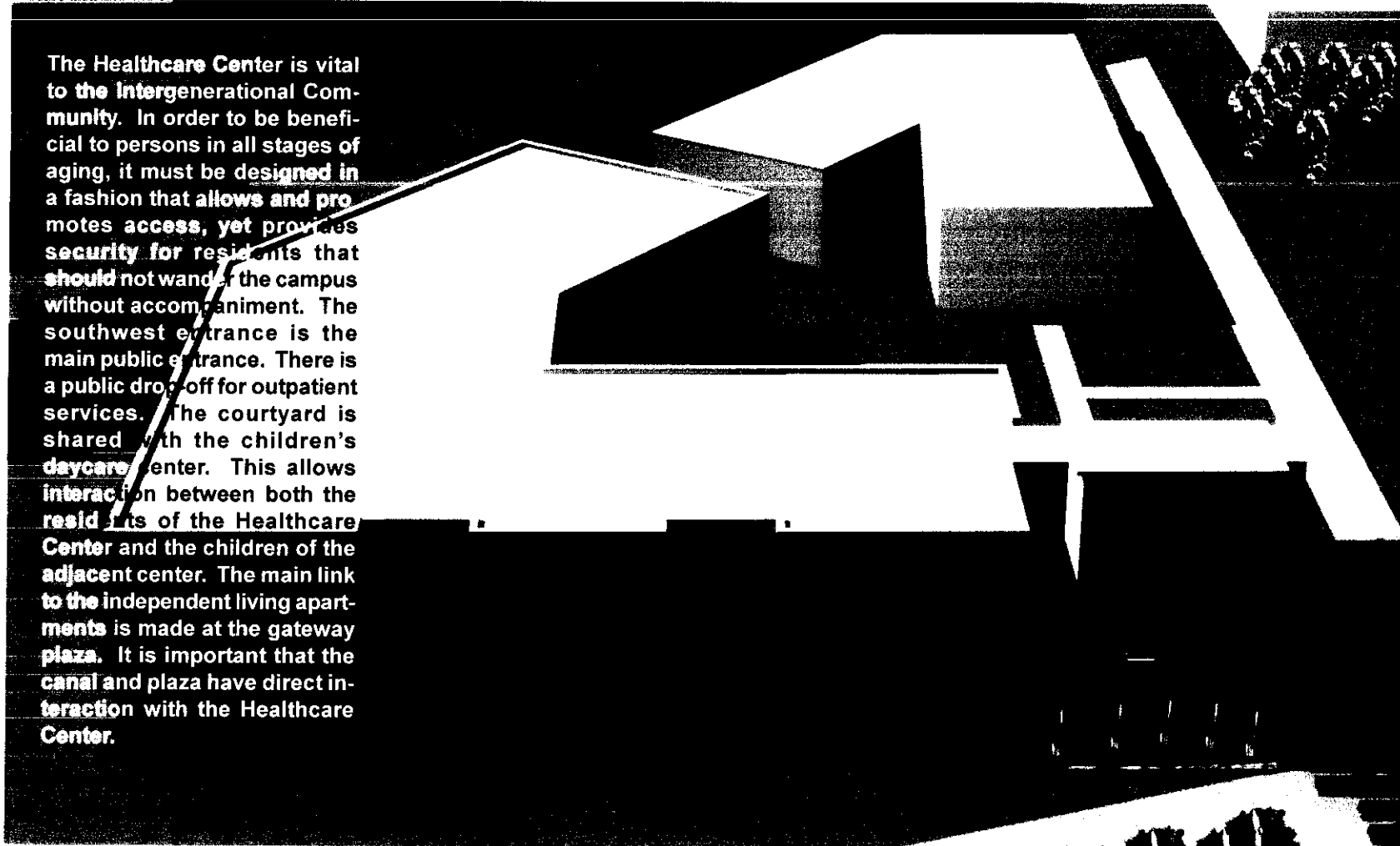
The progression into the campus begins with the exit of the plaza and the origin of a canal that bisects the path. Repetitiously stretched over the canal walk are three walking bridges. The bridges allow circulation between the buildings and opportunity to cross the canal. In a parallel line along the edge of the canal are activity areas. A branch of the canal turns to the west and connects the canal to a rigidly formed pond and green space. At this point the promenade may either head west to the pond or cross a bridge to continue toward Forest Park. A tunnel through the ridge at the north end of the campus marks the exit of the site and an entrance into Forest Park.





# An Intergenerational Community

The Healthcare Center is vital to the Intergenerational Community. In order to be beneficial to persons in all stages of aging, it must be designed in a fashion that allows and promotes access, yet provides security for residents that should not wander the campus without accompaniment. The southwest entrance is the main public entrance. There is a public drop-off for outpatient services. The courtyard is shared with the children's daycare center. This allows interaction between both the residents of the Healthcare Center and the children of the adjacent center. The main link to the independent living apartments is made at the gateway plaza. It is important that the canal and plaza have direct interaction with the Healthcare Center.

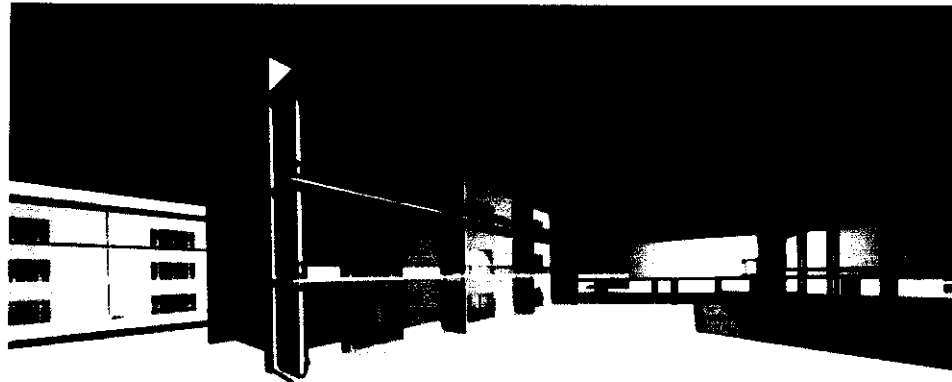


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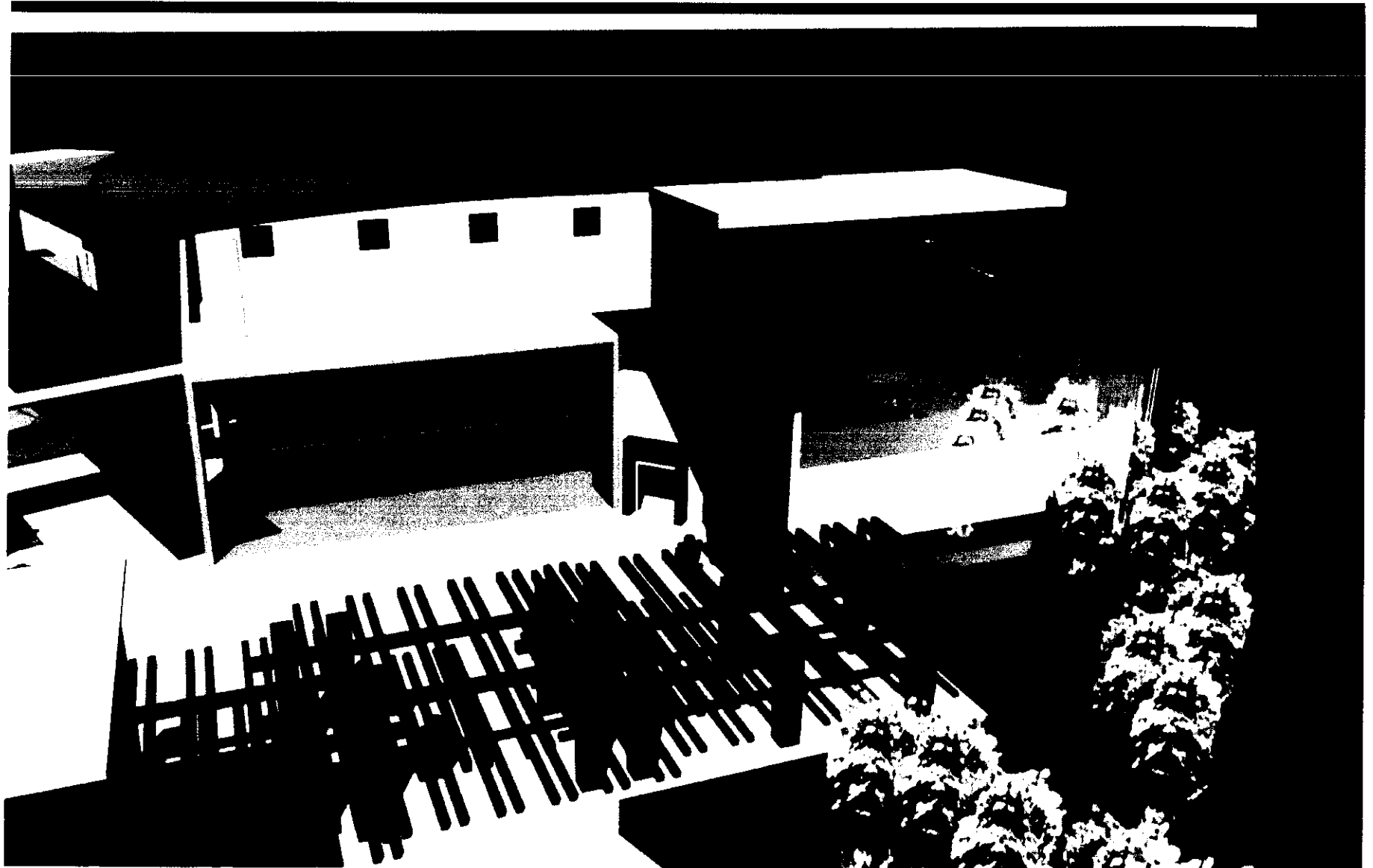
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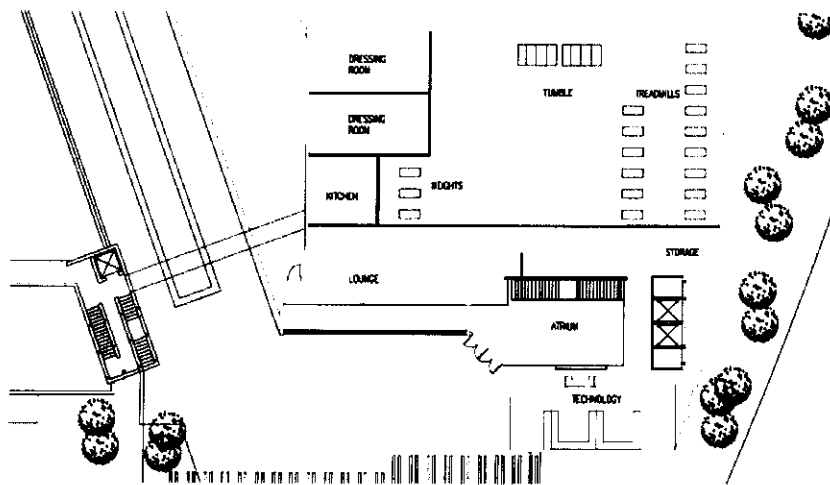
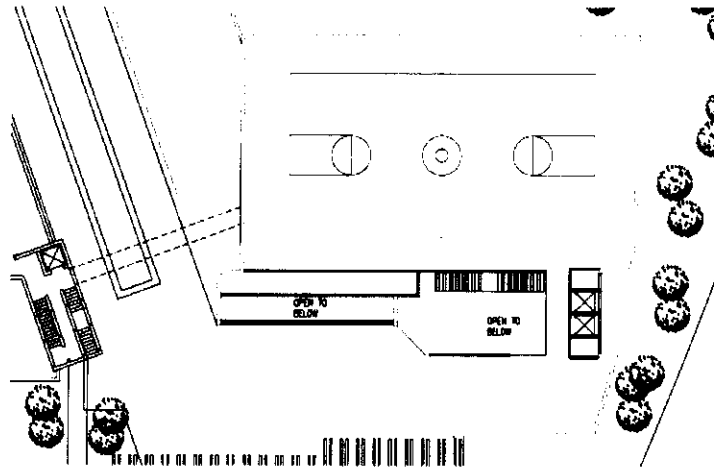


Five tri-level apartment buildings line both sides of the canal. The apartments are built using barrier free design so that elderly and disabled persons will be accommodated in the intergenerational community. Even though they are designed using barrier free design for seniors, the idea is that seniors, young adults, and the nuclear family can live here in harmony. The arrangement of the buildings dictate the angle which the canal dissects the site. Each building is spaced 75' from the next to allow sunlight to penetrate into the patio areas. The buildings are aligned on an east-west axis to maximize the heat and light effects of natural lighting. Each apartment unit is designed so that all entrances are at the north façade and each unit has its own terrace facing south.

# *An Intergenerational Community*



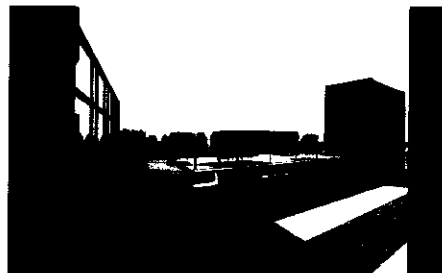
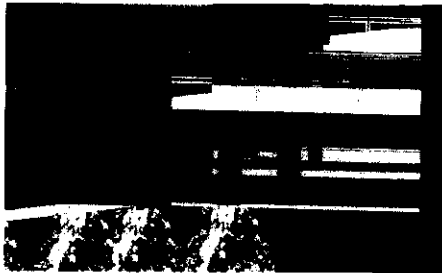
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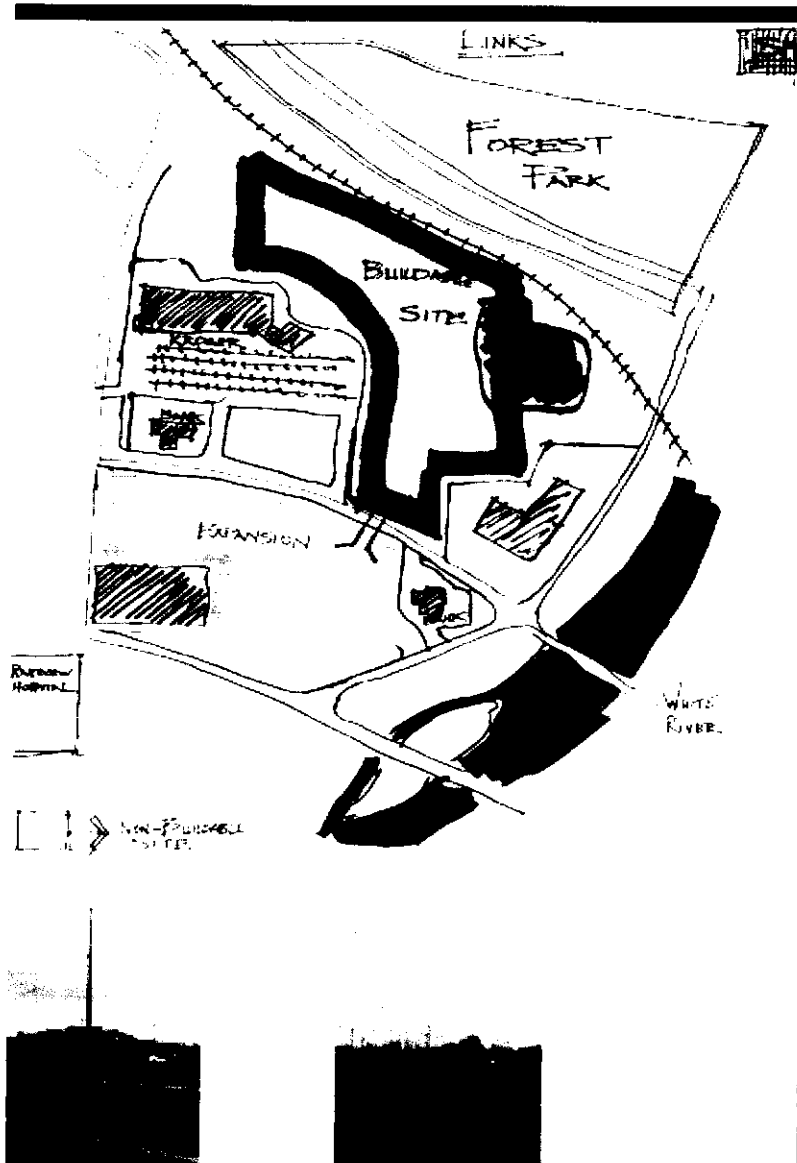
The Technology Center is a combination of a computer science center and a fitness center. This is the primary social area of the campus. The program features include a gym, workout center, café, formal space, computer labs, and a hi-tech learning center. It is open to residents and non-residents alike. The building is made up of three sections. An atrium space separates the fitness area from the computer area. The atrium is the formal space and has enough square footage so that large groups of people can gather for social functions. At the north end of the atrium, a pair of elevators provide vertical circulation. The elevators are glass enclosed on the east side to provide views out to the greenspace that envelops the east facade. This creates a nice aesthetic for the vehicles traveling on the adjacent highway. This is the vehicles only view of the campus. Both main areas of the building are two levels, with the more public spaces located on the first level. South of the atrium, the computer lab is located on the first level with the conference learning center on the second. North and West of the atrium is the fitness area. The first level houses the workout equipment, locker room, and a cafe that overlooks the plaza. A gymnasium is located on the second level. These elements might not normally be grouped together, however the concept of this program was to create a facility that caters to the mental, physical, and social health of the users.

# An Intergenerational Community

The activity areas that separate the individual apartment buildings are divided into two levels and occupy the area between the vertical circulation towers. The vertical circulation towers are the link between the separate apartment buildings. In each tower there is one stair and one elevator. The activity areas will be designed to host social activities as well as physical activities. Some examples of the activities that will take place in these nodes are: billiards, cards, conferences, concerts, etc. Both levels provide lateral circulation between the buildings, however only the lower level is completely enclosed. The lower level is specifically designed to perform two functions. The first is to allow access between buildings without exposure to the weather. The second is to house the activities that require indoor furniture and equipment. Persons on the canal walk construct the walls in a storefront fashion to provide views through the activity spaces. This keeps the canal space from being a closed off, tight space. The second levels of the activity areas are sun decks. They also are spacious enough to both provide lateral circulation and serve as staying spaces, however they are completely open and there is no protection from the elements.



# An Intergenerational Community



The available land in the immediate area is plentiful. Logan Street divides two non-developed areas that are approximately equal in square footage. The land north of Logan Street was chosen for the first phase of this project because it lies directly between Forest Park and downtown Noblesville. As the intergenerational community and the City of Noblesville continue to develop and grow, it will be necessary to expand the community. Several amenities that are beneficial to the area should be planned for in phase two of the project. These are retail spaces and restaurants. It is these types of facilities that will enhance the idea of creating a district area.

# An Intergenerational Community

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This project began with a question. "How can we do a better job caring for our elders?" The idea was to create a facility that I would want to live in when I get older. As my thoughts and observations expanded, I realized the place I want to live after retirement is the same place I want to live now. At this point, the project became much more than a building, it was an investigation of how our society lives. In the process of discovery, the project swelled to become part architectural design and part urban planning. As designers and architects, it is important to understand how we can affect our communities, for we are a service providing profession. At the beginning of this thesis year, my main goal was to enhance my computer skills. Looking back, I now understand the most important lesson learned. It is to continually strive to make my community a better place.



# An Intergenerational Community

American Institute of Architects. Design for Aging: An Architects Guide. Washington: AIA Press, 1985.

Driver, Diane, ed. Blueprint for Aging. Proceedings from a Two-Day Conference. Oakland, CA: The Center on Aging Academic Geriatric Resource Program University of California, Berkeley, 1986.

Howell, Sandra C. Designing for Aging Patterns of Use. Cambridge, MA: The MIT Press, 1980.

Massachusetts Institute of Technology. Private Space: Habitability of Apartments for the Elderly. Cambridge, MA: Massachusetts Institute of Technology, 1978.

Porter, Douglas R. Housing for Seniors: Developing Successful Projects. 2<sup>nd</sup> printing. Washington: Urban Land Institute, 1996.

Regnier, Victor, AIA. Assisted Living Housing for the Elderly: Design Innovations from the United States and Europe. New York: Van Nostrand Reinhold, 1994.

University of New Mexico School of Architecture and Planning. Visions for an Intergenerational Community. New Mexico: University of New Mexico School of Architecture and Planning, 1997.