The University of Calgary

Hospice: A Place for the Dying

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ABSTRACT

The primary intention of this thesis project is to generate an architectural resolution for a hospice facility to be located on a site in Inglewood, Calgary. Hospice architecture should encourage the search for meaning in life and in death by creating a place in which its inhabitants can withdraw into their spiritual selves. The dying could freely slip into the place of the in-between, a place of transition which signals that one way of living is over and a new way is emerging; rational awareness could be transcended to another level of experience. Such an environment for self-reflection and inner transformation can be accomplished, architecturally, in two major ways: by creating places where boundaries blur and by creating places of nature. Although background information, in the form of literature reviews, a hospice volunteer training program, site visits, and interviews, all play a role in the design outcome, the architectural manifestation evolves primarily from Michael Benedikt's philosophy of architecture and Frank Lloyd Wright's winter residence, Taliesin West, as the architectural precedent. Together these bring life to the poetic idea, and the design outcome is a result of the integration of this idea, the site, and the program.

ACKNOWLEDGEMENTS

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1.0 INTRODUCTION

In recent years, society has been rethinking the concept of health care, and a broader, more holistic approach is emerging. Emotional, social, spiritual, and intellectual considerations have been added to the emphasis on physical/medical needs. This is particularly so in the case of the terminally ill. The way we treat the dying reflects our culture. People are increasingly expecting a better "quality of life," and this depends upon more than good health care as it was defined in the past. The dying person's physical environment has become more important than it has been. Because of the preference to be cared for at home, society is moving away from buildings based on hospital models. This Master's Degree Project proposes a design for a 7-bed, inpatient, stand-alone hospice to be located in the city of Calgary, in the community of Inglewood. The project, therefore, is essentially concerned with the role of architecture in the last few weeks of a dying person's life. For the specific site, located at 21st Street and 7th Avenue south-east, and the proposed program, the thesis will investigate the way a hospice should be designed to make a dying person's last few weeks of life more meaningful than they would be in a hospital setting.

1.1 PROJECT OBJECTIVES AND SCOPE

The following project objectives were developed by the author and are indicative of the project scope:

1. The primary focus of this project is to generate an architectural resolution, by

incorporating a poetic idea, the functional aspects of the program, and the site's characteristics, into a building which would be meaningful to its users and the community in which it would be located.

2. The functional aspects of the project have already been investigated in a directed study undertaken by the author prior to the commencement of this project. This included:

(a) studying the needs, desires and characteristics of the dying person, the bereaved, and the caregiving staff (the users of the facility) and the ways these relate to the architecture;

(b) exploring existing hospice facilities within the Calgary vicinity to learn from their design successes and inadequacies; and

(c) exploring available information on hospice design through a literature review.

1.2 METHODOLOGY

The research for this design project was accomplished through several means. The literature was consulted regarding the characteristics of the type of people who would use a hospice. In addition, understanding was also gained through the Volunteer Training Program offered by Hospice Calgary, which the author completed in November 1998. Site visits to Calgary hospices, one hospital, and several nursing homes were conducted, and understanding was obtained through observation and personal interviews with the managers of the facilities. The literature was also consulted with respect to hospice design, handicap accessibility,

city bylaws, the Area Redevelopment Plan, and building code requirements. Various architectural writings and designs provided inspiration for the development of the poetic idea.

1.3 DOCUMENT ORGANIZATION

Chapter 2 contains background information for the design, such as the meaning of "hospice/palliative care" and its objectives, a brief history of the hospice movement, and a brief introduction to the existing facilities in Calgary, as this is where the site for the design is located. Pertinent design information and hospice precedent cases from literature sources are discussed in Chapter 3, as are the author's observations from the visits to the Calgary hospice facilities. Chapter 4 covers the hospice user / environment relationship, in that a profile of each of the three hospice user groups is provided along with the design objectives stemming from it. Other general design considerations are also discussed in this chapter. Chapter 5 outlines the architectural program for the anticipated building, providing a summary of the design objectives and the required spaces, as derived from the research. This chapter also outlines the relevant code and city bylaw requirements. Chapter 6 deals with the urban context and site considerations that bear on the design project. Chapter 7 presents the poetic design idea. Chapter 8 describes the final design solution and, finally, Chapter 9 concludes the thesis.

2.0 BACKGROUND

People are "dying" when they reach the stage in their illness at which nothing more can be done to promote recovery. Terminally ill people die in a variety of settings. Some die in a hospital, or in an auxilliary hospital, which is unfortunate because these institutions tend to "...emphasize curing...[and] the dying are seen...as people who cannot be helped" (Carey, p. 14). In other words, in the hospital, doctors and nurses frequently see death as failure, since their job is to prevent death. When they are unsuccessful at saving a life, it is difficult for them to change from the role of "preventer" to the role of "comforter". Nevertheless, statistics show that 80 percent of North Americans die in hospitals, and 90 percent of those dying in the hospital wish that they could die at home (Ley, p. 46). For the dying, caring is more important than curing, and most hospitals cannot provide this. Furthermore, despite their huge size, most hospitals lack privacy and adequate space for family and visitors. Some hospitals, however, do have a special ward or unit for terminally ill patients, where they can receive some special care, rather than curative treatment. A local example of such a ward, toured by the author, is the new palliative care unit at Glenmore Park's Continuing Care Centre, connected with the Rockyview Hospital. This palliative care unit, which opened in July 1997, has 11 beds set up in private rooms. The unit admits patients who have six months to six weeks to live and have no family to look after them. The Peter Lougheed Hospital also has a special unit with a palliative care focus, but this facility was not toured by

the author.

If the terminally ill person is also elderly, he or she may die in a nursing home. However, "nursing home deaths account for fewer than five percent of deaths overall..." (Gotay, p. 6). The problem with nursing homes as places to die is that nursing homes are organized for long-term custodial care, which means that they provide accommodation, meals, laundry, personal services, special diets, routine medications, and recreational and diversional activities. Neither the atmosphere nor the environment is suited for terminally ill people and their families; "custodial caregivers are not trained to care for the dying [and] have neither the time nor the skills necessary to listen to and help the patient" (Carey, p. 16).

Calgary has many nursing home facilities, and the author toured the following: Bow Crest, Chinook Care, Brentwood, and the Bethany (both Calgary and Airdrie). Of these, all admitted that the terminally ill are not treated any differently than the other residents. They do not receive special care, that is palliative care. Furthermore, segregation in any way, such as in moving the dying to a special area within the nursing home, would be inappropriate, as residents would designate this as the "dying room". Though there is no action at the present time with respect to the provision of special care for the terminally ill in nursing homes, the treatment of the dying in nursing homes will become increasingly important in the future, since people are living longer and are moving into them as they get older. Because "the elderly population in the year 2000 will be better educated, better travelled, more

socially aware and less likely to be passive about their care than the preceding generations" (Ley, p. 35), it is important that future management of the elderly and the terminally ill, operate with the principles of palliative care in mind. These principles will be discussed shortly.

It is a fact that "most patients wish to stay at home as long as they can, to die at home if possible" (Rossman, p. 122). Keeping terminally ill people at home allows the dying to continue to share in the life of their families. Those who do die at home often have home-visiting specialists, from Home Care for example, helping the family with the care required. Some of these patients are part of a hospice outpatient program and generally die within 40-45 days of admission to the program (Carey, p. 23). It is a fact that 65 percent of American hospice patients do die at home (Lemming, p. 259).

Though dying at home in familiar surroundings may be the ideal situation for the terminally ill, for any number of reasons this may not be possible. Sometimes, for example, the family simply has too much trouble coping. The daily routines of the family may be disrupted by having the dying person at home, and it may create quite a stressful situation for all. The alternative to home care of the dying is to place the dying person in a hospice, the atmosphere of which is more intimate and caring than that of a hospital. To be eligible, a hospice resident must have a diagnosis of a terminal illness, with a prognosis of six months or less, consent of the patient's doctor, and a willingness to deal with dying in an open awareness context

(Lemming, p. 259). This includes striving to believe and participate in the meaningfulness and quality of life right until the end. Modern hospices are designed for a maximum stay of up to 90 days, but inpatient stays generally range from about two weeks (Carey, p. 23) to a month and a half (Lemming, p. 259).

Hospice is a medieval term that refers to a way station for travellers. However, the medieval hospices were more than just temporary stops for dying persons. They were dedicated to both the physical and spiritual care of the ill and the dying. Hospice, therefore, represents a very old and compassionate philosophy of care, that is, palliative care. It is important to distinguish between the concepts of cure and care. The concept of cure centers on the diagnosis and treatment of disease, while care, on the other hand, is concerned with the subjective aspect or "well-being" of the person. In fact, to "palliate" means to relieve without curing. Palliative care, therefore, is oriented toward the "global" needs of the person who is approaching the end of life, that is, it is compassionate care directed towards improving the quality of life for the dying by meeting the physical, psycho-social and spiritual needs of both the patient and the family. This requires the collaboration of many disciplines. Every member of the caregiving team is considered equal, and the team includes the dying person and his or her family. Although a specifically designed program of care will be required for every individual, hospice or palliative care strives to meet certain particular objectives.

To begin with, palliative care has a specific outlook; it is an attitude toward

life and toward death. Residents are not seen as "waiting for their death" (Simpson) but, rather, in hospice care, the dying person is treated as a living human being, who has the right to live as fully and as completely as possible, until death. This means that the person's experiences in the present are of primary importance, and his or her illness has a secondary focus. Death is seen as an inevitable part of life. In fact, most hospices require the individual to agree to forgo rescusitation. Nevertheless, the dying are given hope and a continued belief in the meaningfulness and quality of life. Hope may include the hope of being comfortable (pain-free), the hope of not being a burden, the hope for more time or less time, the hope for reconciliations, and the hope for a peaceful and pain-free death (Hospice Training Program). In addition, honest relationships are sought; the dying are told all the facts and are allowed to express their feelings about their death in their own way. Palliative care acknowledges that each person is unique and that each person should be entitled to die with dignity. "Dignity means protecting the person's personal modesty, integrity and right to make decisions about his or her own life" (Spiegel, p. 67). Inducing personal autonomy and giving a sense of continuing self-respect is very important in hospice care. Every terminally ill person has the right to be informed about his or her illness and has the right to care and comfort. Because a dying person may suffer from physical pain and/or psychological pain (ie. anxiety, depression, insomnia, etc.), pain control is aimed at both. The terminally ill will share in their own care, which means that they will be given a sense of control

and involvement in decisions concerning them. A wide range of choices will be made available to the person, such as the selection of food, personalization of his or her own room (with paintings or family photos), access to entertainment, and comfort at any hour of the day or night. The hospice resident may even choose to make a "living will" which specifies the parameters within which the treatment team may function.

Because the patient and the family together are considered as the unit of care, additional support is also given to the family members before their loved one's death and after. Before the death, the family is allowed to participate in the caregiving and decision-making and is given free access to the patient, with continuing open communication with the caregiving team. After death, bereavement care has several goals, namely,

> to assess the normal grief response, to assess individual coping mechanisms and stress levels, to assess support systems, to set up additional support (groups, individual therapy, visits by team members) when needed, to identify individuals at high risk and make appropriate interventions, [and] to make referrals for financial problems and medical care (Lemming, p. 258).

Counselling after the death of a loved one is provided for as long as the bereavement team finds it is necessary. Each case is assessed independently.

Dying is a spiritual event, and spirituality is the heart of the hospice movement. A distinction must be made, therefore, between religion and spirituality.

> Religion...[is] an organized set of practices that surround a traditionally -defined belief in the existence of a God or divine, super-human ruling power...Religion is, in some respects, a set of tools used to express or practice one's beliefs. Spirituality may be (and hopefully is) a part of religious beliefs or practices. However, religion may, or may not, be part of one's spirituality (Ley, p. 49).

Spirituality creates a desire to identify the valuable and the true in one's life. This desire to find meaning in life and in dying is usually intensified when death approaches, regardless of one's religious affiliation. The time of facing death, therefore, is often a time for contemplation and reflection. The role of palliative care is to help the dying find their own meanings. In fact, it will become the author's argument that not only does the special caring provided contribute to making dying more spiritual, but the architecture of the hospice itself can enhance the spirituality of the process and create a smoother transition from life to death. Therefore, the design of a hospice, like the special caring it provides should take into account the deep meaning and significance of facing the end of life. Furthermore, spirituality is implicit in the grieving process since the bereaved also look for meaning in their loss. Hospice care is spiritual care and extends into the bereavement period to help those who grieve.

The objectives of palliative care outlined above were first introduced with the opening of St. Christopher's Hospice in England, in the summer of 1967. This played a pivotal role in the development of the modern hospice movement. Dr. Cicely Saunders developed the hospice as an alternative form of holistic care for

people dying of cancer. She established the objectives of the care, believing that hospice care would make it possible for people who are dying to live fully until they die. Because spirituality rather than religion is emphasized in hospice care, St. Christopher's Hospice welcomed people of all faiths and cultures. In 1974, resulting from Saunder's hospice work, Hospice Inc. in Connecticut was established as a home-care hospice. The National Hospice Organization, a non-profit group, took over the management of Hospice Inc. and commissioned Lo-Yi Chan to design the Connecticut Hospice, which was the first architecturally designed freestanding hospice facility in the United States, completed in 1980 (See Figure 1). Two V-shaped patient wings and a long service spine at the apex of the V's define the building. The V's connect to exterior south-facing terraces, which are adjacent to the patient areas. Though the special caring of Connecticut Hospice distinguishes it from a hospital, its plan, nevertheless, still reveals a rather hospital-like architecture, with its large building scale (52 beds) and the linked, repetitive, modular units. Furthermore, although greenhouse-style windows in the bedrooms

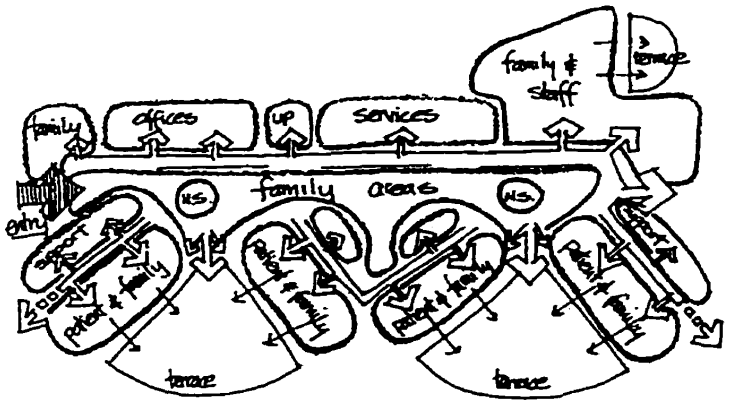


Figure 1A: Diagrammatic Layout, Connecticut Hospice (Carey, p. 65)

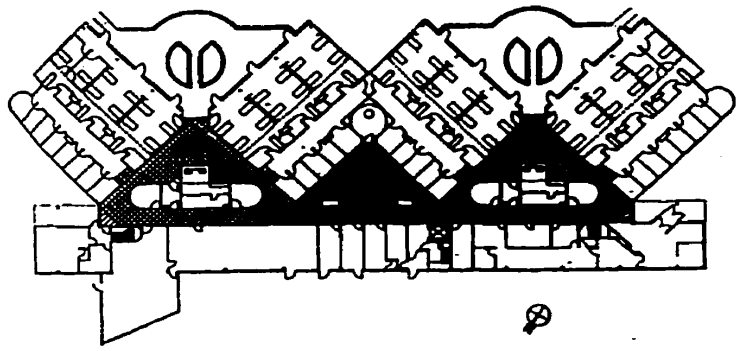


Figure 1B: Floor Plan, Connecticut Hospice (Chan, p.44)

overlook patios, the bedrooms are "ward-style", as in a hospital. The building also lacks a kitchen and dining area accessible to residents and visitors.

In Canada, in 1975, a Palliative Care Service was opened at the Royal Victoria Hospital in Montreal, Quebec. The 13 bed palliative care ward was the first comprehensive hospital-based hospice service in the world and was unique in that it was located in a very large teaching hospital. In Calgary, at the present time, there are three stand-alone hospice facilities: Rosedale Hospice, Agape Manor, and Beswick House. In addition to these, there is also the Hospice Calgary organization that uses hospice philosophy to provide counselling programs and services, both pre- and post-bereavement, for patients and their families struggling to cope with the effects of terminal illness. "To date there has been little effort to define and develop a national consensus in standardized practice for palliative care" (CPCA, p. 6). Since such a consensus would be important in ensuring that facilities do not fall below a designated standard, since 1994, the Canadian Palliative Care Association (CPCA) Standards Committee has been working towards rectifying the situation in Canada.

There is even less of a consensus when it comes to architectural aspects of

hospice design, in that, according to the Calgary Regional Health Authority, there are no provincial guidelines for hospice design, as there are, for example, for nursing home design (Brown). This was confirmed by the Health Facilities Projects Division of the Government of Alberta (Mueller). Some guidelines have been published by the Federal Government of Canada, but these are very general and are only suggestions, not provincial laws (Health and Welfare Canada, p. 21-24). The architectural design of the spaces is suggested as an important consideration. Furthermore, it is suggested that single rooms are preferred to double rooms, and bed space allocation should be greater than for non-palliative care patients. Another source reveals that in a one-bed room, the space between the side of the bed and the wall should be a minimum of about 900 mm , and there should be a minimum of about 1,000 mm between the foot of the bed and the wall. (Barrier Free, p. 342). This means that these spaces must be larger for palliative care patients, according to the Federal Guidelines. If single rooms are not possible in the design, then other arrangements should be made for privacy. In addition, the Guidelines list the necessary functional spaces that would help the hospice to run smoothly. For instance, space for counselling, family lounges, kitchen, staff conference rooms and offices, and storage are recommended. Outside spaces, such as a garden, patio, or balcony are other suggested spaces. Although the Federal Guidelines provide some functional design parameters, they make no architectural suggestions as to the ways one might create a more spiritual place for the dying.

3.0 HOSPICE PRECEDENT INFORMATION

3.1 LITERATURE REVIEW

Deborah Carey's study of 48 hospice inpatient environments provides great insight with respect to existing hospice design in the United States (Carey). The focus of the study was stand-alone hospices, which varied greatly in size and composition, ranging anywhere from five to six patients to 200. Patients ranged in age from 16 to the elderly. The oldest patients tended to be women, and patients varied in terms of trajectories of illness and debilitation, although the majority of hospice patients die from cancer or heart disease.

The study found that the most manageable size for one nursing unit is approximately 15 beds, although the average was just under 30 beds per unit. Large units of 10 beds or more were often separated functionally from other areas by substantial distances, which made replication of services necessary. For example, more family rooms, kitchenettes and nurses' stations were needed. It was found that the larger the unit, the more standardized the design became. Regardless of size, it was found that most hospices have the following users: patients and families, administrators and office staff, nursing staff, a medical director, an attending physician, laundry and cleaning staff, food service and maintenance personnel, community resource people, a volunteer coordinator and volunteers, a dietician, a social worker, a chaplain or bereavement counselor, an

occupational therapist, and a physiotherapist. Some hospices even had psychiatrists, pharmacists, and daycare personnel.

The Carey study concluded that there were four features that were present in most hospice settings, namely, family rooms, kitchenettes, indoor gardening, and artwork. The author agrees that family rooms and kitchenettes are essential for the proper functioning of the hospice, as these provide comfort and choice, which contribute to the holistic well-being of the residents and their families. For people who are too ill to enjoy the open air of the outdoors, incorporation of nature into the hospice in some form is also essential. In terms of artwork, because people's tastes in art vary greatly, it is the author's opinion that, if the artwork depicts scenes of nature, then perhaps it could be considered an essential feature of the hospice setting. This is because nature is authentic; it speaks for itself, and it speaks about life. Reflecting upon such artwork could definitely contribute to the search for meaning in life and in death, which is typical of hospice residents.

The Carey study found that there were at least eight different kinds of spaces in the majority of the hospice facilities surveyed. The majority of the facilities had a variety of bedroom accommodation and decor. In fact, there was no unanimity with regard to patient bedroom populations. Everything from one, two, three, four bed rooms to six and eight bed rooms were found in 60 per cent of the hospices surveyed. The remaining hospices had either single or double bedrooms. More

area per patient in the bedroom areas was provided than is usual in traditional medical facilities. Family rooms that included at least one large gathering area, as well as private areas in patients rooms, were found to exist in the majority of hospices surveyed. Most also had private family rooms, with access to multi-purpose rooms that were suitable for large-scale gatherings (See Figure 2). The

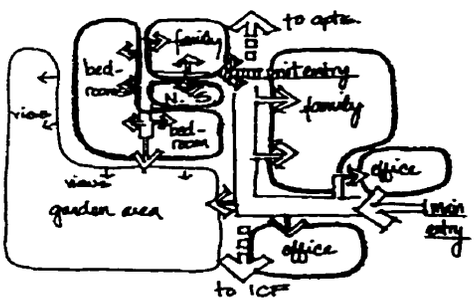


Figure 2: Functional Layout, Clover Hospice - Example showing Family Spaces (Carey, p. 60)

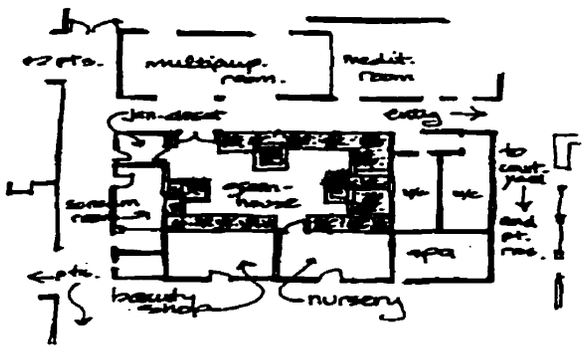


Figure 3: Greenhouse Example, Nathan Adelson Hospice (Carey, p. 233)

majority of hospices provided family overnight accommodation. Chapels or meditation rooms were common. Kitchenette facilities were usually provided in conjunction with family rooms and could be used by families, patients and staff. Most hospices had some sort of indoor gardening areas with openable windows and/or skylights (See Figure 3). Most had a considerable amount of artwork, especially depicting natural scenes. Separate and specially designed nurses' stations were found in all hospices. There was always a separate and distinctive

entry for the building, and outdoor areas were provided for hospice use.

Though the above mentioned spaces are the most necessary hospice spaces, according to the Carey study, one cannot ignore the fact that it is the quality of the spaces that should be considered most important when designing. As will be discussed in 4.0 The Hospice User/Environment Relationship, satisfying the users' needs means more than simply satisfying their physical needs. Whether it be the resident, the visitor, or the caregiver, the user's frame of mind is crucial and should be considered a priority in designing, because dying is a stressful event for all concerned. It will be shown later that the architecture can promote such qualities as calmness and serenity, choice and control of the environment, and respect for privacy. The architecture can encourage the search for meaning in life and in death, providing the potential for a smoother transition from life to death. This will be discussed in Chapter 7.0 Design Idea.

The image a hospice presents to the outside world and to the people entering it for the first time is very important because the hospice does not sit in isolation from the surrounding community. On one hand, a spectacular approach and entrance can "awaken" the community, causing it to take notice of the hospice building. For example, Watt's hospice design for the RIBA Design 90 Awards features a marvelous entrance to the hospice, in that "the approach to the building is through a thick rubble wall of granite enclosing a hanging garden which embraces

patients and visitors alike as they enter" (Energy, p. 54). On the other hand, as is often the case with housing for people with AIDS, the safest route to take is to blend the building into its neighboring community (Arcidi, p. 99). (See Figure 4, but note that while Frankfurt Aids Hospice and Beswick House both may "blend in" architecturally with their respective neighbors, one may question whether or not it is appropriate to try to design them to appear as something they are not. In actuality, the Frankfurt Aids Hospice is not an apartment, and Beswick House is not a duplex. Both are hospices, not residences, and, therefore, lack

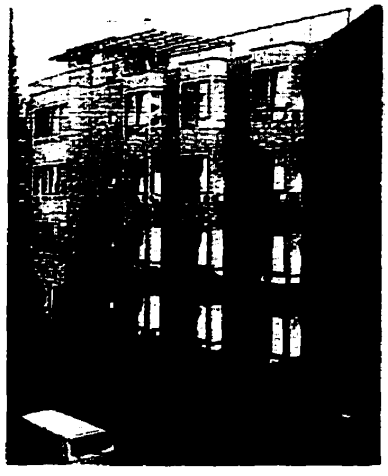


Figure 4 A: Frankfurt AIDS Hospice blends in with densely inhabited Apartment Block District (Dawson, p. 63)

Figure 4 B: Frankfurt AIDS Hospice - Other Elevation (Dawson, p. 65)

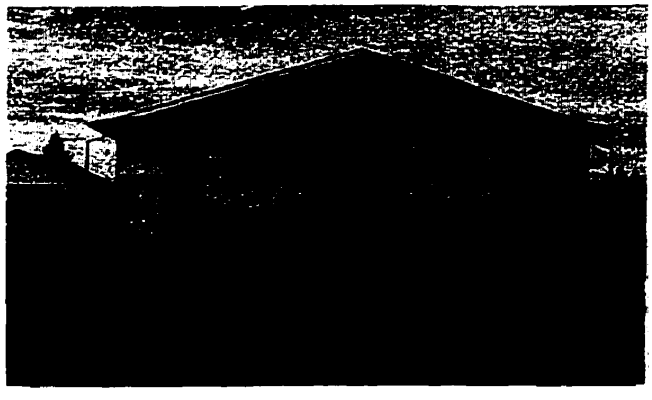


Figure 4C: Beswick House, Calgary

an "authentic" quality because they appear to be something they are not.) (See 4.0 The Hospice User/Environment Relationship for a detailed discussion on authenticity.) Therefore, although the Carey study indicates that the most significant image for the hospice is the home, it is the author's opinion that the hospice design should not try to mimic any particular building type, such as the home. The architecture can be authentic and, yet, can still "blend" into the surrounding community. (Section 6.3 Development Constraints discusses how to fit new buildings with old.)

Nevertheless, a smaller building scale, and a form that is made welcoming to humans because of its warm materials and unintimidating design (domestic), for instance, are examples of "home-like" architectural qualities that should be incorporated into the design. An example of this is the Sussex Beacon AIDS Hospice on the outskirts of Brighton, UK (1996) (see Figure 5), which "...has domestic references with a pitched tiled roof, brick-and-render elevations over a timber frame..." (Field, p. 32). Nevertheless, as Carey points out, "connecting the hospice with life and activity around the facility has been the subject of some controversy because it touches upon the question of community acceptance of the hospice" (Carey, p. 234). There should perhaps be some architectural aspect of the

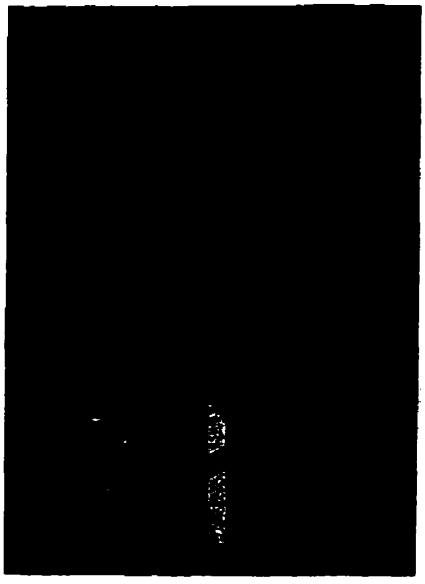


Figure 5 A: AIDS Hospice Brighton, Britain (Field, p. 32)

Figure 5 B: AIDS Hospice, Brighton, Britain - Front Elevation (Field, p. 32)

hospice that brings the community in, such as incorporating a community daycare into the design. This not only may make the hospice more acceptable to the community, but hospice residents also may not feel so isolated from the community with which they identify. Furthermore, since children represent life and growth, being exposed to the daycare would add to the quality of life of the residents in the hospice, in that for the dying, children "...give the feeling of continuity with what you are leaving behind" (Chan, p. 43). Given the controversy that has arisen in locating hospices in communities, such as in the case of the Calgary facilities (which will be discussed later), it seems that community acceptance is an important architectural design objective that must be addressed in the design process.

If there is one room that could cater the most to the holistic well-being of the hospice resident, providing him or her with a therapeutic environment by enhancing

his or her quality of life, this is no doubt the bedroom. The palliative resident spends most of his or her time here and can establish his or her own territory. A very important issue in planning the residents' bedrooms is the number of occupants the room should have. In English hospices and some American ones, rooms with four beds are common because such an arrangement provides constant companionship. "Twos are a disaster. When a patient has made a friend and the friend dies, the loss is traumatic... Threes and fives are better, but they have the geometric problem of an odd man out" (Chan, p. 44). After having been used for a while, the Home for AIDS Patients in Frankfurt (1994) found that single rooms would have been better than double rooms, which had been intended to provide companionship but in practice create unnecessary stress when an occupant dies (Dawson, p. 65). Furthermore, research on nursing homes shows that "...most elderly people prefer privacy to sharing a room" (Manard, p. 107). Some research also suggests that providing residents with private rooms actually increases their social participation (Koff, p. 127). Based on this finding, the author thinks that providing private rooms is better than providing rooms that have to be shared. Having a private room gives the resident the choice when, with whom and where to socialize, assuming there are socialization spaces within the hospice. Such an environment improves the resident's well-being and enhances his or her quality of life.

In the design of the single resident bedroom, special attention must be given

to the size of the room, the layout, and the furnishings of that room. Establishing a sense of place in the design of the hospice environment is important, and "typically individual meaning is given to a place when territory is established and embellished with personal articles..." (Carey, p. 212). Furthermore, the idea of security also contributes to a sense of place, in that "...security means boundaries and having a private place for one's own things within easy reach" (Tetlow, p. 50). The resident's mobility should be maximized and, therefore, the room should be large, with ample space around the bed and furniture. Hookups for sophisticated monitors and life-support equipment are not necessary or appropriate in a hospice, but some residents may need oxygen for comfort, suctioning, or an occasional intravenous feeding, so space for this should be made available at the bedside. Furthermore, there must be sufficient space and seating for family in the resident's room, since receiving visitors is one of the most important hospice activities. Bedside tables should have plenty of room for personal items. The room should also have display space and shelving or cupboards for storage of larger personal items and the resident's clothes. "The physical environment should impart to the patient-resident a feeling of control: control over the patient-resident's own person and destiny and control over his or her immediate surroundings" (Koncelik, p. 59). Therefore, personalization behavior must be strongly encouraged. There should also be a convenient sink within the bedroom and enough room to store a

wheelchair. Toilet and bathing areas should be in close proximity to the bedroom and should be built to the highest standards of accessibility. Underfloor heating may be a welcoming feature, "...not only because residents who often walk around in slippers are especially susceptible to cold, but also to avoid perimeter radiators and maximize usable space" (Dawson, p. 64).

To enhance the resident's well-being, there should be two connections from the bedroom, one to the rest of the activity of the hospice and one to the outdoors. The connection to other spaces in the hospice allows for freedom which is "...the power to discover others and get on with life" (Tetlow, p. 50). In Watt's design, for example, the patient spaces are arranged along a lightwell overlooking an arcade so that the residents can participate in watching the comings and goings of visitors and staff (Energy, p. 55). Chan, likewise, points out that this idea of "community" as a goal in hospice design is important because fear of abandonment is a major source of anxiety to the dying (Chan, p. 44). The resident's bedroom should be connected to the outdoors with a view, or even an attached greenhouse area. Windows with sills, low enough so that the bed-ridden resident is able to look out, are important so that he or she is not cut off from the rush of everyday life. Better yet, openable windows and windows with blinds to regulate the view and the light, preventing discomfort from glare, allow the residents to make choices that are, as already discussed, critical in palliative care. Koncelik suggests that "there should

be access to the out-of-doors, to sunshine and fresh air, without having to exit the facility" (Koncelik, p. 114).

In terms of mobility within the hospice, all door openings should be wide enough to accommodate the passage of beds. Residents appreciate being moved around and experiencing different "scenery" within the hospice, and many, therefore, will have to be transported from one room to another in bed. The long double-loaded corridor that is so often used in both medical and non-medical institutions should be avoided or in some way modified (See Figure 6). Chan suggests the use of transition spaces. In the Connecticut Hospice, for example, patient wings are approached through sky-lit family rooms with seating groups and fireplaces. According to Chan,

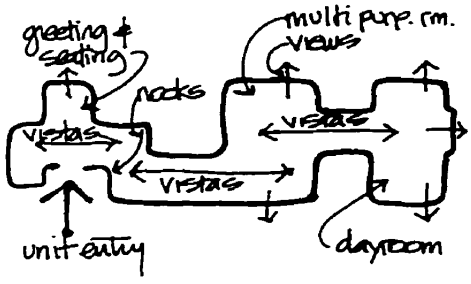


Figure 6: Corridor System, St. Peter's Hospice (Carey, p. 217)

> Because fear of the unknown is an obvious source of anxiety among patients and families, death, being the ultimate unknown,...[one] can...design for this...by creating anterooms...Movement about a hospice should be through relief valves so that people can confront the unknown gradually, with many opportunities for withdrawal to allow them to understand their feelings (Chan, p. 44).

This type of transition space was used in Lo-Yi Chan's design of the Connecticut Hospice and illustrates the need for a gradient of privacy, in that it allows staff, residents and visitors to adjust when passing from room to room (Chan, p. 44) (See

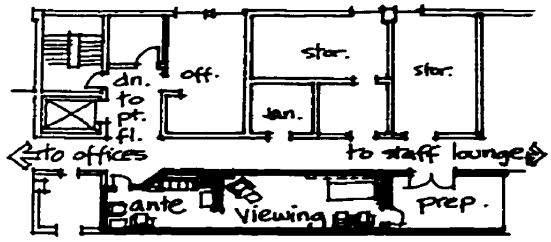


Figure 7: "Ante Room" Transition Space adjacent to Viewing Room, Connecticut Hospice (Carey, p. 231)

Figure 7). Although the Carey study indicates that many remodeled hospice units were unable to transform the double-loaded corridor, Carey, similarly, refers to the need for a "gradient of privacy" which would allow people to pause to collect their thoughts or temporarily retreat (Carey, p. 215).

The families of residents definitely need some space within the hospice as places of retreat, where they can go to take a break from sitting at the bedside of their loved one, and these spaces should not be too far from the residents' quarters. Family overnight accommodation should be provided, as should spaces for grieving, and other private family functions, such as counselling. According to Koff, several small lounges, that sit six to eight people, are superior to one large lounge, because they are more intimate and also because a variety of different activities could take place at once (Koff, p. 132). For example, the children could watch television in one room while the parents and the physician confer in another room. Diversions within each lounge, such as a T.V., a fish tank or bird cage, a library, or games are ideal. At the same time, any of these rooms could also be turned into overnight accommodation if necessary.

A hospice facility should have at least one large "community room" that can be used for a variety of functions, such as for group activities, celebrations, memorial services, and conferences, as these permit interaction, which is important for the well-being of the hospice's residents. "Socialization of the dying is a matter of both choice and opportunity" (Carey, p. 27). Therefore, these rooms should be easily accessible and large enough to accommodate several patients in beds or bed-lounge chairs, as well as their families, and staff. In Lions Hospice in Dartford, UK (1993), "the Green" is used as a focal point for social activity (see Figure 8)... It provides a waiting area, coffee bar, reception, dining area, and area for relaxing in front of an open fire or watching T.V." (Hook, p. 17). An important point to note is that the communal gathering space need not be one gigantic space but, rather, could be a series of smaller communal spaces. For example, Watt's hospice design (see Figure 9) provides an arcade of shops and a café beneath, where

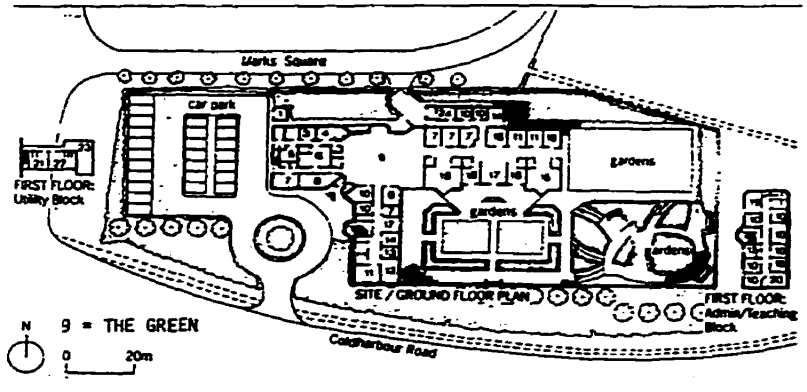


Figure 8: Idea of Village Green as a Social Hub in Lions Hospice , Dartford, UK (Hook, p. 17)

residents may, in effect, "go out" for a while (Energy, p. 55). Similarly, the London Lighthouse Aids Hospice (1990) provides a drop-in centre and a restaurant that is open to the public (Cowan, p. 14). This is an excellent way of bringing the hospice and the community together, as discussed earlier.

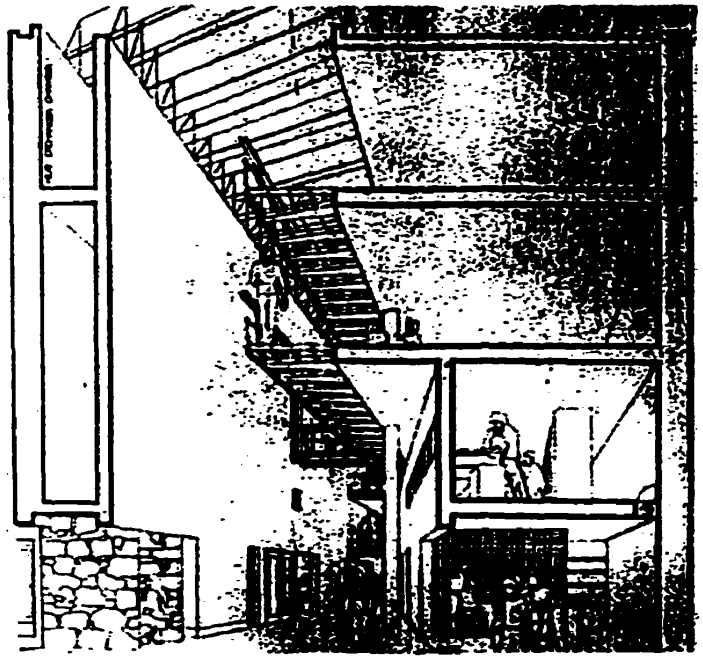


Figure 9: Arcade of Shops and Café inside Hospice where Residents can "go out" (RIBA Journal, p. 54)

Because the principles of palliative care specify that the dying be involved with and consulted about their care, this also means that meal planning is discussed with the hospice residents. Kitchen and smaller kitchenette facilities should be provided in the hospice so that favorite meals of the residents can be prepared either by staff or by family. Although meals are recognized as times for residents to socialize, as in a home, residents should have the choice to eat either in their beds, with their families, or in a dining area with other residents. The dining area should be located near the central kitchen so that meals

arrive hot, and it should be accessible to persons in beds or wheelchairs and can be made particularly inviting if it is located adjacent to an outdoor patio with a view.

Providing the family with a private place, in which it can say goodbye to its loved one shortly after death, is helpful in initiating the bereavement process. When hospice bedrooms are not one-bed rooms, a "viewing room" should be incorporated into the hospice for this purpose. Chan suggests that the room should be long and narrow (see Figure 10) with a preceding anteroom and several places to stop, pause, or retreat before reaching the bed at the far end (Chan, p. 45). The viewing room should be designed like a bedroom, where the body could be kept in a bed rather than in a casket. Locating the viewing room near the chapel or meditation room would be a source of comfort to the survivors and would help them prepare themselves for the events to follow.

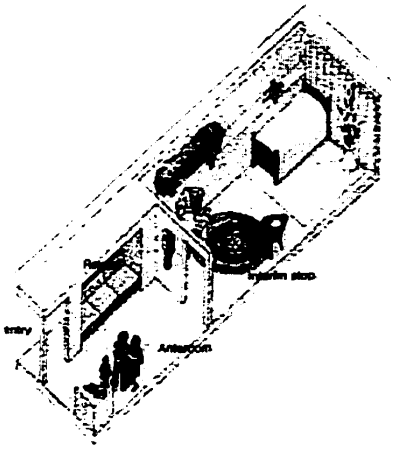


Figure 10: Viewing Suite, a long sequence of Transition Spaces, Connecticut Hospice (Chan, p. 45)

Because a hospice caters to the holistic well-being of its residents and their families, as part of its care, it should offer a response to the spiritual needs of its users. Architecturally, space should be provided for religious purposes and for peaceful reflection. A chapel or meditation room, which would be acceptable to most

religious orientations and even to people with no religious commitment, would be most appropriate and should accommodate both wheelchairs and beds. A small and uniquely designed meditation room that has the flexibility to be converted to a larger meditation room when needed, such as for memorial services, would be ideal.

While a meditation room may be a partial response, architecturally, to the spirituality found in palliative care, it is not a full response, in that spirituality in the hospice must be connected with nature. According to Carey, "no matter what its size, location or configuration, the indoor garden is fundamental to hospice design" (Carey, p. 233). The author agrees with Carey, in that "the connection with nature and spirituality in the hospice is basic to the hospice's role in affirming life and providing succor for the dying...Nature provides a symbolic realm for reflection upon beauty, eternity, timelessness and the mutability of existence" (Carey, p. 230). Furthermore, the spiritual element of nature is often associated with natural light. Chan believes that revealing the passage of time as natural and universal is an important goal in hospice design because the dying often have anxiety about time. Natural light can help to conquer this anxiety, so he suggests the use of skylights and placing windows all around the building, so that sunrises, sunsets, and summer and winter are all revealed and take their natural place (Chan, p. 44). The Home for AIDS Patients in Frankfurt (1994), for example, allows "light and sun [to] flood

the building, from the glazed corridor bays overlooking the street to the south-facing balconies overlooking neighboring gardens" (Dawson, p. 65). Benedict House in New York (see Figure 11), also a hospice for AIDS patients, has an outdoor courtyard which is a shared backyard for the residents, whose porches are clustered around it (Arcidi, p.

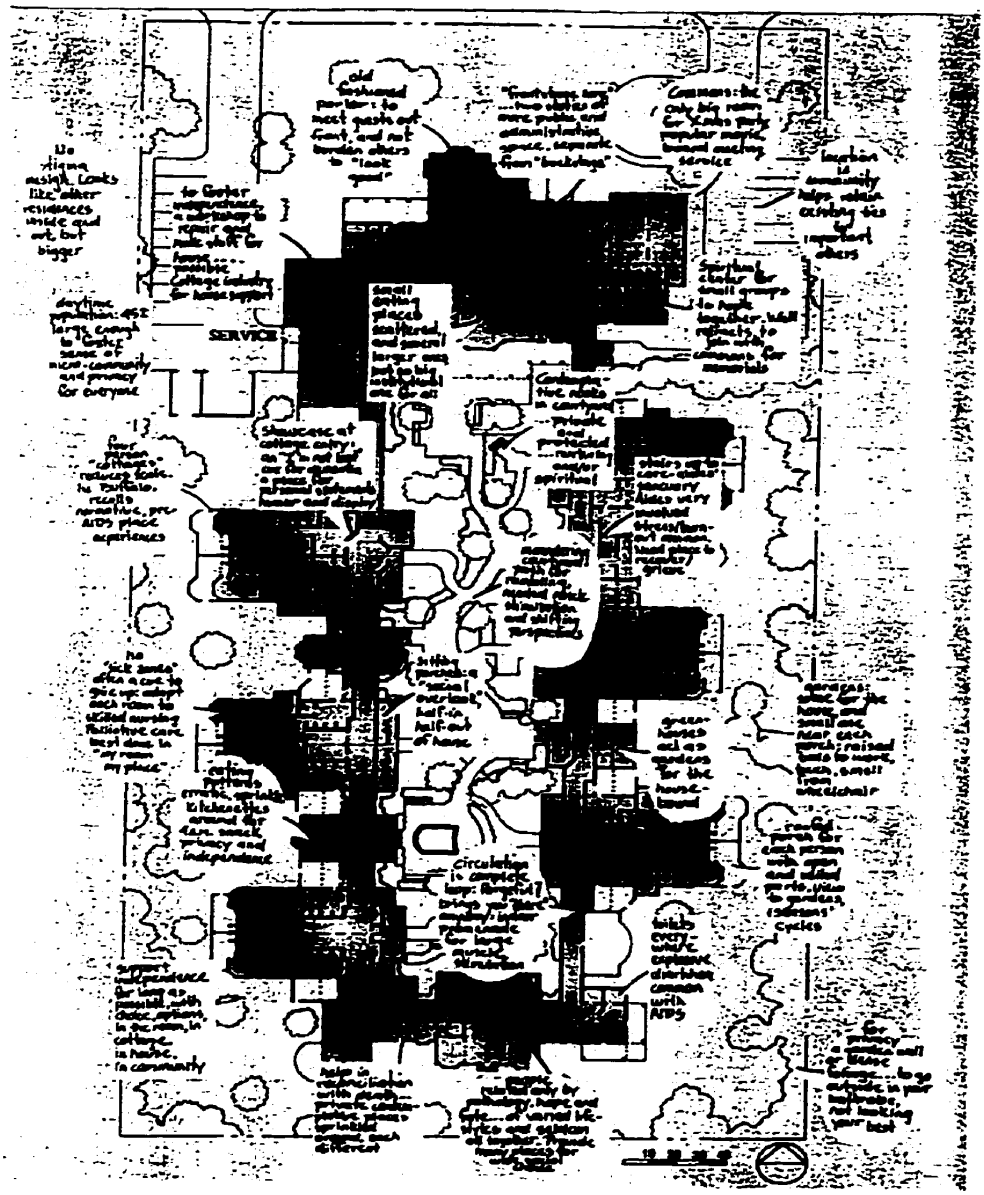


Figure 11: Benedict House - Outdoor Courtyard (Arcidi, p. 101)

101). Having an indoor and/or outdoor garden adjacent to the residents' bedrooms and the family rooms, visible and easily accessible, would add a spiritual aspect to the comforting, home-like environment.

Like an institution, a hospice must be administered, and the Carey study found that office space varied as widely as did the sizes of resident rooms and nursing areas. Although the study found that most small to medium hospices had a minimum of two offices, business staff could include as many people as the following: the hospice administrator, secretarial personnel, a volunteer coordinator, a social worker, a counselor or chaplain, a dietician, and maintenance personnel. A conference room for staff meetings is necessary in the hospice, as is a staff retreat area with lockers and a kitchenette. There should be work areas and/or nurses' stations for the nursing staff, located in close proximity to the residents, because many of the dying fear abandonment or having to die alone. All nursing stations should be designed so that residents in wheelchairs can see the nurses behind the counter. Finally, a housekeeping or janitorial room must also be provided in the hospice. Storage space, in general, is extremely important in the hospice for items ranging from clean and dirty linen storage, extra blankets to extra beds and bed parts. There should be some outdoor storage for gardening equipment.

In terms of comforting furnishings in the hospice, there is some debate as to

what materials should be used. On one hand, natural materials such as wood or stone, and the presence of growing life forms (such as plants and children) may create a more home-like atmosphere, in comparison to the metal, antiseptic quality found in hospital settings. On the other hand, a hospice is, nevertheless, a health facility and, as Beck and Meyer suggest, "in a health facility it is particularly important that the building materials have smooth surfaces and that the furnishings be cleanable" (Beck, p. 174). Attention must be paid to choosing pleasing colors and textures for wall and floor treatments so that these surfaces can reduce the negative quality of institutional living. Generally, warm colors enliven and cheer, whereas cool colors sooth and comfort. Saturated colors, especially in patterns stimulate and enliven, whereas dark colors depress. Instead of having the same monochromatic color scheme throughout the entire hospice, one could vary the colors with respect to the function of the various spaces. For example, bedrooms may have the cooler, soothing colors (such as blues or greens), while the multi-purpose room may have a warm, enlivening or stimulating color (such as peach). "...The most important thing to know about hospice colors is that there is still disagreement and that neither 'neutral', white and beige, nor very brilliant and saturated hues is appropriate" (Carey, p. 223).

Residential rather than institutional furniture should be used in the hospice for comfort and pleasantness. In fact, the furniture provided in the NUVA/Easler

House of Gloucester, a hospice in Massachusetts (1991), was made to give residents more control and choice by allowing them to choose interactive pieces of furniture that could fold away, fold up, or roll away (Tetlow, p. 55). Similarly, incandescent task fixtures or indirect lighting should be used instead of the institutional lighting that is typical in hospital settings. Daylight should be abundant, with windows and skylights, though should be controllable with blinds or curtains. Acoustics are also very important in a hospice. Harsh institutional sounds, such as paging systems, carts transporting food or linens, and noisy cleaning equipment, should be eliminated or controlled. Perhaps a call-bell system and a video camera arrangement could be used to monitor residents and lessen their fear of being abandoned. In terms of safety, adding handicap bars, nonslip surfaces and other handicap features increases choices for the hospice residents, which improves their well-being. While wide corridors, fire doors and grab bars are required for safety, these can be offset with elements such as large plants, wall hangings and upholstered chairs. Signs should not blend into the background but should stand out, being readable from at least four metres, thereby making it easy for the residents and visitors to recognize their information.

3.2 LOCAL HOSPICE FACILITIES

The author conducted her own investigation of Calgary's three stand-alone hospice buildings in an effort to ascertain whether the kinds of spaces found in the

Carey study are also found in these hospices. The eight different kinds of spaces outlined in the Carey study, namely, bedrooms, family rooms, meditation rooms, kitchenettes, nurses' stations, indoor garden spaces, outdoor areas, and distinctive hospice entries, were all found to varying degrees in the Calgary hospices, although none of the spaces can be considered ideal. It is unfortunate, for example, that all hospices have very small bedrooms, especially since the resident will spend most of his or her time there. The bedrooms lack outdoor patios, and the balconies lack views and visual diversions. In many instances, views through windows seemed unplanned. Although small family rooms are provided in all three hospices, there are no large gathering spaces at Rosedale or at Beswick House for larger community gatherings. Although present in Agape and in Rosedale, there is no meditation room or similar space in Beswick House. The essential kitchenettes, which Carey discusses and which provide more choice to residents, are missing in Rosedale and in Agape Manor, making these places seem more institutional in nature. Furthermore, Beswick House has no retreat room for its staff. It is unfortunate that gradients of privacy and transition spaces are lacking in the Calgary hospices and that the institutional corridor survived. Furthermore, it is unfortunate that counselling services, which are as important to a hospice as a family room is to a house, are banned from Rosedale's premises. Perhaps the most essential missing item in all of the hospices is the indoor garden, the presence of which could

have helped to create a more spiritual environment for its residents. Similarly, in the case of Beswick House, there is nothing spiritual about an outdoor space facing a garbage dumpster. Finally, although Agape and Rosedale both have distinctive entries to their facilities, the entry at Beswick House is ambiguous, since the building pretends to be a residential duplex which it is not. (For a more detailed account of Calgary's local hospice facilities, see Appendix 10.1.)

4.0 THE HOSPICE USER / ENVIRONMENT RELATIONSHIP

4.1 THE DYING AND THE HOSPICE

Dying is more than a biological occurrence. "A human being is not just a body that can have disease but is a composite of the physical, social, psychological, and the spiritual..." (Magno, p. 113). The major problems of the dying fall under three headings: pain, loneliness and loss of control (for a detailed profile of the dying, see Appendix 10.2). Satisfying the dying person's needs can be accomplished, in part, by the special caring a hospice provides for its residents (as discussed in 2.0 Background). The built environment, however, also can help the dying live effectively in the face of impending death. From the needs of the dying, a fundamental architectural design objective becomes apparent, namely, that the architecture should cater to the holistic well-being of its residents, providing them with a therapeutic environment that enhances their quality of life. This architectural design objective can be met by creating an authentic place to die.

In his book entitled The Malaise of Modernity, Charles Taylor presents an argument for the moral ideal of authenticity, which could give an architect insight into the way in which a modern hospice should be designed (Taylor, 1991). According to Taylor, we live in a culture of self-fulfilment, in which everyone has the right to develop their own form of life, grounded on their own sense of what is really important or of value. Although this has led many people to lose the connection with others, Taylor argues that what is important is what lies behind the fact of self-

fulfilment. Here lies a picture of what a better or higher mode of life would be: the moral ideal of authenticity, which dictates that one should be true to oneself in all endeavors.

What does the moral ideal of authenticity have to do with hospice architecture? Consider, for example, building type. Should the hospice be designed as a home or as an institution or as something else? Because people who are dying wish that they could die at home, a hospice should be designed as home-like as possible. However, no matter how home-like a hospice strives to be, it will never be home to its dying residents. At the same time, some hospital-like elements are clearly needed in a hospice, which gives it an institutional character, though the whole intent of the hospice movement is to move away from hospital design. As an authentic place to die, a hospice allows the necessary hospital-like elements into its design and yet, at the same time, also strives to include home-like qualities as much as possible (discussed below). Therefore, its architecture should never try to mimic one building type (eg. a house) or another building type (eg. a hospital) but, rather, to be real or authentic, it should offer the residents opportunity and potential (Benedikt, 1987). This will be discussed in greater detail in Section 7.0 Design Idea. Both institutional and homelike qualities should be combined in such a way that the hospice is "true to itself" and can cater to the holistic well-being of its residents, providing them with a therapeutic environment that enhances their quality of life.

There are two important home-like qualities that a hospice should have in order to enhance its residents' quality of life. The first of these is that it should promote calmness and serenity (Posner, p. 115). The hospice should not feel overwhelming to its residents and visitors, in that the building mass should be as small as possible in scale. The spaces themselves should be intimate in size and in decor, and the plan should be easy for the residents to understand. Furthermore, a hospice should be visually interesting since people who are dying are very sensitive to "being" in the present and, therefore, are highly aware of their surroundings. The built environment should give the residents support, when needed, to compensate for decreased physical abilities. Visual cues, for example, should be provided to assist residents in negotiating the environment, as should physical aids for safety, such as grab rails and ramps. The low energy level of its diverse residents should be recognized and considered in the design of the built environment, as passive homelike activities, such as watching others, listening to music, and reading, tend to be favored over more active ones.

Beyond these functional interventions that can help to induce calmness and serenity in the environment, the architecture should offer opportunity and potential by encouraging the search for meaning in life and in death. This means that the hospice should be designed as a spiritual place, providing the potential for a smoother transition from life to death. This is addressed in detail in Section 7.0 Design Idea. A calm and serene environment is a therapeutic environment, in that

it enhances the residents' quality of life by putting them into a relaxed frame of mind during their stay in the hospice.

The second home-like quality that a hospice should have in order to enhance its residents' quality of life is the promotion of choice and control of the surroundings, which helps the residents to continue to nurture their self-worth (Brousseau). "...People will experience a higher quality of life when they maintain their abilities to do as much for themselves as they can and when they have as much control as possible over their lives" (Long Term, p. 49). A mixture of spaces should be provided, based on several criteria. There should be a privacy gradient, in that private spaces should be provided as well as spaces that facilitate interaction or socialization. There should also be various types of spaces to choose from, allowing for both passive and active participation. In general, choice and control would create independence, usefulness and self-esteem in the residents. Furthermore, although staff supervision is one of the necessary institutional elements that must be incorporated into the hospice, it should be under-emphasized in the design. For example, while nursing stations are necessary for observing the residents, so that help can be rendered when needed, incorporating the stations into the environment might be achieved more subtley than in hospital settings. Perhaps instead of appearing as obvious "control booths" in the middle of corridors, the stations could appear to take on a less obvious role, by being designed as a less dominant feature of the environment.

In promoting resident choice and control, the environment should also encourage movement, "because those near death fear a loss of personal control and this fear focuses on the loss of mobility" (Chan, p. 45). Residents should be allowed to move freely, or have their beds rolled, from their own rooms to the social spaces within the hospice and to the outdoors, if they so desire. Freedom in choice of visual and physical contact with the outdoors helps to counteract the feeling of confinement and increases the feeling of independence.

Permitting hospice residents to control their environment may require flexible room arrangements or moveable partitions, gradations of privacy, and the ability to accommodate family members without difficulty. (See Figure 12 , but note that although these illustrations demonstrate the home-like quality of controlling one's surroundings, the environments in these illustrations, nevertheless, appear very institutional in nature. The spaces in Figures 12A and 12B appear modular and

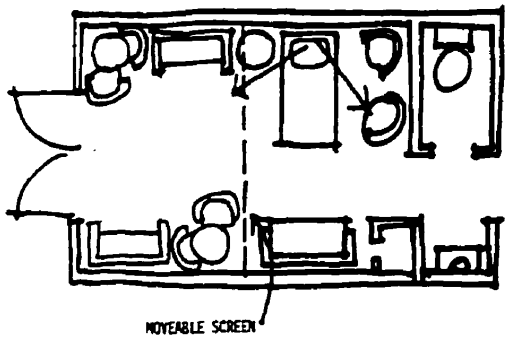


Figure 12A: Flexibility of Extent of Privacy (Carey, p. 216)

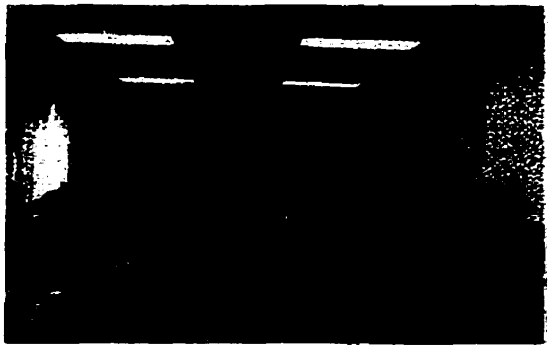


Figure 12B: Back Wall Moveable Screen (Carey, p. 133)

bland, as is often the case in hospital design, and the fluorescent lighting in Figures12B and 12C, similarly, appears hospital-like in nature, rather than home-like. Furthermore, although the use of various adaptable devices, such moveable screens or room dividers, would add to the options with respect to functions, privacy and socialization, the resulting flexibility must be weighed against the labor to move the screens and make the necessary adjustments. Similarly, while Figure 12D does suggest the possibility of rearranging furniture within the space, this extremely large lounge, with its overhanging upper balcony, also lacks the intimate scale and decor that would be found in a space at home and

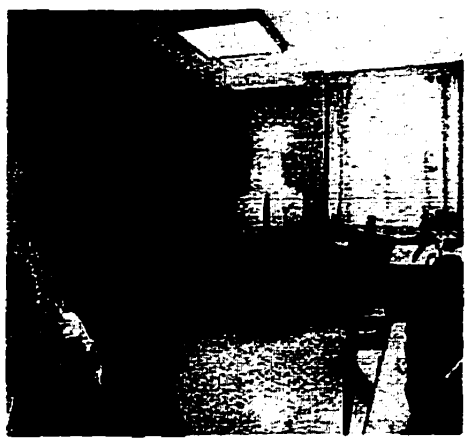


Figure 12C: Bed and Furniture can be rearranged (Aranyi, p. 54)

Figure 12D: Flexible Room Arrangement in Main Lounge (Aranyi, p. 183)

that should be found in a hospice.) Unlike an institutional building, which has certain areas assigned certain functions, a hospice should encourage various activities at each location as the needs or desires of the residents change. For example, the dining room could be used for eating or for holding conferences. Therefore, to provide residents with a therapeutic environment, one that enhances their quality of life, a hospice requires a loose-fit homelike design, rather than the rigid arrangement of spaces typical of hospitals.

Privacy, or places of retreat, should be provided in the built environment and should not be confused with isolation. If the architectural design allows the environment to change based on personal needs, to accommodate visitors, or to provide times when the individual resident can be alone, then privacy can be achieved even in the midst of other residents and staff. Privacy can also be influenced by the scale of the hospice setting, which should be small and intimate. Nevertheless, the environment should provide areas other than just the bedroom that are private, because research in nursing homes has revealed that residents keep to their beds if there are no other places to be private (Tetlow, p. 71). Providing private spaces other than the bedroom adds variety to the life of the dying and encourages movement within the hospice.

Residents should be allowed to control room temperature and lighting levels, and the freedom to express their individuality should be allowed in personalization of their bedrooms. The design, therefore, should provide places for pictures,

displays, plants, etc., because this creates a sense of territoriality or ownership. Furthermore, variety should also be introduced into the design. Variety involves changes in perspective or points of view. Residents will be in beds, wheelchairs, and using walkers, and the designer should contemplate their various vantage points and adjust the environment accordingly. For example, providing interesting ceiling designs, rather than the repetitive acoustical tiling often found in institutions, is the most appropriate for the bed-ridden. Similarly, residents in wheelchairs would be best served by lower window sills and vanity heights.

Small social activities or "community" events, that bring people together, are also of primary importance to residents of the hospice. The hospice architecture should help to facilitate interaction with friends and family visitors so that fear of abandonment and anxiety is eased. This could be accomplished with something as simple as providing sitting places near busy areas, such as by elevators or nursing stations, and by making the travel distance between activity areas manageable. In addition to this, the built environment can structure interaction by arranging spaces in a gradient from private to public, allowing the residents to choose the space in which they would like to be at a given point in time.

4.2 THE VISITORS AND THE HOSPICE

While the dying residents constitute one of the hospice user groups, the visitors of the dying, which include family and friends, are an equally important user group. Both groups are of equal importance because, as discussed, both groups

together are considered as the unit of care. Grieving requires the expenditure of both physical and emotional energy. The major need of the visitors, therefore, is learning to cope with their grief, both before and after the death of their loved one (for a detailed profile of the grieving visitors, see Appendix 10.3). The special caring a hospice provides for the dying person's family and friends (as discussed in 2.0 Background) is important to their success in the grieving process. It can help the family and friends "prepare" for their loved one's death, can help them accept the death, recognizing that their loved one is gone, and can help them to reach the point at which they can live healthily with their loss, after having made the necessary internal (psychological) and external (social) changes to accommodate this reality. The built environment, however, also can contribute to helping the visitors cope with the impending death of their loved one. From the characteristics and needs of the grieving family and friends, a fundamental architectural design objective becomes apparent, namely, that the architecture should provide the survivors with a therapeutic environment that would make them feel cared for and welcome. This architectural design objective can be met by creating an authentic place to die and grieve.

A hospice, as an authentic place to die and grieve, allows the necessary institutional elements and the desired homelike qualities into the design, but without trying to mimic any particular building type. Because the hospice has many dying residents with family and friends visiting, the building will often be filled with

strangers who are constantly coming and going and, therefore, it could never be considered as a home. Reception and public space become necessary, unlike in a home. On the other hand, there are two homelike qualities that a hospice should have in order to provide the visitors with the therapeutic environment needed.

As with the residents, the visitors to the hospice should also experience the environment as one which promotes calmness and serenity, the result being a more relaxed frame of mind. The built environment can help to alleviate worry by offering the guests quiet and comforting spaces to use while they are visiting at the hospice. One of these spaces, for instance, may be a meditation room or chapel. Nevertheless, the hospice should be designed for choice, in that various family spaces should be provided from private to more social. Furthermore, visitors' spaces should be flexible enough to accommodate short visits and overnight stays and should be adaptable to various activities and functions.

The second homelike quality that a hospice should have in order to create a therapeutic environment for the visitors is the promotion of respect for their privacy. Private spaces should be provided for the visitors in order to facilitate various interactions. For instance, the family may need a space to speak privately with the caregiving staff. If bedrooms are shared in the hospice, a private space to visit with the dying loved one would also be needed. The hospice should also provide a private space where families can interact with other families who are going through the same tragedy, such as during group therapy sessions.

4.3 THE CAREGIVING STAFF AND THE HOSPICE

The caregiving staff, particularly the palliative care nurses, constitute the third hospice user group. (For a detailed profile of the caregiving staff, see Appendix 10.4.) In considering their major role in delivering the special hospice care to the dying residents and the stress involved, a fundamental architectural design objective becomes apparent. The architecture should provide an environment that would enhance the working conditions of the staff which, in turn, would improve the dying residents' quality of life. This architectural design objective can be accomplished by creating an authentic place to care for the dying. As discussed, an architecturally authentic place does not attempt to mimic a particular building type, such as a home or a hospital, but, instead, it allows into the design both homelike as well as the necessary institutional elements.

A hospice cannot be a home, because homes do not have nursing stations and staff rooms. Nevertheless, for the caregiving staff, as with the residents and visitors, the promotion of calmness and serenity can and should be incorporated into the design. This could be found in places of retreat within the hospice, that is, "ventilation rooms [or staff lounges] should be provided where staff can be assured of complete privacy for the expression of powerfully felt emotions" (Mandel, p. 1197). By providing such places within the hospice, the staff is put into a more positive and personable frame of mind when dealing with each other, with the residents, and with the families. Furthermore, the retreat spaces could be

adaptable spaces, in that they could also be used to hold formal conference meetings.

To help the staff in accomplishing their duties in a calm manner, the built environment should offer a convenient and well-organized setting and should provide safe working conditions. This would include proper lighting, minimum travelling distances, adequate storage facilities, and unobstructed views for supervision. Furthermore, the spaces should be planned to promote communication between staff members, between staff and residents, and between staff and visitors. A consultation room, for example, should be provided for physicians to speak privately with patients and for inter-physician consultation or nurse-physician dialogue (Beck, p. 49).

4.4 OTHER DESIGN CONSIDERATIONS

A general overview of the requirements for environmental comfort of the hospice users is appropriate here, although the finer details of this topic are usually left to the engineering consultants. The major source consulted for this information is Beck and Meyer's book The Health Care Environment: The User's Viewpoint.

LIGHTING DESIGN

For a hospice, lighting design is very important. On one hand, the visually comforting lighting typically found within a residence may be best suited for certain spaces but, on the other hand, in other spaces the intense illumination required in institutions may be a necessity. Hence, while maximizing visual comfort, adequate

lighting for tasks is also required. Lighting can influence the occupants of a space by its directionality, by the characteristics of the source, and by the level of light produced. Acceptable lighting and appropriate colors work together in creating psychological satisfaction within a space. For example, if a wall is white in color, its reflectance will increase overall lightness, and the space will appear more cheerful. Another example is that spaces are more attractive if they contain a variety of brightness patterns. Furthermore, the fact that people tend to move toward light can be used in influencing movement within the hospice. For example, giving entrances, lobbies and nurses stations higher light levels will cause people to naturally walk towards them, and "if overcrowding is unavoidable in a room, a lower light level will make it more tolerable, because the reduction in visual detail has the effect of increasing perceived distance" (Beck, p. 225). Similarly, less intense lighting or the way in which lighting is positioned (eg. indirect lighting) may be the most appropriate in counselling situations in order to provide an intimate atmosphere. Nevertheless, while lighting can create an interesting visual environment, it must be remembered that the level of artificial light has to be coordinated with the unfiltered daylight in a space due to the variability in the natural lighting and to make it as easy as possible for the eye to adapt. It is easier to control the daylight than to vary the artificial illumination. Though windows are essential in patient facilities, care must be taken to avoid unwanted glare, as this causes eyestrain and discomfort.

One of the most important spaces in the hospice is the resident's bedroom.

Lighting in this room should be variable to accommodate different uses and preferences. Indirect or diffused lighting would probably be the most comfortable, rather than direct ceiling lights. Discomfort from glare is another important lighting design consideration. Because the majority of hospice residents will be bed-ridden, gazing directly upwards, lighting should be planned so that reflections from the ceiling, walls and floor will not create glare. "On the other hand, surfaces with too low reflectance may produce a too dark atmosphere and result in gloom" (Beck, p. 142). Single bedrooms in the hospice should be treated like residential bedrooms in terms of lighting, the aim being to put the resident at ease. Indirect lighting would offer the most satisfaction for most of the resident's activities in the bedroom, as long as it can be controlled, such as with the use of a dimmer. However, indirect lighting may not be acceptable for reading in bed and, therefore, some flexibility in lighting must be built into the lighting design to allow for this activity. In rooms with multiple beds, the lighting must be designed to meet the needs of one resident without bothering the other residents. Some sort of built-in limitation to manipulating the light sources would be required. Night and observation lighting may require multiple sources of light oriented to the resident's bed, so that the nurse can frequently observe the resident and any equipment. These however, must be kept from intruding upon the resident's line of vision and from disturbing other residents in the room. Switches for these lights should be located at the door and may be controlled by a dimmer. A lighting level of about 1100 lux is required for examination

purposes, and for reading, about one third of this amount of light is necessary (Beck, p. 149).

The lighting at nurses' stations must be carefully considered since the tasks performed by the nurses have many aspects. Tedious desk work, sorting and filing charts, dispensing medication, and visual contact with physicians, visitors and residents at the station require a double function of lighting, that is, direct task lighting of about 750 lux as well as general illumination. Furthermore, the lighting at the nurses' stations should be unobtrusive to residents and family members in adjacent lounge areas. Corridors should have transition lighting, that is, somewhere between 100 and 200 lux during the day and switching arrangements to produce around 50 lux at night. This would allow the nurse to move from her station to the resident accommodations with the least amount of eye strain. Variable control dimmers or multiple switching located at the door of the room would provide flexibility. 1000 lux should be provided in medication areas so that medicine containers are clearly visible. One other important area in which lighting design should be carefully considered, for safety reasons, is exterior night lighting. Since "ophthalmologists and psychologists have proven that stress of any kind may cause decline in visual faculty, even if only temporarily, [and] users of a health care facility are more likely to be under stress than not" (Beck, p. 199), exterior night lighting can help people approaching and leaving the building do so safely. For steps, curbs and ramps, it is important to have good visual contrast conditions. Uniform diffused

lighting of a minimum of 50-100 lux is desirable for driveways and parking areas. Entrance areas can be accented by making them brighter or by a change in source color.

VENTILATION AND THERMAL COMFORT

Thermal comfort can be defined as "...an environmental state in which the body can remain in heat balance with a minimum call upon the mechanisms it has for conserving heat or getting rid of an excess of heat" (Beck, p. 124). Thermal comfort depends upon the occupant's clothing and his or her activity level. In a health care environment, most patients are dressed lightly (in bed clothes) and have a very low physical activity level. In addition, a patient's adaptive system is likely to be impaired due to his or her failing health. The hospice air conditioning system must help to overcome this inadequacy if comfort is to be maintained. This may be accomplished with heating and air-conditioning zoned for each room that would allow residents and families to regulate their own room temperature as desired. Even the placement and size of windows should be carefully considered, as large windows may have considerable heat gain. "With a good view, windows occupying 20-30 percent of the window wall are acceptable" (Beck, p. 128). Furthermore, ventilation in the patient rooms needs special attention, because not only is it associated with the system for the heating and cooling of the building, it is also involved in the control of odor and air quality, which is critical in a health care environment. Ventilation should occur with a minimum sensation of a draft.

5.0 ARCHITECTURAL PROGRAM

Developed prior to the design stage, and based on the information gathered through the research, the architectural program states the requirements that are to be incorporated into the design of the hospice.

5.1 USERS' NEEDS

BASIC DESIGN PREMISE: Based on Taylor's moral ideal of authenticity (Taylor, 1991), the hospice should be designed as an authentic place to die, grieve, and care for the dying. This means that it should not try to mimic any particular building type but, rather, allow for necessary and desirable qualities from different building types to enter into its design.

A. The architecture should help to foster community acceptance of the hospice.

B. For the holistic well-being of its residents, the architecture should provide a therapeutic environment that enhances their quality of life.

   1. The architecture should induce a relaxing frame of mind by promoting calmness and serenity.

   2. The architecture should promote residents' choice and control of the environment.

C. For the family and friends (visitors) of the dying, the architecture should provide a therapeutic environment in which the people feel cared for and welcome.

   1. The architecture should induce a relaxing frame of mind by promoting

calmness and serenity.

2. The architecture should promote respect for the privacy of the family and friends (visitors) of the dying.

D. For the caregiving staff, the architecture should provide an environment that enhances working conditions.

1. The architecture should promote efficiency and safety.

2. The architecture should induce a positive and personable frame of mind by promoting calmness and serenity.

E. For all users of the hospice (but particularly for the dying), the architecture should encourage the search for meaning in life and in death by creating a spiritual place in which to die, grieve and care for the dying. It should offer opportunity and potential (Benedikt, 1987). (See Chapter 7.0 Design Idea.)

SPACES CHECKLIST

SPACE	MINIMUM SIZE (sq. metres)	QUANTITY	DESCRIPTION
Reception Area	14	1	Includes waiting area for visitors to hospice - locate at entrance
Admin. Office	14	2	Locate near reception
Unit Bedroom	20	7	Single/private room
Unit Bathroom	7.5	7	Private bathroom adjacent to bedroom

Unit Family Space	14	7	Overnight accommodation
Unit Kitchenette	2.5	7	For family to prepare resident's favorite dishes
Resident Retreat Area	variable	variable	Alternative to bedroom privacy
Lounge	20	variable	Private - for small group, grieving, counselling, introspection, etc.
Communal Gathering Space	84	1	Public - for hospice celebrations, memorial services, etc.
Indoor Garden Space	112	1	With natural light - locate centrally
Meditation Room	23	1	Connect with nature
Transition Spaces	variable	variable	To "bridge" adjoining spaces
Dining Room	50	1	Public - for anyone in hospice
Kitchen	35 10 storage	1	To serve whole hospice - locate adjacent to dining room
Staff Retreat	18	1	For staff - with lockers
Staff Kitchenette	2.5	1	For staff - locate within staff retreat space
Staff Bathroom	7.5	2	2 stalls in each bathroom - locate within retreat space
Public Bathroom	11	2	3 stalls in each bathroom
Nurses' Station	12	1	Locate centrally in relation to resident rooms
Medication Room	7	1	Locate near nurses' station

Consultation / Conference Room	16	1	For both admin. staff and medical staff to use
Physiotherapy / Massage Room	16	1	
Bathing Room	16.5	1	Space for special tub with lift device
Hospice Laundry	17	1	
Family Laundry	7	1	
Storage Space	35	variable	For linens, blankets, bed parts, wheelchairs, etc. inside and for grass, snow equipment, etc. outside
Janitor's Room	9	1	
Garbage Room	8	1	Locate near rear entrance
Mechanical Room	30	1	
Outdoor Spaces	variable	variable	Some to be located adjacent to bedrooms
Circulation	15% of area		
Walls / Partitions	7.5% of area		

5.2 RELEVANT CODE / BYLAW REQUIREMENTS

The major occupancy classification for a hospice building is Group B, Division 2 of the Alberta Building Code, 1997: Care or Detention Occupancy "in which persons having cognitive or physical limitations require special care or treatment" (ABC, p. 41 and Yuen). Parts 3, 4, 5 and 6 of the Code apply. In

general, the Code indicates, for this classification, the way in which the hospice should be constructed and specifies the construction rules necessary to ensure the safety of the building's occupants. While actual building construction, in terms of materials (eg. combustible, noncombustible, etc.), is beyond the scope of this project, certain other rules pertaining to the design of the spaces are applicable and should be adhered to. For example, corridors must be a minimum of 2,400 mm wide and doors in the corridors should be a minimum of 1,100 mm wide, with a headroom clearance of 2,100 mm. Furthermore, the Alberta Building Code specifies the number of exits, limiting distance, and area of unprotected openings. These types of specifications will be incorporated into the final design of the hospice. Similarly, Part 3 of the Code has very strict requirements concerning barrier free design, which also will be incorporated into the hospice design. In addition, according to the Calgary Land Use Bylaws, 1990, the "permitted use rules" must be adhered to with respect to the project and its site (Calgary Land Use Bylaws, 1990). For example, parking and loading zone requirements will be incorporated into the design of this hospice project.

6.0 THE SITE

6.1 SITE LOCATION

The site chosen for this design project is located in Calgary's Inglewood Community. Inglewood is Calgary's oldest community, dating back to the 1880s. Because of its historic role in the development of the city, Inglewood is recognized as a "Special Character District" (ARP, p. 2). In fact, there are a number of heritage sites that contribute to the Community's unique image. Historically, Inglewood has been a self-sufficient community, supporting residential housing, industry, and commerce. Because of this and because its boundaries isolate it somewhat from the rest of the city, the community has retained its "small-town" feeling.

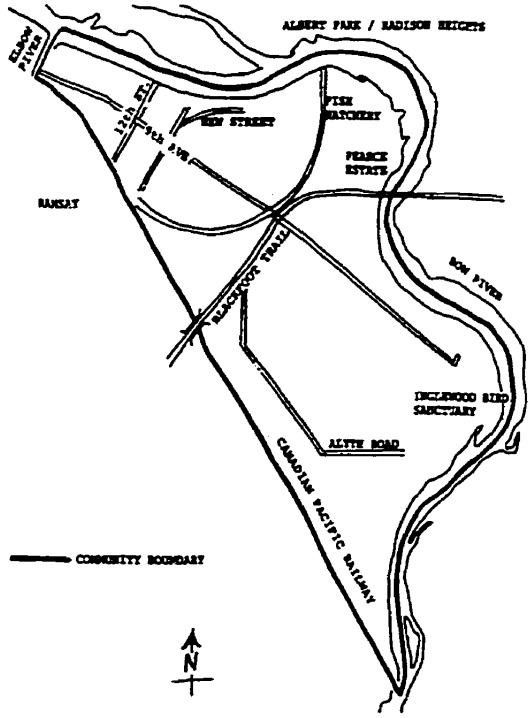


Figure 13: Inglewood's Community Boundaries

Inglewood's boundaries consist of the Bow River, the Elbow River, and the Canadian Pacific Railway (CPR) line (See Figure 13). The Bow River forms the northern and eastern boundaries of Inglewood, crossable at 12th Street to St. George's Island and at Blackfoot Trail. The Elbow River, Inglewood's western

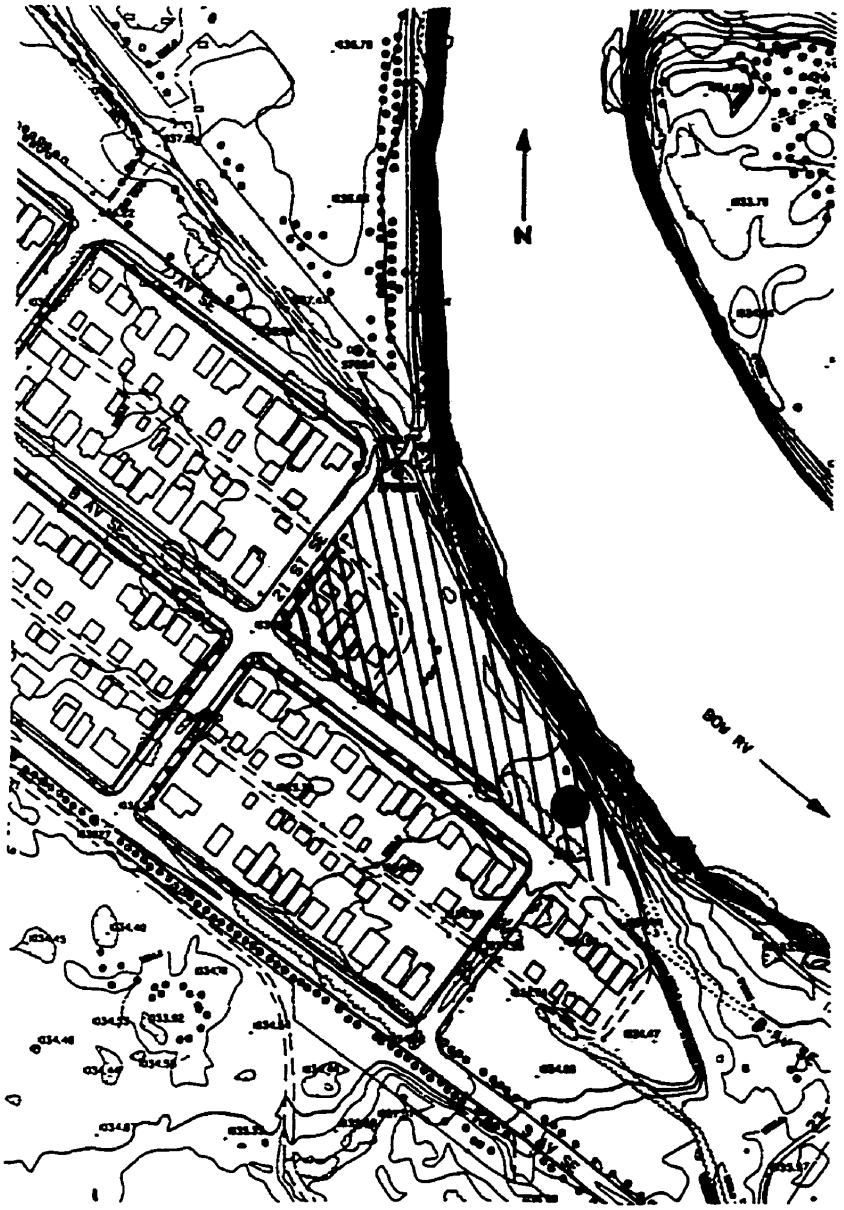


Figure 14: Site and Location of Hospice

boundary, can be crossed at the 9th Avenue bridge, which provides entry in the community from the west. The southern boundary of Inglewood consists of the CPR line, which is continuous and can be crossed only at Blackfoot Trail. Much of Inglewood's industry is situated adjacent to this boundary.

The site chosen for the hospice is located at 21st Street and 7th Avenue south-east, on the southern-most portion of the land (See Figure 14). It is a triangular-shaped piece

of land situated adjacent to the imposing Bow River boundary of Inglewood. This site is an ideal location for a hospice for several reasons.

First, because community acceptance of the hospice is so important, the author thinks that the Inglewood Community might be more accepting of a hospice than other communities might be because of its already existing diverse mixture of residential, commercial, and industrial activities. Furthermore, because the particular site chosen for the hospice in Inglewood is on the edge of the residential portion of the community, the hospice would feel a part of the community yet, at the same time, would not be a big disruption to the community as a whole.

Second, the site is an active place of nature. Life flourishes on the site in terms of natural landscape, as well as people. Furthermore, the site also has several symbolic qualities that are appropriate for the design of a hospice. For instance, just as a hospice is a place of transition from one life to another, so too is the land itself a place of transition, in that it is here where the man-made, rigid city grid collides with the natural (ie. the river). There is a blurring or merging of boundaries on this site. Similarly, there is a nice parallel between the fact that a hospice is a "way station for travellers" and the fact that the site actually still has remnants of what once were railroad tracks passing through it. The hospice idea of travel or journey, therefore, fits well with the historic aspect of the site, which also involved travel. Furthermore, the fact that the main access road to the site (22nd

Street south-east) literally ends where the hospice entrance will be located is symbolic of the hospice being at the end of life's physical journey. In addition, building adjacent to the river has religious connotations with respect to death and rebirth. However, regardless of religious symbolism, water has timeless qualities and presents a familiarity to most cultures, in that its presence puts people at ease. Furthermore, because practically all of the site's vegetation is deciduous trees, the transformation of the landscape with the change in seasons will be quite noticeable and symbolizes life's seasons.

A third reason this particular site is ideal for a hospice is that, because the piece of land is quite large, the hospice would not be squeezed between its residential neighbors. A large portion of the natural environment would be left as is and could be developed into a park. Lastly, this site is also suitable for a hospice because a hospice in Calgary's south is desperately needed (Gorden).

6.2 PHYSICAL CHARACTERISTICS AND ADJACENT LAND USES

As mentioned above, the site is located within a residential portion of Inglewood and is triangular in shape, its hypotenuse extending approximately 250 m along the edge of the river. Although the river boundary is imposing, it has a pleasant quality, lined with trees and pedestrian / bike paths. From the river's edge, there is a view of the golf course across the river and the Blackfoot Trail bridge in the distance. The site is relatively flat, except for a man-made berm that increases

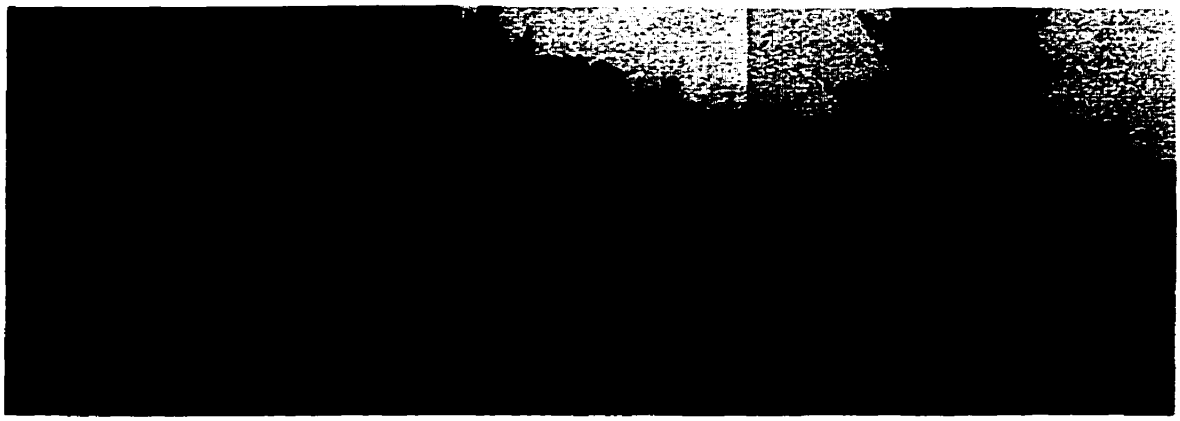


Figure 15: Landscape of South-eastern Portion of Site

in height as one travels south along the river on the path. In this area of the site, existing deciduous trees create a natural outdoor room (See Figure 15). The author's intent is to keep all of the existing vegetation as is. The only other buildings on the site, a cluster of homes, are on the northern side of the site, at the corner of 21st Street and 8th Avenue (See Figure 16). Access to the hospice would be either from 8th Avenue, travelling parallel to the site, or from 22nd Street, travelling perpendicular

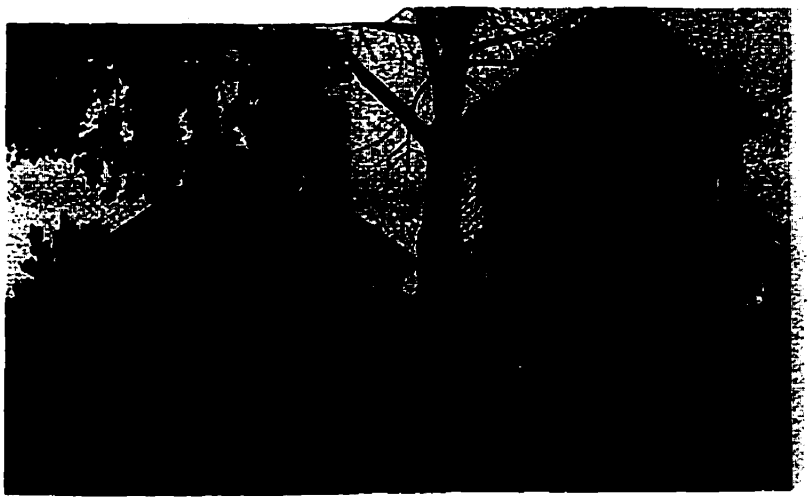


Figure 16: Homes at Corner of 21st Street and 8th Avenue S.E.

to the site. The houses across the street are one and two storey homes and were

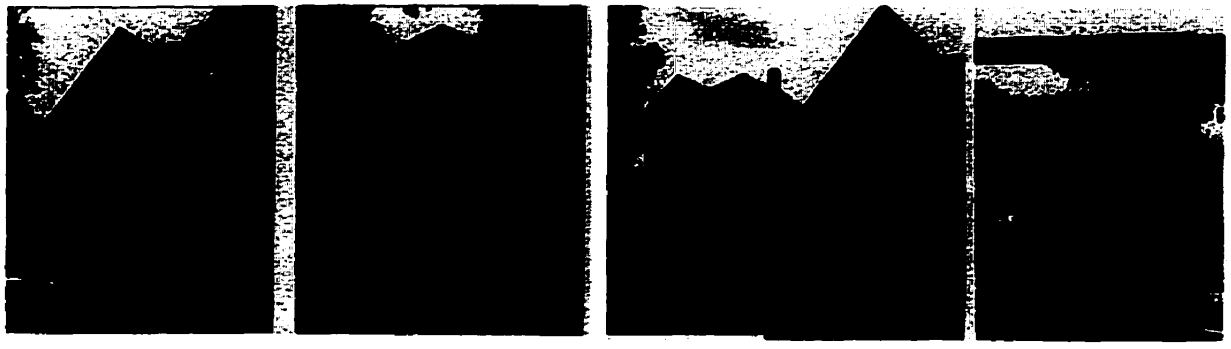


Figure 17: Various Homes Across the Street

probably built in the 1950s. Some of the homes appear to have been renovated (See Figure 17). The street is peaceful, lined with trees, and people's yards are quite well kept up.

6.3 DEVELOPMENT CONSTRAINTS

The existing land use designation for the site is PE (park land), which is a narrow zone that stretches the length of the river, and RM-1 (residential), which bridges the river portion of the land and the street (City of Calgary Land Use Bylaws). It is assumed in this project that the city of Calgary would permit a small portion of the PE portion of the site to be re-zoned to RM-1 status. This would allow the hospice to be built closer to the river and, yet, would still be in keeping with Policy 6.2.3 and Policy 6.2.6 of the Area Redevelopment Plan. These indicate that some natural environment along the river should be retained and that there should be local access to the Bow River pathway system (ARP, p. 72). The berm, bike

path and river bank would remain untouched. Furthermore, it appears as though the site is situated in the flood plain. This must be taken account when considering building construction (ARP, p. 64-65).

Although Inglewood is recognized as a "Special Character District" and "the ARP strongly encourages new development to respect and reflect the history of the area" (ARP, p. 18), "development on sites other than 9th Avenue need not be in keeping with any particular historic era" (ARP, p. 2). Policy 2.3.2, however, does indicate that "new residential development should respect the surrounding housing and contribute to an attractive streetscape" (ARP, p. 23). Architecturally, this means that a new building should be designed so that it is sympathetic to its architectural context. For the hospice design, therefore, Brolin's principles for fitting new buildings with old ones should be considered (Brolin, 1980). Brolin suggests, for example, that "when designing a free-standing building for an existing context, the visual texture, composed primarily of small scale details (ornament) is usually the critical element" (Brolin, p. 143). Connecting the new with the old can be accomplished in several ways: by "closely copying the existing

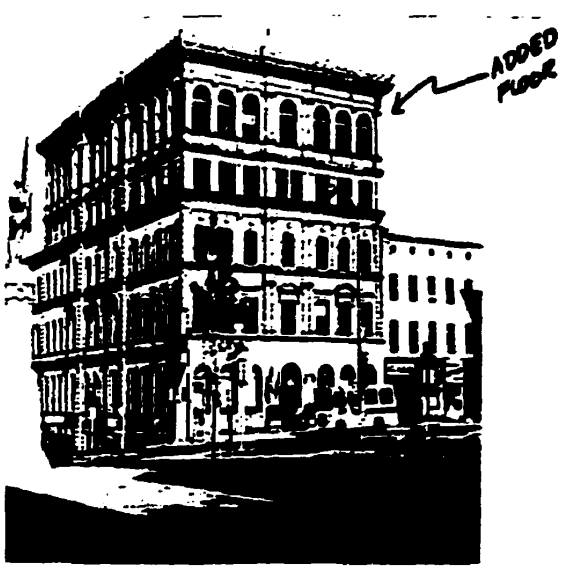


Figure 18: Pittsfield National Bank after Addition of one more Floor, early in this Century (Brolin, p. 147)

Figure 19: Leidse Spaarbank, Leiden, Holland; (left) 1877, (right) 1975 (Brolin, p. 97)

Figure 20: Cotton Exchange, Savannah, Georgia; William Gibbons Preston (1887) (Brolin, p. 30)

design motifs; using basically similar forms but rearranging them; inventing new forms which have the same visual effect as the old; [or] by original forms" (Brolin, p. 140). Some successful examples of "blending" can be seen in Figures 18 to 20. Regardless, the erection of a hospice on the chosen site would cause little disruption in the way of life of the residents of Inglewood, which is one goal of the Redevelopment Plan (ARP, p. 10).

7.0 DESIGN IDEA

Life and death are two separate frontiers; two distinct places. One cannot say that they are opposite places, because no one really knows until death has occurred. It is certain, however, that while life is the known frontier, death is the unknown frontier, and in this sense they are at least different. Perhaps this view of life and death is similar to the way in which Bachelard views the spatial perceptions of "inside" and "outside" (Bachelard, p. 211). Inside and outside are different because, as Bachelard suggests, inside is concrete and familiar and outside is vast (since it contains uncertainty). The laws of nature force everyone, at some point, to experience both inside and outside; life and death. Nevertheless, it is not the experience of these two frontiers that poses a problem for architecture to solve. Instead, it is the transition, the process of passing from one frontier to the other, that gives architecture a great purpose, and that is the focus of this thesis.

Because, as Bachelard suggests, "everything takes form, even infinity" (Bachelard, p. 212), there must be a point in space where one form ceases to be that form and becomes a new form. Similarly, in passing from inside to outside, a door, for example, acts as a barrier or limit to each place. Without the door, inside and outside would be unbounded and would become one space. There certainly must be such a boundary between life and death; something that separates the two. However, while the door may separate inside from outside, it also links the two, and in this way the boundary is also a threshold. According to Hertzberger,

"the threshold provides the key to the transition and connection between areas with divergent territorial claims... [It is] a place in its own right..., a place where two worlds overlap, rather than a sharp demarcation" (Hertzberger, p. 32). For people who die a sudden death, crossing the threshold may only take a moment, and the experience may be like going through a door. For those with a chronic illness, however, the threshold itself becomes a place to inhabit for a while; a place of the in-between and, therefore, becomes more than a door.

No matter whether a person is religious or not, everyone who experiences dying becomes "spiritual", in that he or she turns inward, self-reflects and looks for meanings or truths about life and death. With his/her whole being (mind, body and soul), the dying person slips into the place of the in-between. A place of the in-between is a place of transition, which signals that one way of living is over and a new way is emerging. It is only here that it is uniquely possible to be simultaneously aware of what is significant on either side. This awareness is crucial for self-reflection. A blurring or merging of the distinctions or boundary between life and death occurs; one has transcended rational awareness to another level of experience. Keleman's example of sleeping is ideal in illustrating the transcendence involved in dying: "When I say 'go to sleep' and watch myself leave the awake world, I enter another, one with a different time and a different space. This dream world is not unreal. It is a particular kind of reality, different from ordinary reality" (Keleman, p. 139). In a similar way, the dying pass from life into

another order of perception; they inhabit the threshold of death for a while, a kind of spiritual realm of self-reflection. This place of the in-between, therefore, is a place that initiates transformation, because it is here that one can come upon new insights and truths about the meaning of life and death.

If the physical world is designed in such a way that it allows the place of the in-between to be experienced more deeply, then the transition from life to death can be smoother and more fluid. As Keleman suggests, one can live one's dying (Keleman, p. 101). Thus, architecture has a great purpose for the dying, as we all will eventually die. Architecture can provide the potential for self-reflection required for the smooth transition from life to death, and it is capable of initiating transformation within the individual as he/she crosses over. To an outside observer, the hospice building may appear as only an end, a destination. Yet to its inhabitants, the building is experienced as a new place, a place of the in-between, a place of transition and a place of preparation.

How can the architecture of the physical world (that is, the hospice building) set up a situation for self-reflection and inner transformation? It can do this in two major ways (which will be discussed): by creating a place where boundaries blur and by creating a place of nature. Colin Rowe's and Robert Slutzky's book entitled Transparency suggests the way in which a place of blurred boundaries may be designed. These authors distinguish between literal and phenomenal transparency, the former referring to the inherent quality of a substance, that is, its translucency.

A window, for example, would create a situation of literal transparency, but it is phenomenal transparency that is what is sought in the design of a place where boundaries blur. In this case,

> transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figure has equivocal meaning as one sees each figure now as the closer, now as the further one. By this definition, the transparent ceases to be that which is perfectly clear and becomes, instead, that which is clearly ambiguous. (Rowe and Slutzky, p. 23).

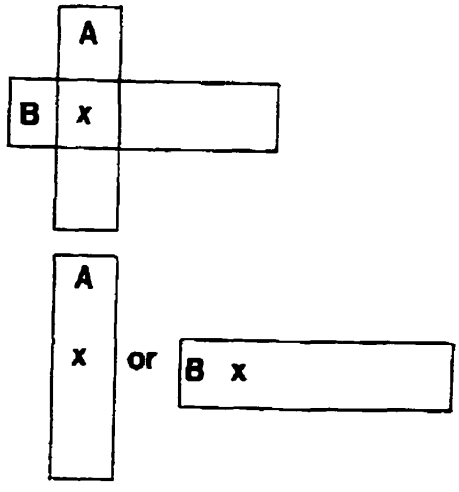


Figure 21: Plan - Phenomenal Transparency

For a simple example refer to the plan in Figure 21. When standing at location X, does one consider oneself as belonging to space A or to space B? This "gridding of space", therefore, results in continuous fluctuations of interpretation, because the person at location X can see himself in relation to both systems of order. "The choice for one or the other path also means entry into one or the other system of geometric arrangement" (Rowe and Slutzky, p. 65). This means that a situation of phenomenal transparency invites and encourages the observer to become a participant in the composition, based on his/her own interpretation.

Frank Lloyd Wright's winter residence, Taliesin West (1937), provides an example of the way in which a place of blurred boundaries can be created

architecturally by using the technique of phenomenal transparency. In referring to the plan in Figure 22 and the grids in Figure 23, one can see that the pergola acts

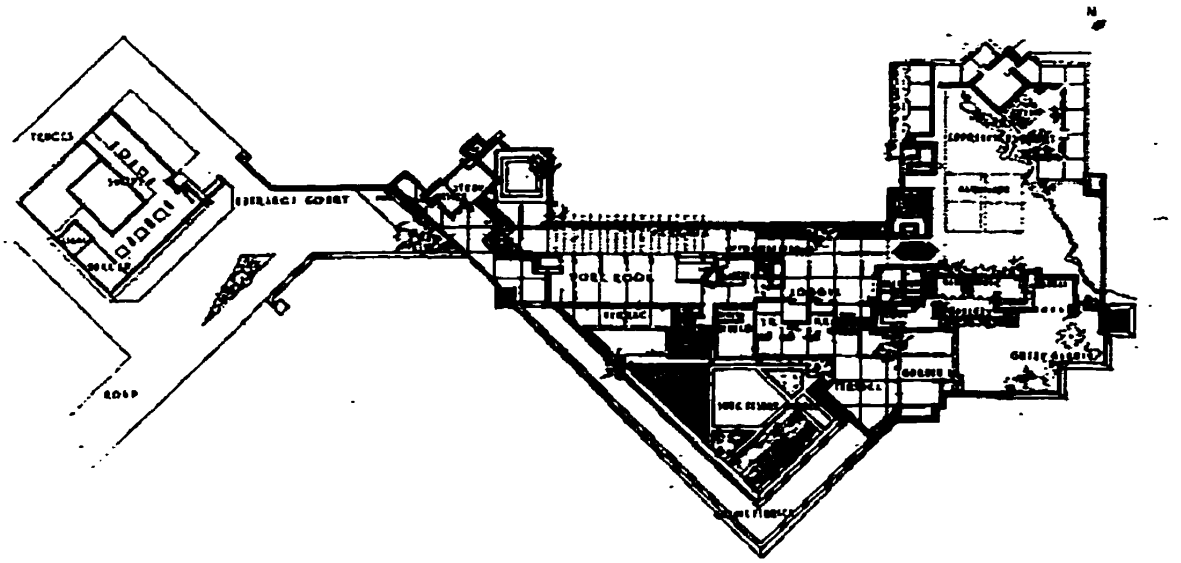


Figure 22: Taliesin West - Plan (Levine, p. 266)

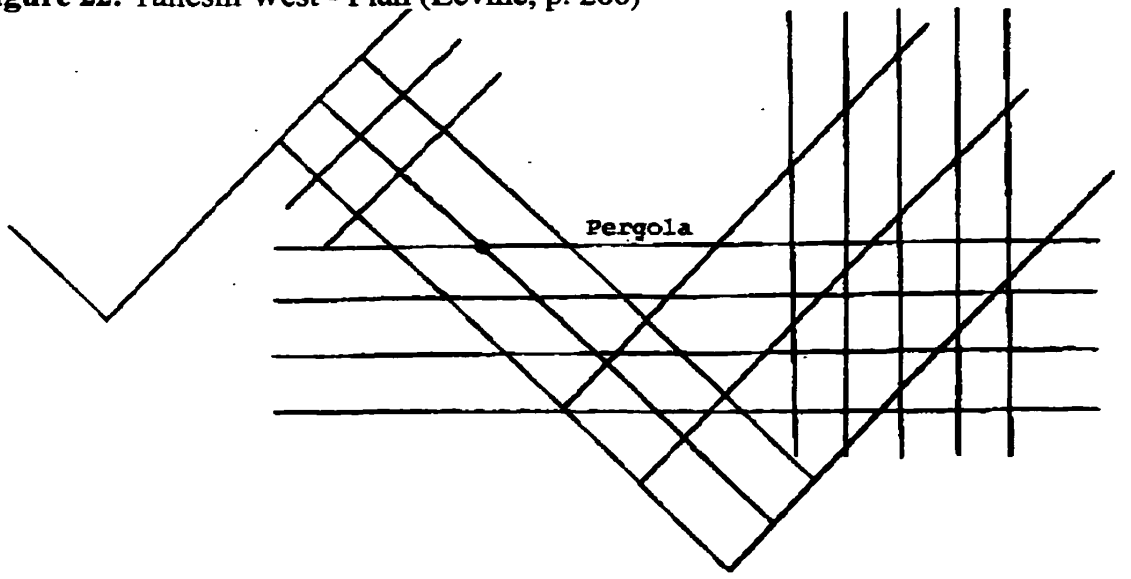


Figure 23: Gridding of Spaces (Rowe and Slutzky, p. 65)

as the lateral spine of the complex. The segments of the main path and most of the buildings (ie. studio, dining room, kiva, the living quarters) are aligned along this spine. The spine is not an isolated axis but is embedded within two grids, as an orthogonal line in one grid and a diagonal in the other. Movement through Taliesin West, therefore, is structured by the lines of the two interlocking grids along the spine. Referring to Figure 23 and Figure 24, a petroglyph boulder (across from

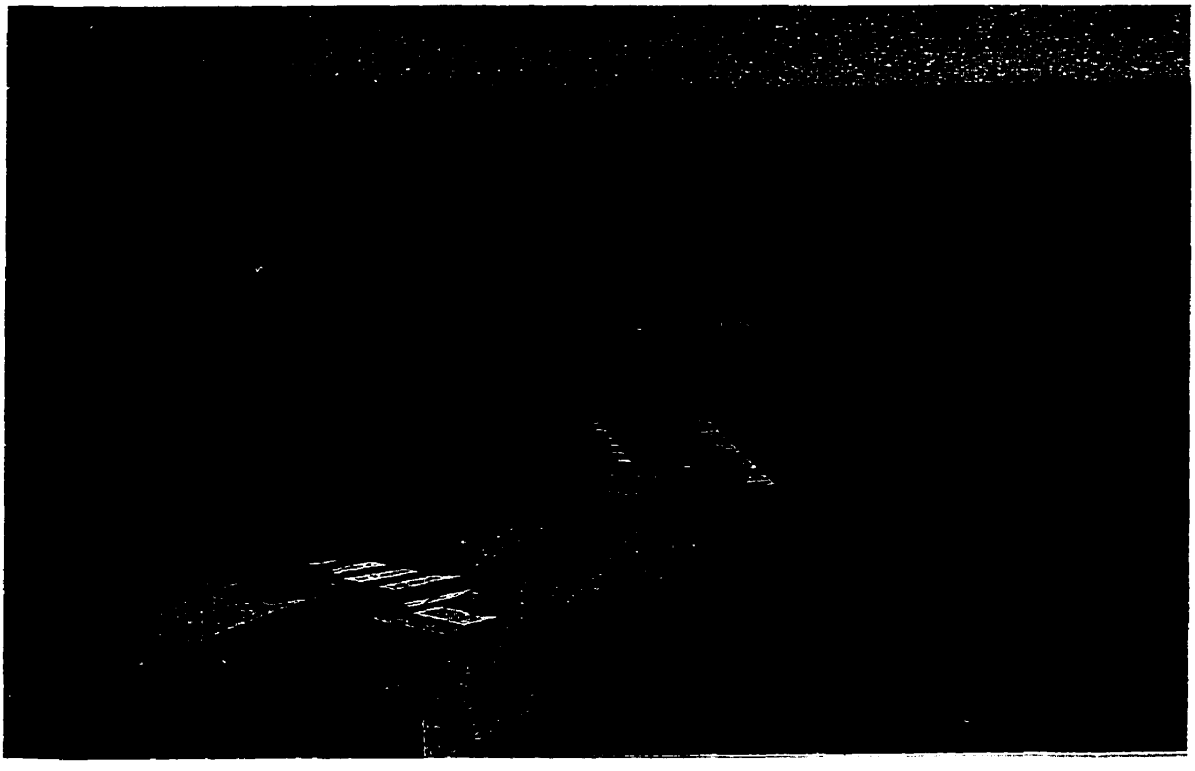


Figure 24: Taliesin West - Aerial View (Levine, p. 293)

Wright's office) marks the pivot point of the plan, "signal[ling] the continued course of that path through the building, while at the same time indicating its redirection

outward" (Levine, p. 283). Hence, at the petroglyph boulder pivot point, a place of blurred boundaries is created, because the phenomenal transparency allows the simultaneous perception of the two different spatial locations. Interpretation fluctuates in the minds of the participants as they can see themselves in relation to both systems of order. A place where boundaries blur, therefore, creates a situation that allows for multiple meanings or interpretations on the part of the participants, which means that the same place can be experienced in different ways.

It should be noted that although phenomenal transparency may be the primary architectural element operating in the creation of a place where boundaries blur, it does not operate in isolation. Other architectural elements contribute to the experience, either directly or indirectly and, therefore, would also play a role in a hospice in helping the dying person to slip into the place of the in-between. For instance, at Taliesin West, phenomenal transparency is made possible because of architectural orientation. As mentioned, Wright's shifted grids dictated where the spatial overlap would occur, the grids themselves being derived from lines of sight. What is viewed from the place where boundaries blur was predetermined by Wright based on orientation towards features of the site. Furthermore, experiencing the blurring of boundaries also depends on how the landscape and the architecture are integrated. For instance, almost every space at Taliesin West feels as though it is simultaneously inside and outside. Landscape and building become continuous. The materials used to construct the architecture also contribute to the experience.

Use of the desert rock in the walls of the building, for example, make the walls seem as though they are an extension of the desert. The approach or movement towards the place of blurring boundaries will, likewise, affect its subsequent experience. Wright liked to reveal successive spaces a bit at a time, so that they would be experienced with greater delight. Thus, it is actually many architectural elements operating together, in addition to phenomenal transparency, that determine how one will experience a place of blurring boundaries.

A hospice should have various places where boundaries blur incorporated into its design for its inhabitants to experience. Experiencing the spatial ambiguity with one's whole being, that is, one's body, mind and soul, gives one the choice to actively participate in any one of the several interpretations of that space. The person slips into the place of the in-between, resulting in self-reflection and inner transformation. As discussed, it is then that the person comes upon new insights and truths about the meaning of life and death, while he/she is simultaneously aware of what is significant on either side.

As discussed above, one way for the dying to transcend rational awareness to a higher level of perception, resulting in a smoother transition from life to death, is to experience places in the building where boundaries blur. Another way to accomplish this would be to design the building as a place of nature. It is important to define what a place of nature is, as interpretations vary. Frank Lloyd Wright, for example, believed that "landscape" refers to the out-of-doors (a "place"), while

nature actually refers to an idea, that is, "...the inner harmony which penetrates the outward form and is its determining character..." (De Long, p. 135, 155). It is this author's opinion that a place of nature is more than an idea; it is a place which has life as a major part of its composition. One example of a place of nature is the bird lounge in Calgary's Rosedale Hospice. Another example is the large atrium/jungle space in Calgary's Bow Crest Nursing Home. Similarly, Frank Lloyd Wright's Taliesin West is an example of how a site's landscape (a form of life) can be integrated with the architecture to create a place of nature. One other example of a place of nature is a daycare facility filled with children. Life, represented in one form or another, flourishes in a place of nature. With life as its chief component, a place of nature is a place of silence, because it does not dictate specifically how one ought to feel or what one ought to think about in that place. Everyone can relate to life in some way, and a place of nature, as in the case of a place where boundaries blur, allows the person to come up with his or her own interpretations and meanings. It is here that one can withdraw into one's spiritual self, to slip into the place of the in-between.

Because of the timeless qualities of landscape, it can easily be used as a tool with architecture to create places of nature for people, and this has had a long tradition in Japan. One kind of Japanese garden, for instance, is designed to be viewed from the interior, thereby inseparably binding the architecture to the landscape created. In fact, "...the Japanese garden is as much a part of architecture

as are the buildings themselves. Together, garden and building constitute Japanese architectural space; separate them and nothing remains but miscellaneous constructions..." (Itoh, p. 81). To the Zen Buddhists, the garden is used as a place for meditation; it is a vehicle for reassurance and offers a lifeline to mental and spiritual refreshment. In such a place of nature, truths about the meaning of life and death are often acquired in sudden bursts of insight, triggered by any one of the many elements in the garden. Water, for example, seems to be considered timeless poetry to the mind for most cultures.

The question remains, how does the garden (as in Japan), or any other landscape that is inseparably bound to the architecture, appeal to our spiritual selves?

> Initially, a garden is a visual experience, but there is more than meets the eye. The image is transmitted to the brain, decoded, recognized and transferred to a deeper level of our being. Here lies a reservoir of feelings...that are drawn upon subconsciously to clarify what we see. These emotional and intellectual reflexes provide the basis for an interpretation different from the initial visual act, and comprise the meanings we find in a garden or landscape. (Francis and Hester, p. 245).

In the same manner that a place of blurring boundaries allows a person to choose one of several interpretations and, therefore, to experience the place in an individualistic way, so does a place of nature allow its participant to arrive at his/her own meanings and resulting experiences. "This is not to say...that a garden should be without character but, rather, that it should be profound enough in spiritual depth

to admit of many interpretations" (Itoh, p. 81). This new awareness is crucial in initiating self-reflection and transformation within the dying individual as he/she passes from life to death.

Frank Lloyd Wright derived many of his ideas from Japan. Wright considered landscape as dynamic but imperfect, needing to be molded with the architecture so that landscape and building would become continuous. His winter residence, Taliesin West, also serves as an excellent example of the way in which one can integrate landscape with architecture to create a place of nature.

The landscape in which Taliesin West is integrated was seen as something magical by Wright when he first discovered the site:

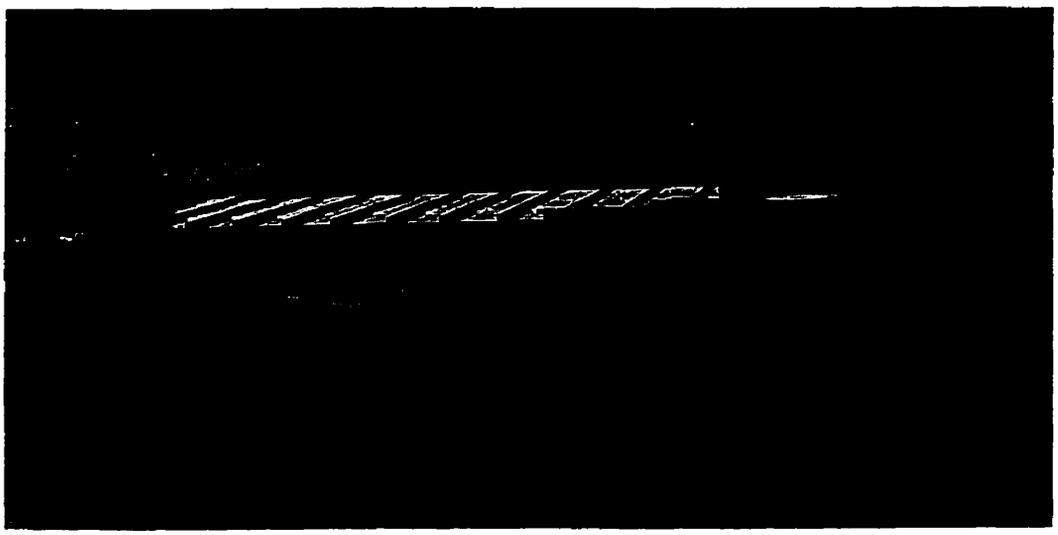


Figure 25: Taliesin West - West Edge of Terrace Prow, with Dining Room, Guest Deck and Drafting Room in Foreground, Wright's Office in Background to left, and McDowell Mountains in distance (Levine,
p. 286)

> ...We came from the mountains as the sun was nearing the horizon, and we rode out upon the Arizona desert. Tall ancient saguaro and graceful waving ocatillo and the vivid green on the floor of the desert and the purple mountains beyond, a garden like none I had ever seen. A desert like something I had never dreamed. The mountains were softened by the distance and the fading light, and the desert plants stood out strong in the long low streaks of sunlight. The new forms, the vivid green, the purple shadowed rock masses and the blue sky, and the movement of the car winding in and out and around...(De Long, p.149).

Woven into this vast desert landscape, and spreading out low to the ground, Taliesin West is a large complex of buildings, courtyards and gardens. It is a place of nature because (as discussed) the site's landscape, a form of life, is integrated with the architecture. This is accomplished with the aid of several architectural elements. To begin with, Wright abstracted the formal structure of the landscape, applying the resulting triangular geometry to the form of the whole complex. The whole complex is perceived as greater than its individual units and, yet, is experienced as part of even a larger whole, that of the landscape. Therefore, the scale of the architecture also plays a role in integrating the building and the landscape. The

Figure 26: Taliesin West - Hohokam Petroglyph Boulder at beginning of Pergola (Levine, p. 254)

angled canvas roofs, which reflect the surrounding mountainpeaks (See Figure 25 and 26), cover pavilion type spaces, which open to the landscape and which "...seem as much outdoor as indoor spaces, providing shelter without a sense of enclosure" (De Long, p. 271). Hence, orientation, like geometry, also plays a role in creating a place of nature. Furthermore, because of the color and texture of the desert rubble rock used as the chief material in the architecture, the architecture is difficult to distinguish from the landscape. (See Figure 26 and 27.) Hence, integration also occurs with the aid of materials used in creating the architecture.

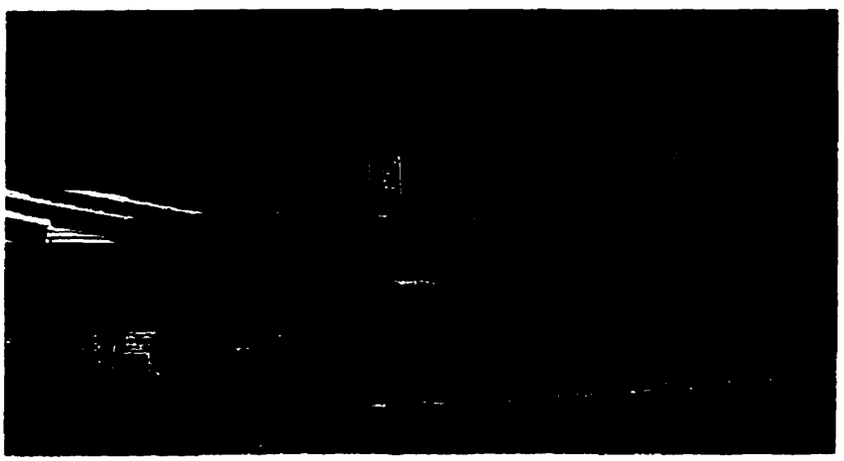


Figure 27: Taliesin West - Above Maricopa Hill directly to east (Levine, p. 288)

The architecture is integrated with the landscape in another way: through movement. Talisien West is a journey, in that it weaves the visitor through various experiences with both the immediate and the distant landscape, thereby blurring boundaries and allowing for individual interpretation at a higher level of perception. In terms of movement and the immediate landscape, the participant at

Taliesin West turns repeatedly, experiencing successive spaces, as natural light constantly shifts and varies, presenting to the participant an alternate definition of time. Buildings, gardens and patios are set into the slope of the hill in some aspects of the journey and are elevated on a platform above the desert in other parts of the journey (See Figure 27, 28 and 29). Hence, ordered variety is another architectural element at work in creating a place of nature. Furthermore, large boulders, incised with ancient petroglyphs, are used in several places to direct movement through the complex (See Figure 26, 27 and 29.) "They give a temporal dimension to the experience that makes the building seem to share a history with

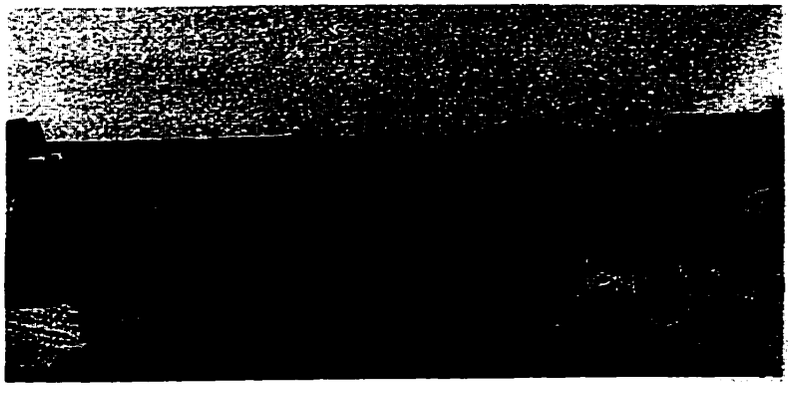


Figure 28: View through Loggia to Thompson Peak (Levine, p. 285)

Figure 29: Taliesin West - Terrace Prow, with Drafting Room to left, Dining Room straight ahead, and Sawik Mountain in distance (Levine, p. 273)

that of its site. Nature, as an object of representation, is viewed as inseparable from its historical manifestations" (Levine, p. 274). In terms of the distant landscape, the major visual axes of Taliesin West are oriented to the distant land forms (See Figure 25, 26, 27, 28, 29 and 30.) Therefore, movement combines with orientation to help create a place of nature, because on the journey through the complex, views are concealed and revealed, as the path twists and turns, affirming the integration of architecture and landscape. In essence, the whole "...processional movement through Taliesin West becomes ... a continual re-experiencing of the finding of the Promised Land" (Levine, p. 290). A place of nature, as Taliesin West is, is a place of silence. It allows one to withdraw into one's own spiritual self, to come up with one's own interpretations, as the place is experienced with one's whole being: mind, body and soul.

Figure 30: Taliesin West, Prow Garden, looking from Sunken Garden to Terrace, Garden Room and Cove (De Long, p. 154)

In his book entitled For an Architecture of Reality, Michael Benedikt proposes a timeless philosophy of architecture (Benedikt, 1987). He suggests that what is

often missing in buildings is a sense of reality or authenticity. Rather than trying to make buildings more "beautiful", "...it falls to architecture to have the direct aesthetic experience of the real at the center of its concerns" (Benedikt, p. 4). "Realness" has four components which Benedikt describes as presence, significance, materiality and emptiness, and it is the present author's opinion that the latter component is what becomes most crucial in the design of a hospice. Emptiness, according to Benedikt, is of two types. The first is "purposelessness" or "innocence", as in the way nature is disinterested in results (Benedikt, p. 52). An example Benedikt gives is that a flower does not bloom so that we can enjoy its fragrance. "Innocence", therefore, suggests that a building should offer opportunity rather than give direction. To help the dying pass smoothly from life to death, a hospice, therefore, should be designed to give the dying the opportunity to withdraw into their own spiritual selves, that is, to slip into the place of the in-between. The second type of emptiness is "the silence between the notes", so to speak, which suggests that a "real" building is always unfinished; a real building shows potential, in that it "...points us towards the beauty in life's openness ... [and requires us to] become engaged with the intervals and open ends" (Benedikt, p. 58). The hospice, therefore, should be designed in such a way as to require the dying to engage the architecture. Such engagement would allow them to slip into the place of the in-between.

In conclusion, architecture has a great purpose for the dying, as we all must

die eventually. A "real" hospice, with a strong "emptiness" component, has two important design aspects. First, it provides the potential for self-reflection and inner transformation, which is required for a smooth transition from life to death. Second, to move smoothly from life to death, the dying must be able to engage the architecture with their whole being (mind, body and soul) and, in this way, experience the place of the in-between. As discussed, this is a place where the boundary between life and death is blurred, and one is simultaneously aware of what is significant on either side. The higher level of awareness reached in this spiritual realm allows the dying to come upon new insights and truths about the meaning of life and death. Although the component of emptiness in real architecture is "very much an intuition ... [and] can be analyzed only up to a point..." (Benedikt, p. 50), there are specific architectural elements that should be incorporated into the hospice design, such as places where boundaries blur and places of nature, that would engage its inhabitants. A hospice that provides the opportunity for a smooth transition from life to death becomes not a boundary but a threshold to the other frontier.

8.0 THE DESIGNED PROJECT

8.1 THE PARTI

The design of the hospice was generated from a parti diagram and model which were an initial response to the site (see 8.5 Design Drawings and Images). The parti was an attempt to abstract the landscape into diagrammatic form. A central spine, meandering through the site, but parallel to the berm, was envisioned as the organizing element of the building. In the parti, the shapes on either side of the spine represent the required programmatic elements of the hospice, but as the diagram illustrates, these are meant to relate to the specific side of the site they face. In the diagram, this is represented by their orientation to the objects of the landscape on the side they face; in the model, the forms on either side of the spine are different in appearance because each side is meant to respond to the particular side of the site that is faced. The spine mediates between the man-made grid of the city and the natural grid of the river, which come together on the site.

Places where boundaries blur are created along the spine to set up the situation for self-reflection and inner transformation needed in the spiritual journey of the dying. This is suggested in the parti, for example, by the pockets of space left between building elements on either side of the spine, across which a blurring between inside and outside may occur. Furthermore, the active participation of the building's inhabitants in the blurring experience (as discussed in Chapter 7.0 Design

Idea) is implied in the parti through the flowing nature of the spine, along which one travels to enter successive spaces within the building. The building's inhabitants participate in or experience a particular space based on their interpretation of that space at that particular moment in time.

As discussed in Chapter 7.0 Design Idea, for the dying, the place of the in-between can also be reached by participating in a place of nature, which is the second goal of the design. The parti hints of some of the ways in which this may be accomplished in the design. As one can see in the illustration, all objects of the landscape remain unaltered. Hence, a place of nature is created by integrating the architecture with the existing landscape. For example, there are places where the building wraps itself around trees. Pockets are created in the scheme in which nature itself can flow through the building. Movement along the spine and experiencing its adjacent spaces allows participation with both the near and the distant landscape. Spaces are oriented to take advantage of the various views of the site, the morning sun, for example, or the bustling activity of the community. The parti suggests that there is variety, a richness of experience, as one can imagine how views would be concealed and revealed as one moves through the building. Furthermore, integration of the landscape with the architecture can create public areas as well as more private spaces. The long extension of both ends of the spine in the parti diagram, and the "extending tentacles" in the parti model, are

meant to suggest that the private world of the hospice should be connected with the on-goings of the outside world. Finally, in creating a place of nature, the parti diagram also indicates that the objects of the landscape and the elements of the architecture are integrated by their similarities in massing; they appear as though they belong together. In the design this becomes important, in that it will affect the image the hospice presents to the community.

8.2 THE PLAN: IDEA, SITE AND PROGRAM

In developing the parti further, one of the first concerns was the refinement of the spine in plan (see 8.5 Design Drawings and Images). To take full advantage of the experiential opportunities offered by all of the sides of the site (the river side, the parkland side and the community side), the spine, as the organizing element of the design changes direction twice, doubling back on itself. Although the spine provides the means of circulation through the hospice, it is experienced as more than just a corridor. The spine itself is a space and plays a key role in both the creation of places where boundaries blur and the creation of places of nature within the hospice.

Places where boundaries blur are of two types in the design. First, one may perceive oneself as being part of the inside but also as part of the outside. These are threshold spaces and occur throughout the hospice. Orientation towards features of the site, integration between the architecture and the landscape, and

even movement through the spine contribute to the experience. Second, one may perceive oneself as being part of the public space but also as part of the private. This blurring also occurs throughout the hospice. Use of materials and scale contribute to the experience. For instance, the indoor porches, which are part of the units and yet part of the spine, are individually detailed with a character of their own and are more intimate spaces than the more open space of the spine proper.

In terms of creating places of nature within the hospice, the design uses two different life forms to integrate with the architecture. First, landscape and architecture are integrated. All objects of the site's landscape remain unaltered in the design. So, for example, there are places where the building wraps itself around the trees, and pockets are created in which the landscape itself can visually flow through the building. Therefore, the geometry of the building, in its attempt to find its way through the landscape, contributes to the integration of nature and the architecture. Similarly, the scale of the architecture also plays a role. Creeping and spreading out low to the ground, the building is woven into the landscape rather than overpowering it. Furthermore, objects of the landscape (such as the individual residences on the street) and the elements of the architecture (the "solid blocks" of the hospice arranged around the spine) are integrated by their similarities in massing; they appear as though they belong together. Orientation is another architectural element that contributes to the experience of a place of nature.

Spaces are oriented, for example, to take advantage of the various views of the site and to make the best use of natural light. As one moves through the spine and stops in various places, one can participate with both the near and the distant landscape, and there is variety, a richness of experience, as different views are concealed and revealed as one moves through the building. Use of particular materials also helps to integrate the architecture with the landscape. Furthermore, integration of the landscape with the architecture allows the creation of both public areas as well as more private areas.

The second life form that is integrated with the architecture is people. The private world of the hospice is connected with the on-goings of the outside world; people and activities can be found on all sides of the site. The authenticity of human life is integrated into the hospice and is experienced by means of views and outdoor participation places. For example, a cycling stop is developed on the river-side of the site, as is a playground on the parkland side. Children behave naturally and cause reflection in the dying in their search for meaning in life and in death. Furthermore, an open porch at the entrance of the hospice, on the community side of the site, provides the potential for meeting people who stroll by on the sidewalk. Similarly, within the hospice itself, spaces are designed in such a way that if one wishes to interact with others, either vicariously or directly, one can. Therefore, orientation of the spine and other spaces of the hospice is as important in creating

places of nature as it is in creating places where boundaries blur.

In terms of the program, all required spaces were successfully integrated into the scheme, resulting in a gross area of 1,907 square metres, not including 155 square metres of outside porch area. (For a complete breakdown of the area calculation, see Appendix 10.5).

The frame of mind of the hospice user was carefully considered in the organization of the plan. For example, one way calmness and serenity is instilled in the building inhabitants is by having a plan that is easy to understand and navigate. As discussed, the spine is the organizing element of the plan. It links two distinct clusters of the hospice: the residents' side and the services side. Another way calmness and serenity are induced in the building's users is through the use of transition spaces or thresholds that signal the change from one space to another and allow one to adjust prior to entering a new space. In fact, there is a gradient of privacy established in the scheme so that movement is always from a private to less private to more public space or vice versa. Similarly, the fact that the spine is a space itself, rather than a hospital-like, double-loaded corridor, adds to the feeling of calmness and serenity, in that it provides a richness of experience and choice. This is important for the well-being of the hospice users by providing the opportunity and potential for the search for meaning in life and in death. Choice and control are promoted by offering the users a variety of different spaces to

experience as desires or needs change. There is a variety of quiet and intimate spaces for self-reflection or introspection, larger gathering spaces, inside and outside spaces, and spaces with various degrees of privacy. The plan, therefore, allows different levels of spatial experience and multiple meanings.

8.3 ELEVATIONS AND TECTONICS: IDEA, SITE AND PROGRAM

The design envisions a low-lying structure that sprawls across the site (see 8.5 Design Drawings and Images). There is a hierarchy of architectural elements. The dominant form is the spine, which lets natural light into the building and orders the rest of the building's forms around it. Although the spine is largely embedded within the hospice structure, parts of it are exposed to the outside and provide areas of transparency in the elevations. For example, the connection between the residents' side and the services side of the hospice occurs where the spine is exposed and integrated with nature, the landscape being drawn through the building at that particular location. A blurring of the boundary between inside and outside occurs here. The nooks and the indoor garden are also extensions of the spine and act as connectors to the nature outside of the building. Furthermore, the spine has other extensions to the outside, linking the other forms, and also integrating the building with nature. Both the river-side and the community-side lounges are examples of these spinal extensions. Space is contained and, yet, released in these spaces. Once again, the boundary between inside and outside is blurred and

nature becomes integrated with the architecture.

The other forms organized around the spine are blocks of a more solid, rather than transparent, nature, and these are also visible in the elevations. For all of the blocks surrounding the spine, the grounding element is a continuous band of masonry. The next gradation of material is a band of wood siding. The blocks that contain the resident units are also distinguished from the service blocks by the way they respond to the particular side of the site they face. For example, in the parkland unit block, the structural roof beams "open up" or lead the eye to the playground and the relatively flat parkland lying ahead. The porches of this unit block are barely noticeable, blending in with the land. In the river-side unit block, on the other hand, the structural roof beams become columns at the porches, framing views to the river between them and echoing the trees along the berm. The community unit block has its structural roof beams arranged like a grid to echo the city grid of which it is a part, and its masonry porches create more privacy for the units, as these are exposed to the street and the neighboring homes. On all three major elevations, therefore, a blurring of the boundary between inside and outside occurs as the architecture of the unit blocks becomes integrated with the specific landscape of each of the three sides of the site.

In terms of the overall form of the hospice, the outer-most portion of the building is stepped down to achieve a more residential massing. It is an

unintimidating form and appears welcoming to the community because of its softer look, its materials reflecting the varied texture of the community's streetscape. Furthermore, the banding of materials, the fenestration, the porches, and the sloped roofs all provide the level of small-scale detailing that is consistent with its context, thereby helping to blend this new building in with the existing old ones.

8.4 SECTIONS: IDEA, SITE AND PROGRAM

The sectional quality of the hospice also contributes to the blurring of boundaries and the creation of places of nature (see 8.5 Design Drawings and Images). To begin with, the grade changes of the site are reflected inside the building in floor level changes and the use of ramps. As one moves through the spine, therefore, changes in the space are gradual rather than abrupt and noticeable. On the service side of the hospice the spine is at its tallest, being a public space. Strangers or newcomers to the hospice enter the facility here, deliveries are made at this side of the building, and so on. However, as one moves towards the more intimate residents' side, the public spine itself gradually reduces in height, creating a more "intimate" public space. This publicity aspect is dissolved further in the areas of the indoor porches, which are more private spaces, yet, are still situated within the public domain. One other example of this public-private gradation occurs within the resident units themselves, in that because of the sloped roofs, the ceiling height grows as one walks towards the threshold at the spine, the

growing ceiling height hinting of the adjacent public space to come. In terms of integration of the architecture with nature, because the outermost portion of the hospice is stepped down, the sections reveal how natural light can enter the building through windows at the spine.

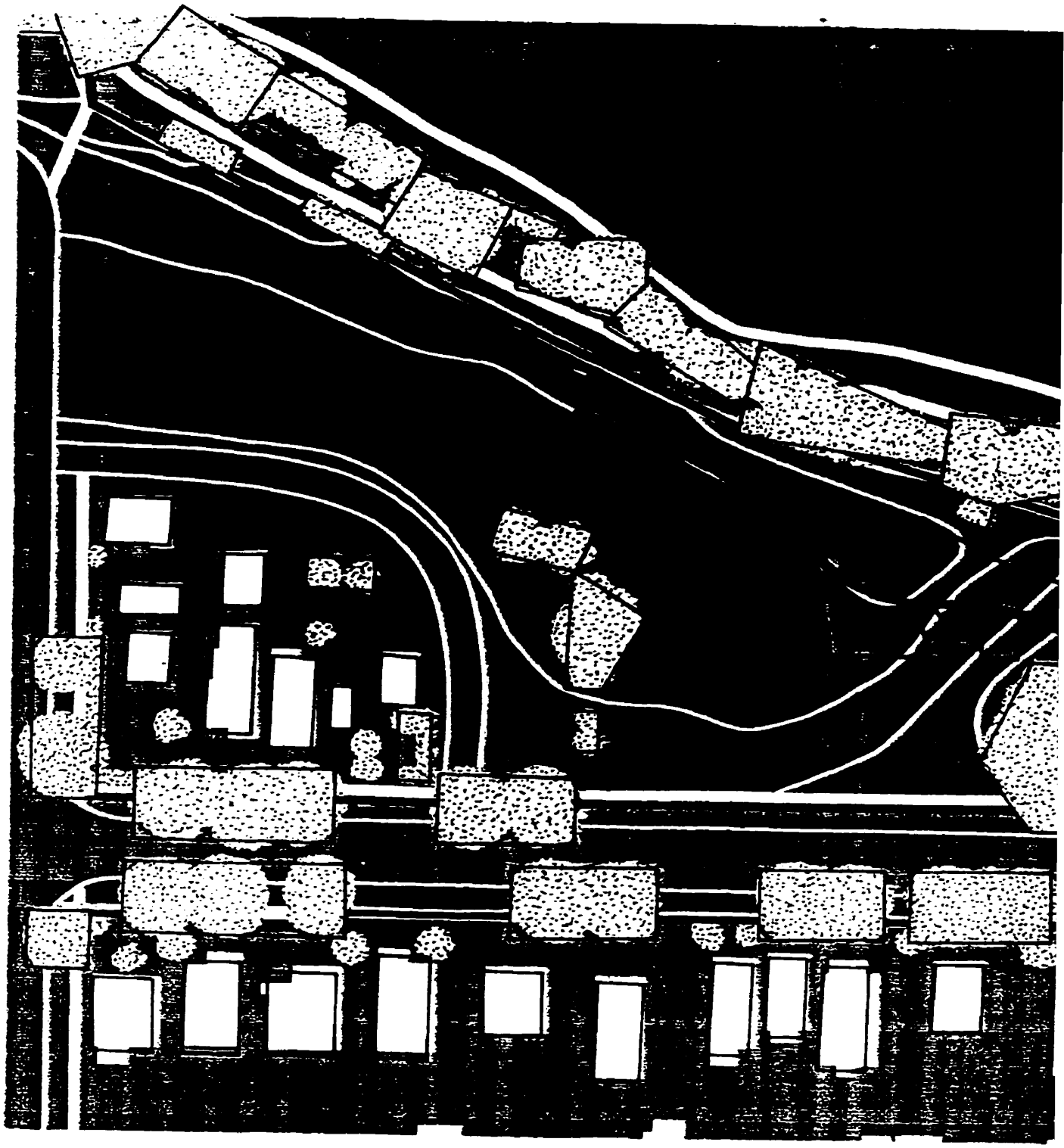
8.5 DESIGN DRAWINGS

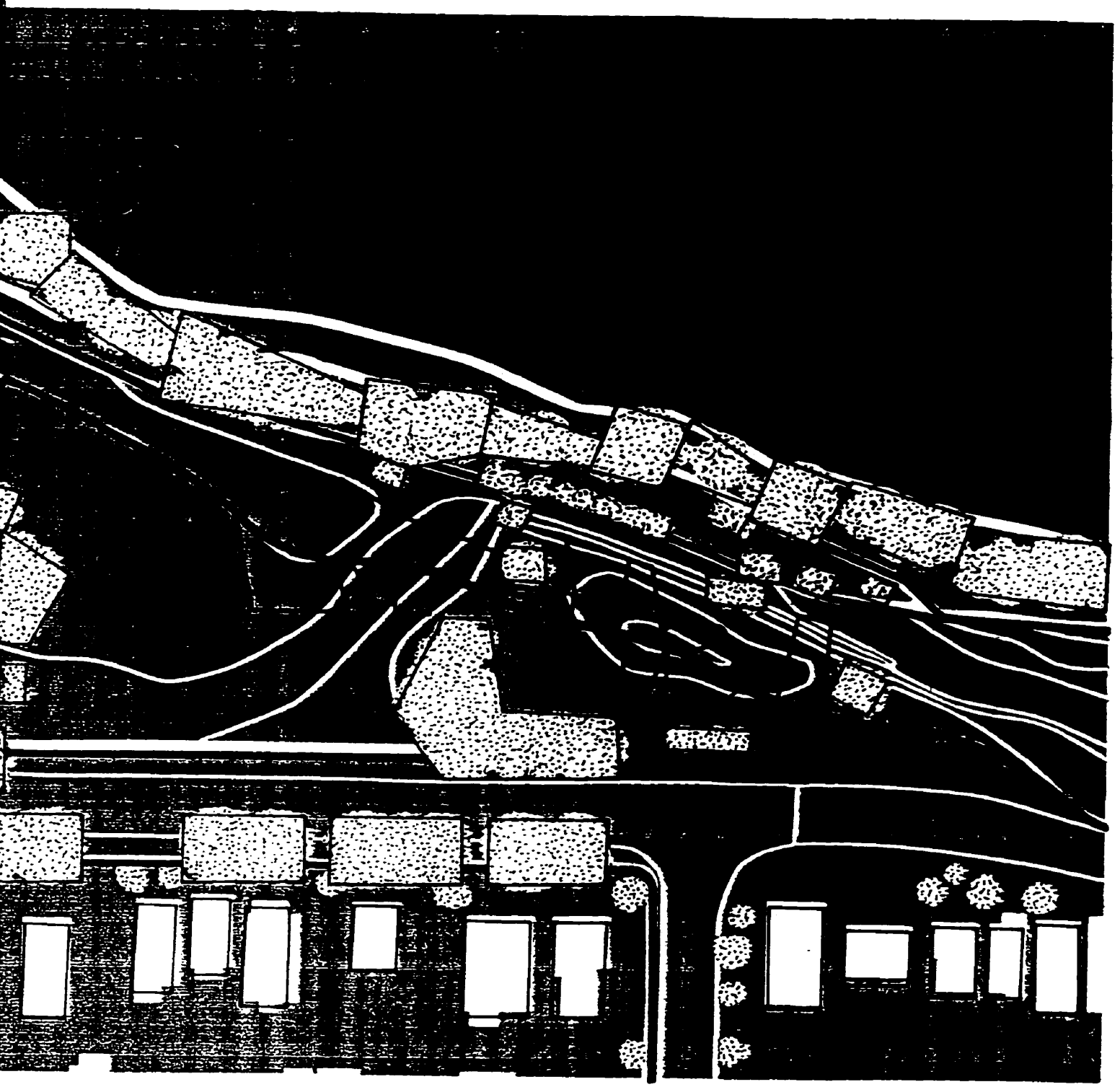
AND

THREE-DIMENSIONAL IMAGES

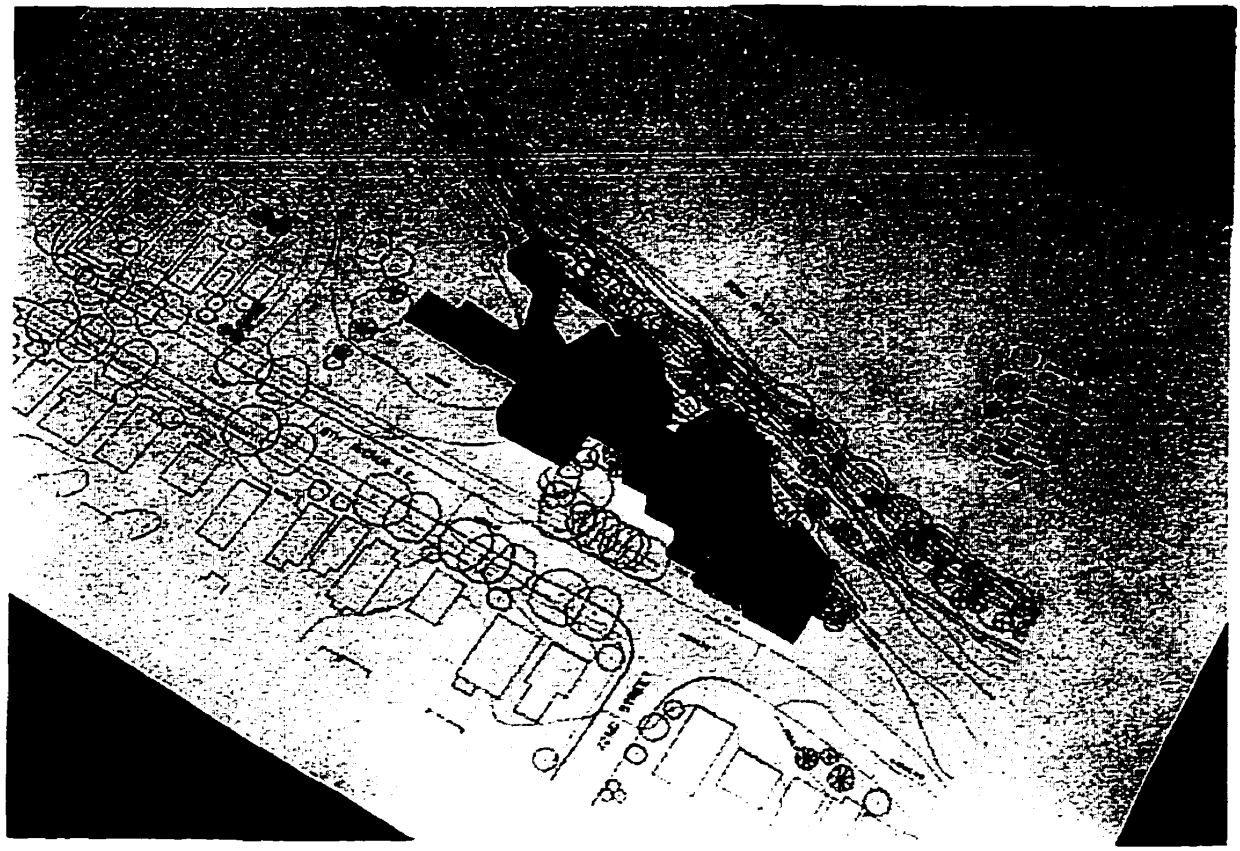
OF

HOSPICE PROJECT

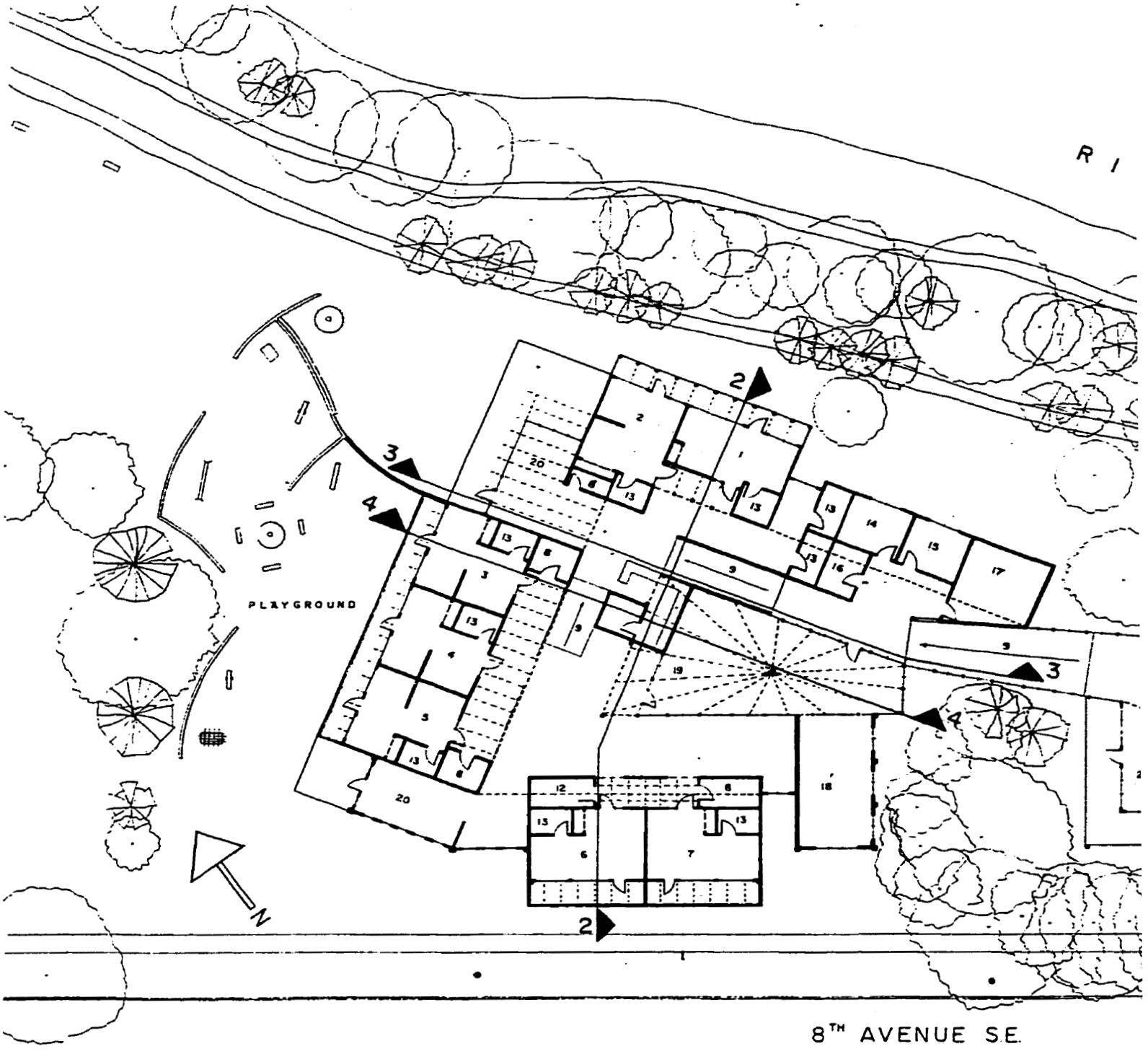




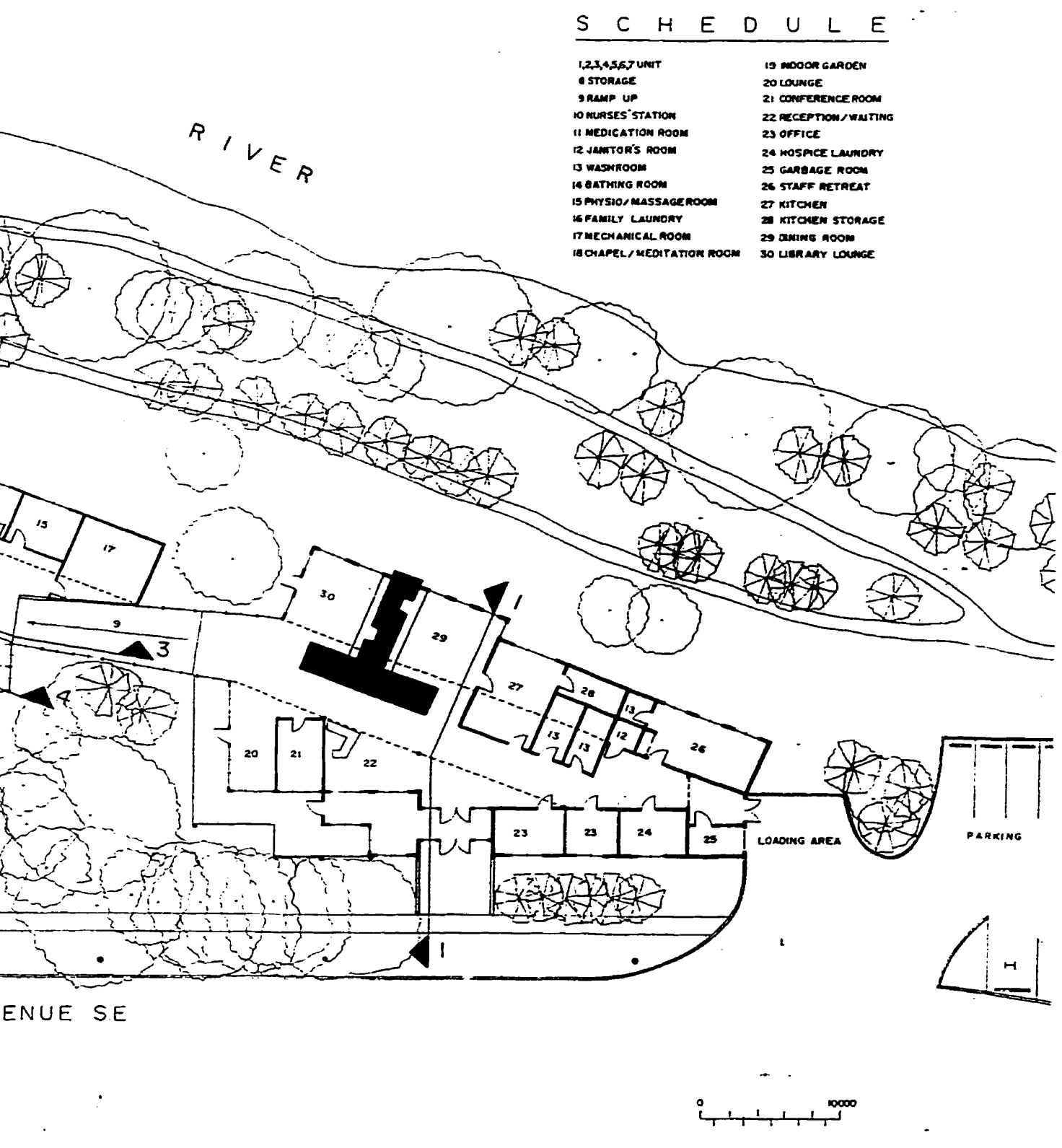
parti



Parti Model Positioned on Site Plan



PLAN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1,2,3,4,5,6,7 UNIT
8 STORAGE
9 RAMP UP
10 NURSES' STATION
11 MEDICATION ROOM
12 JANITOR'S ROOM
13 WASHROOM
14 BATHING ROOM
15 PHYSIO/MASSAGE ROOM
16 FAMILY LAUNDRY
17 MECHANICAL ROOM
18 CHAPEL/MEDITATION ROOM
19 INDOOR GARDEN
20 LOUNGE
21 CONFERENCE ROOM
22 RECEPTION/WAITING
23 OFFICE
24 HOSPICE LAUNDRY
25 GARBAGE ROOM
26 STAFF RETREAT
27 KITCHEN
28 KITCHEN STORAGE
29 DINING ROOM
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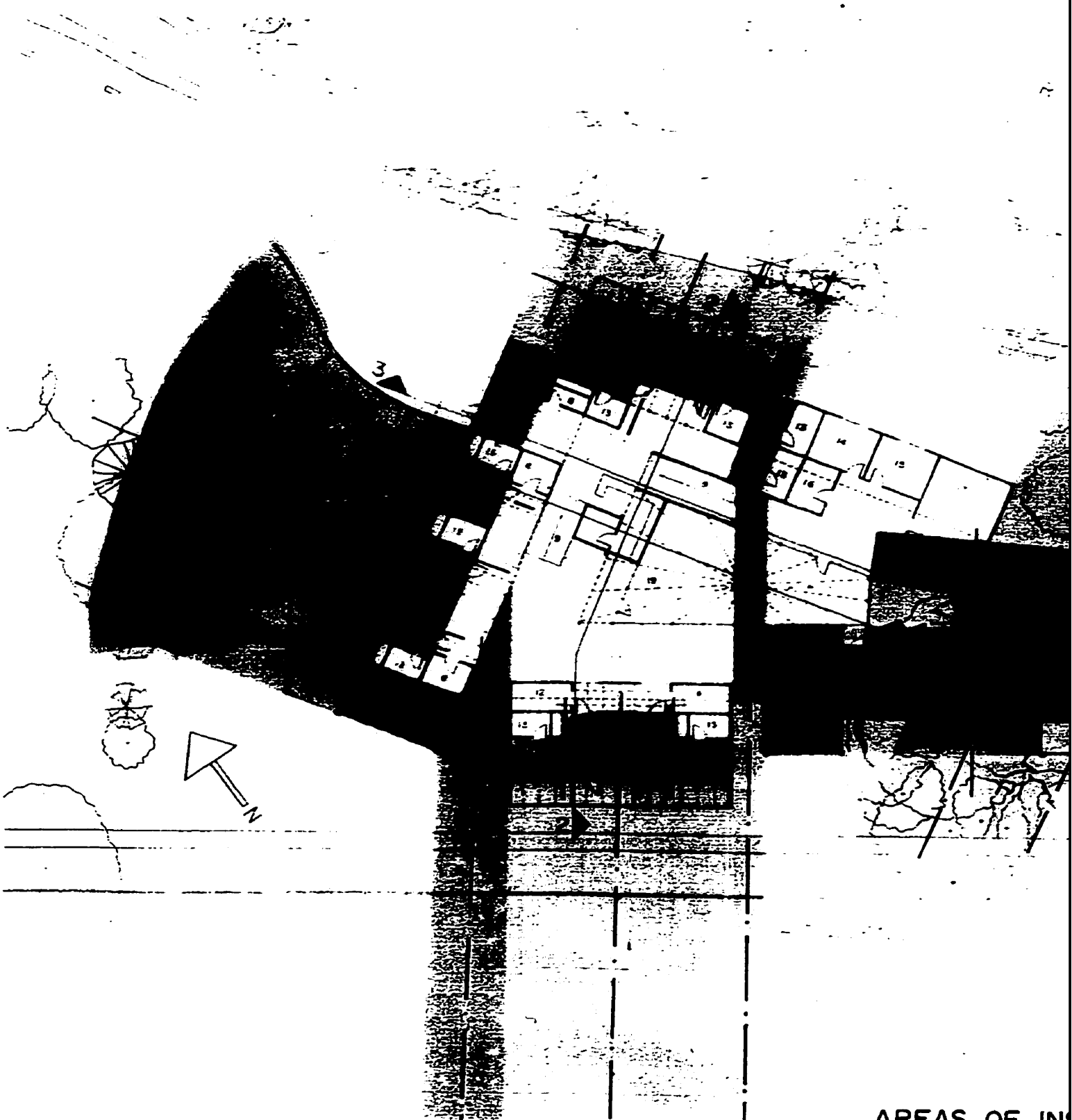

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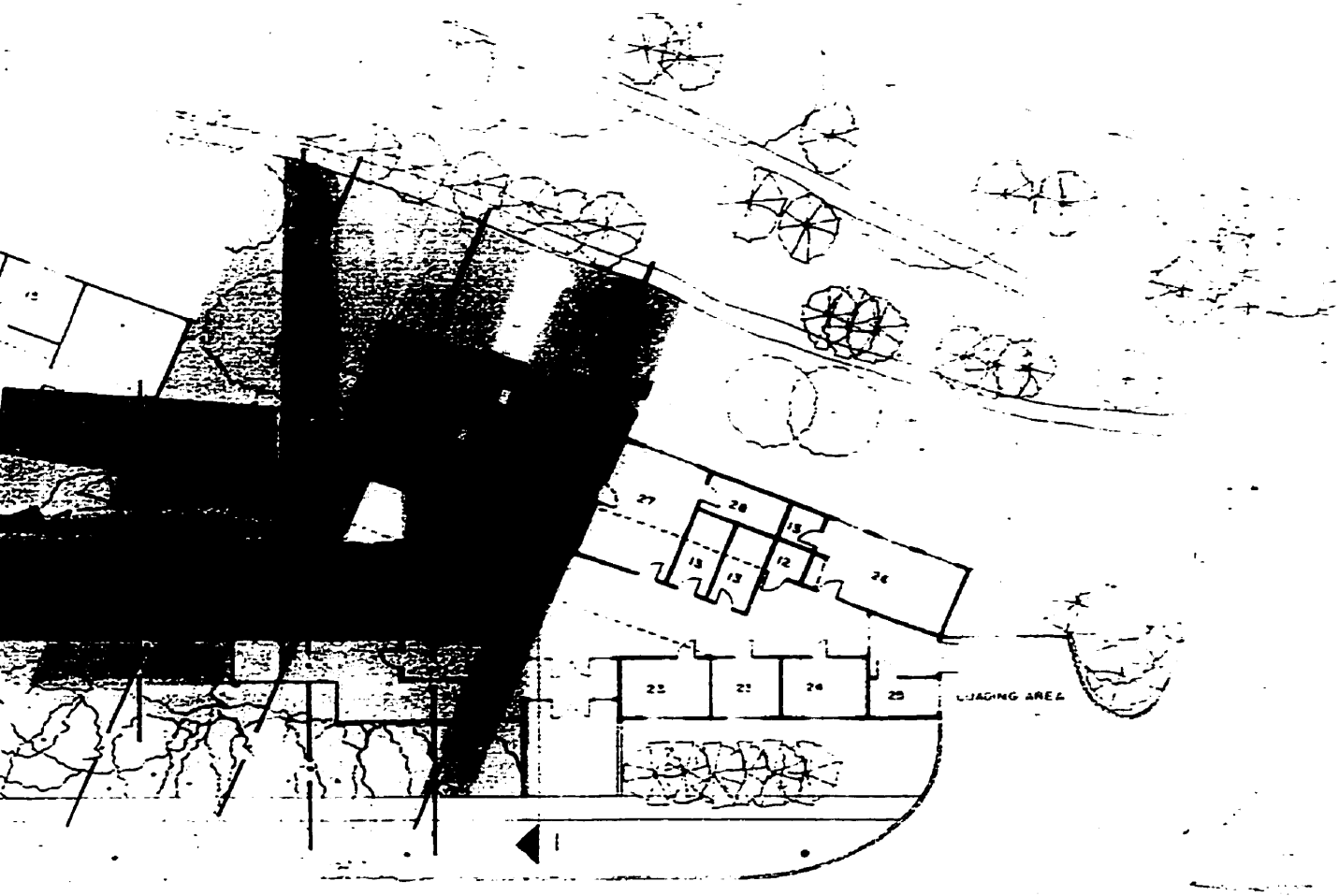

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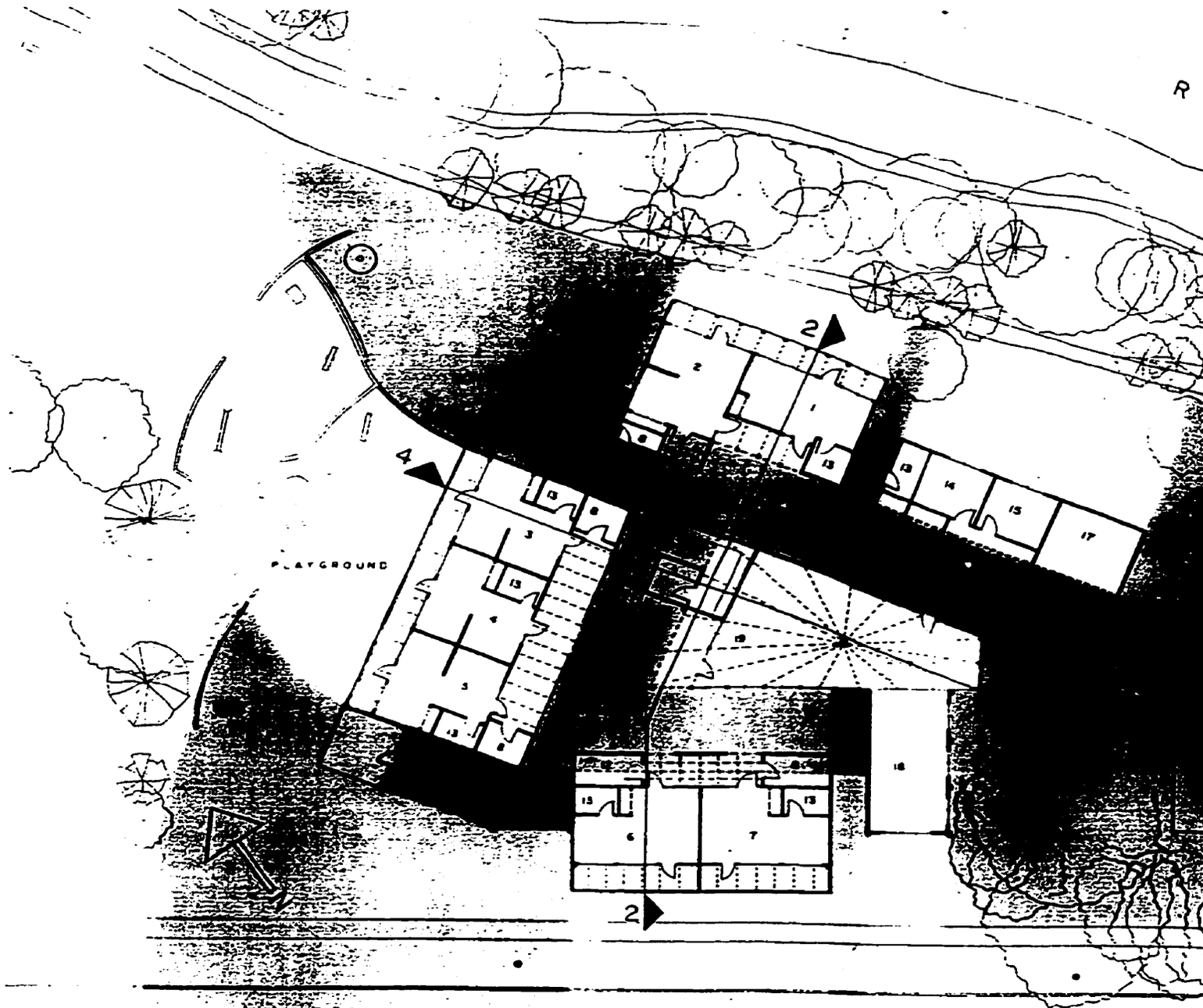

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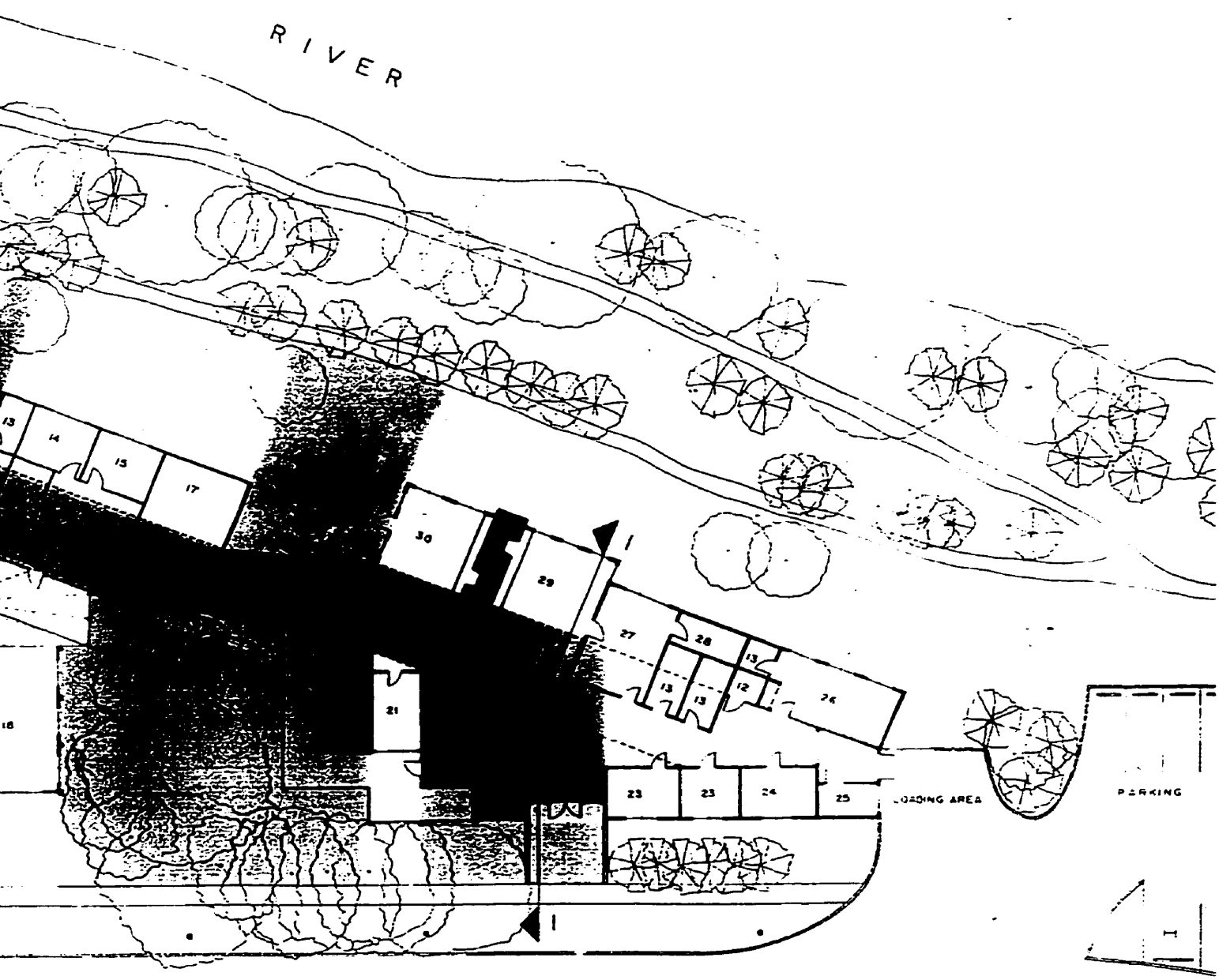

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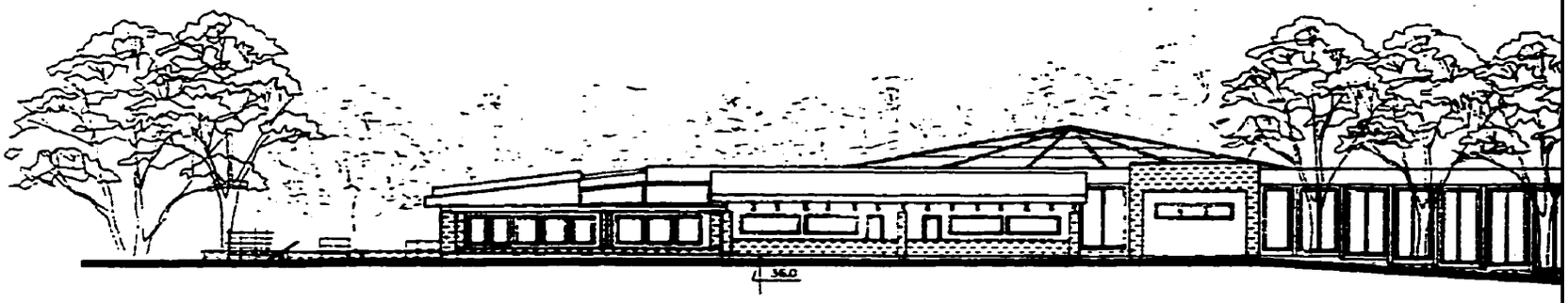

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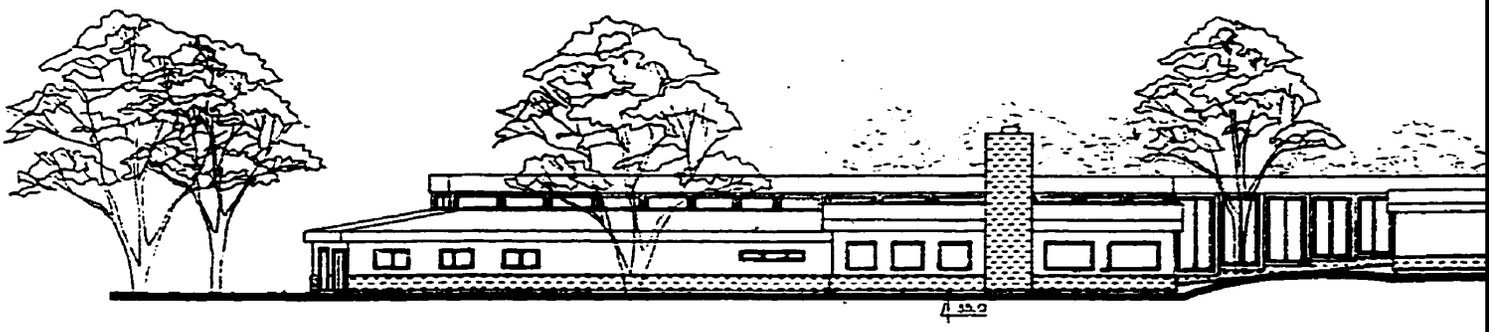
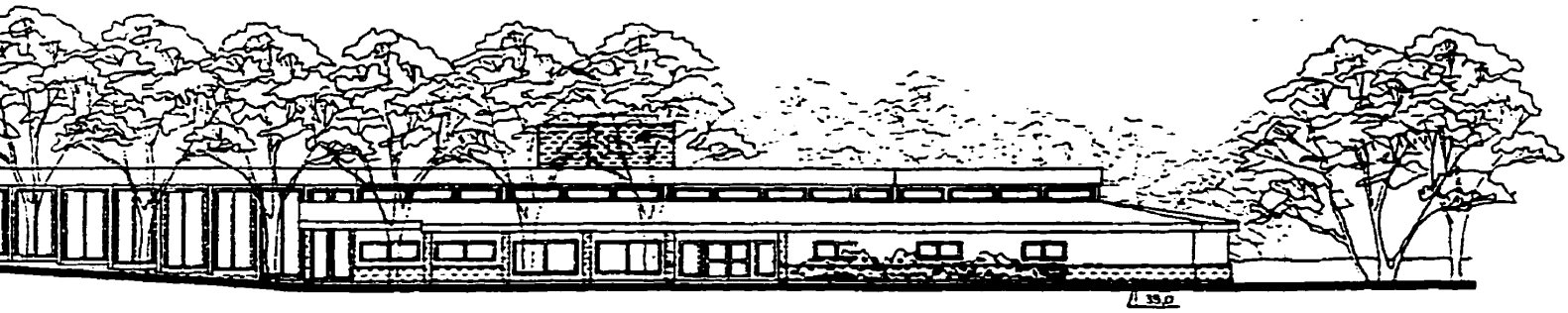
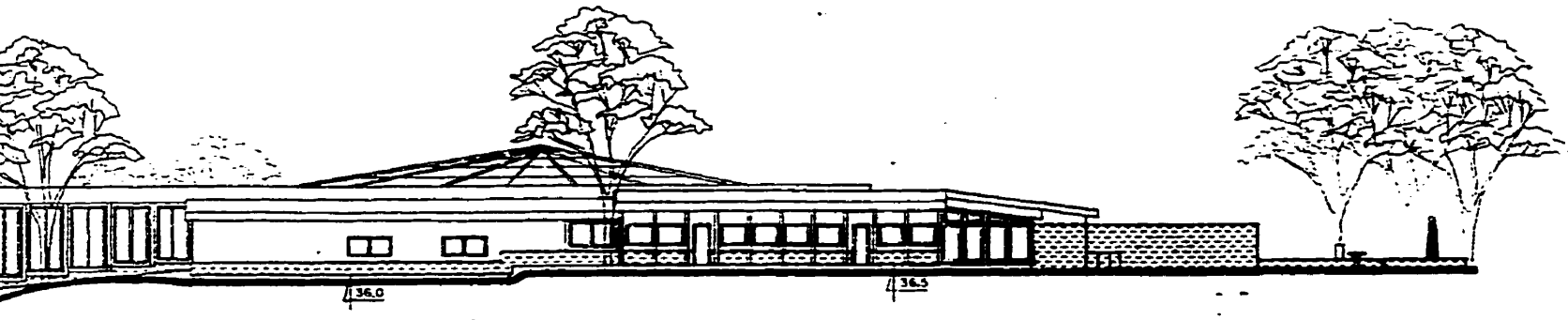
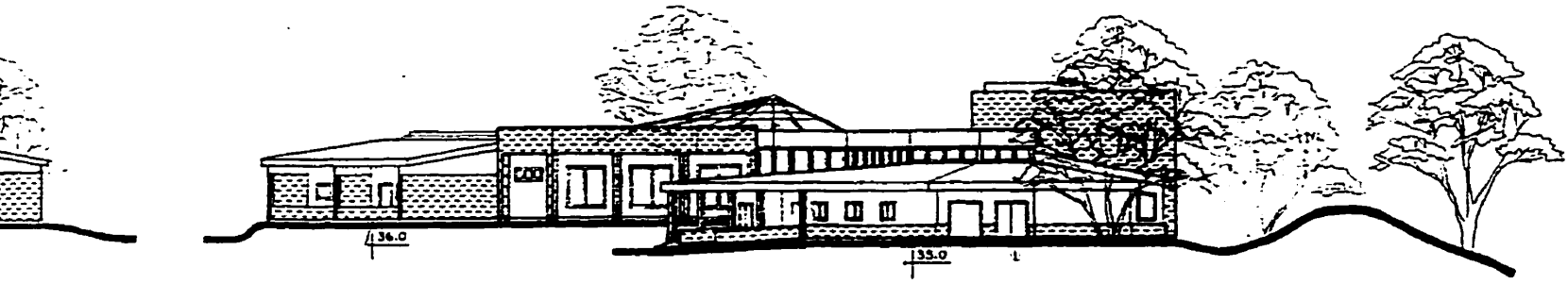


EAST ELEVATION

NORTH ELEVATION







SOUTH ELEVATION

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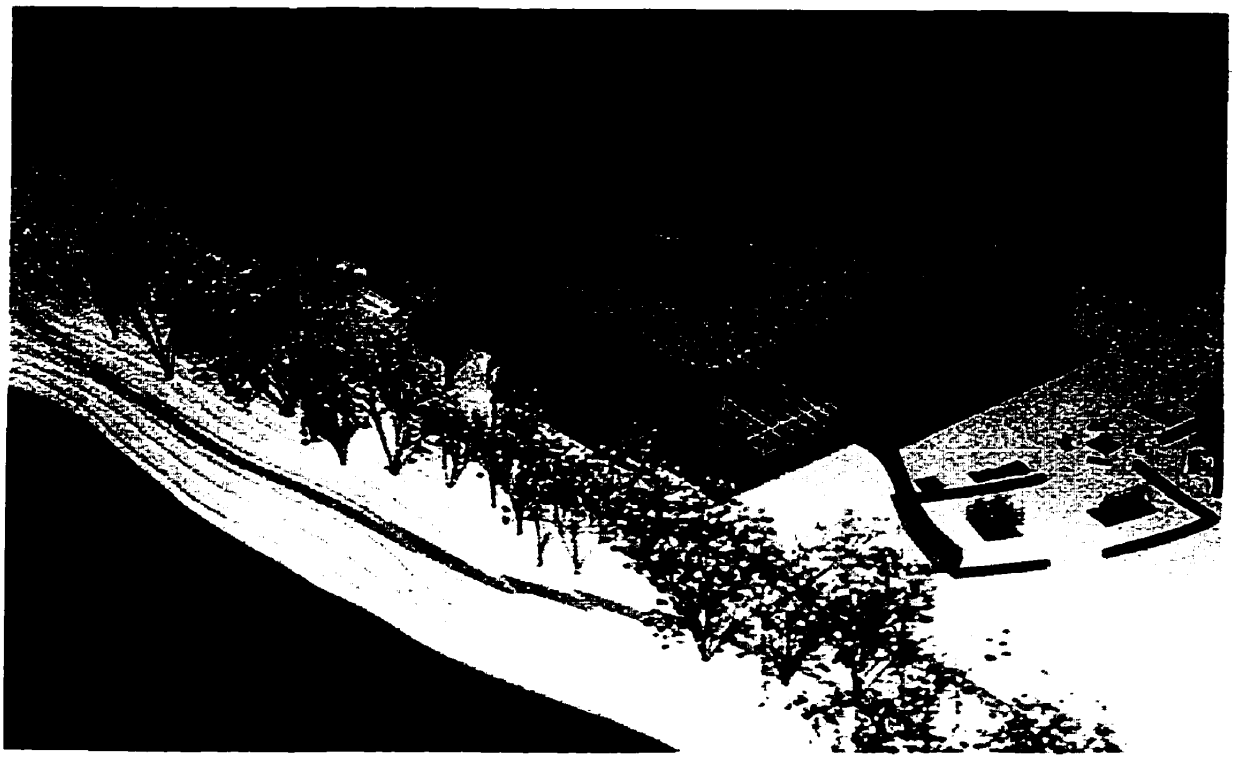
South-West Elevations

North Elevation



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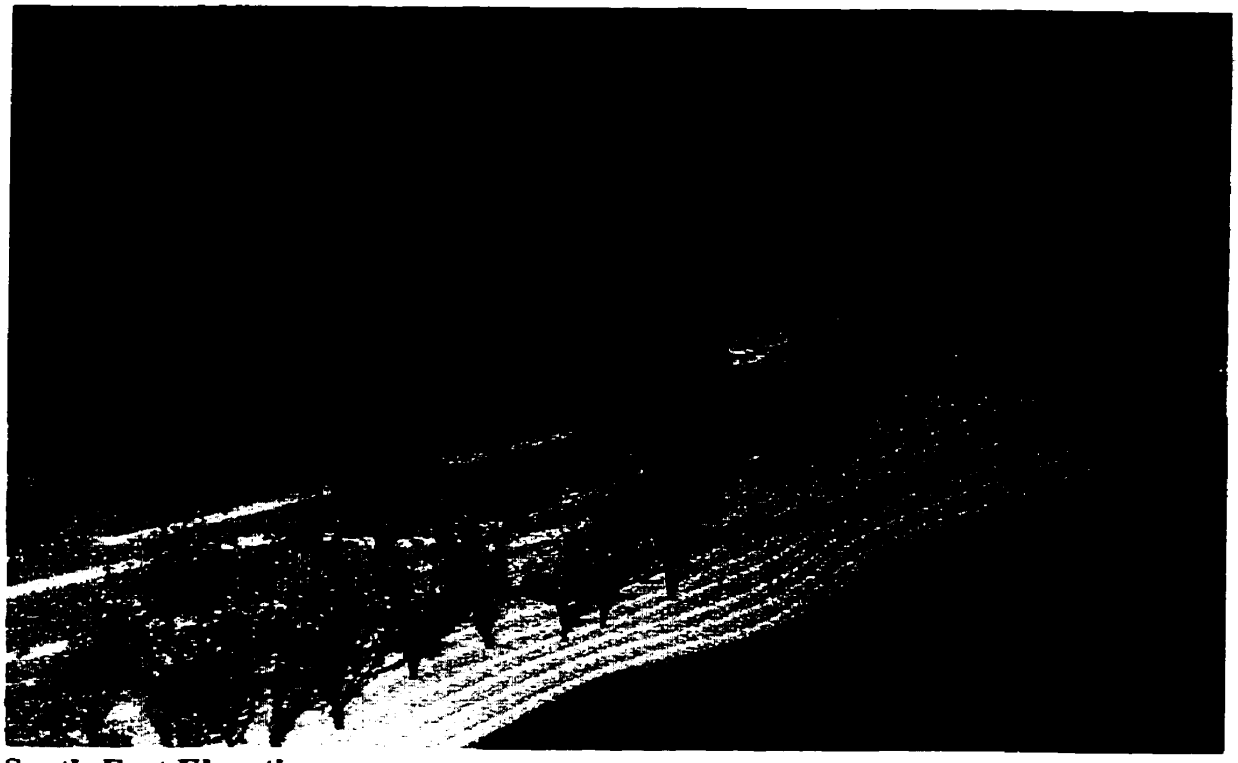

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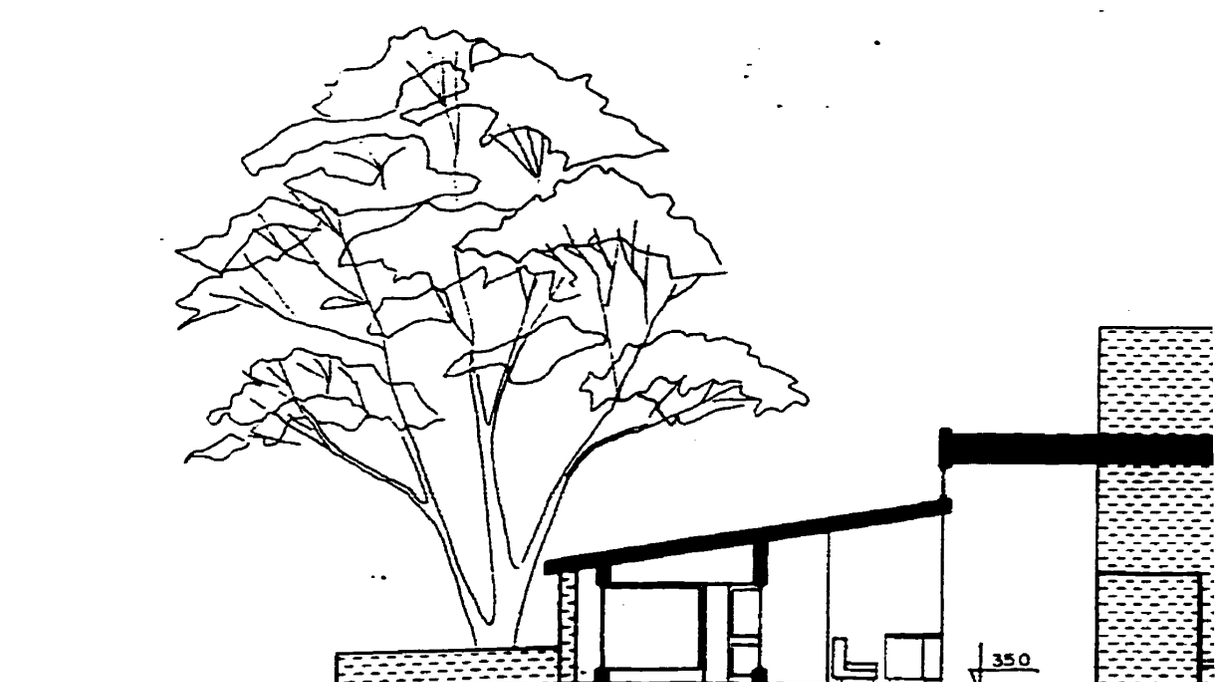

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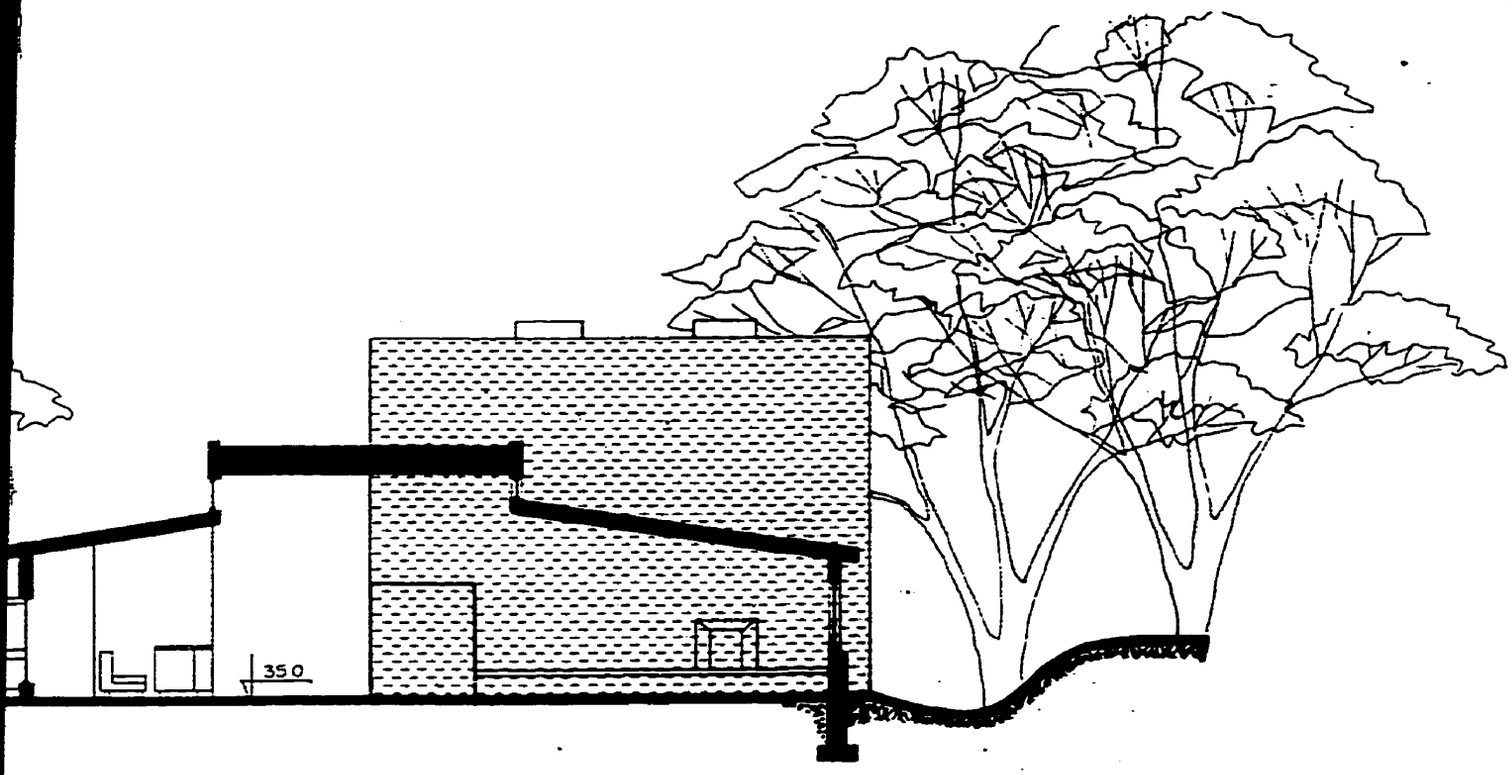

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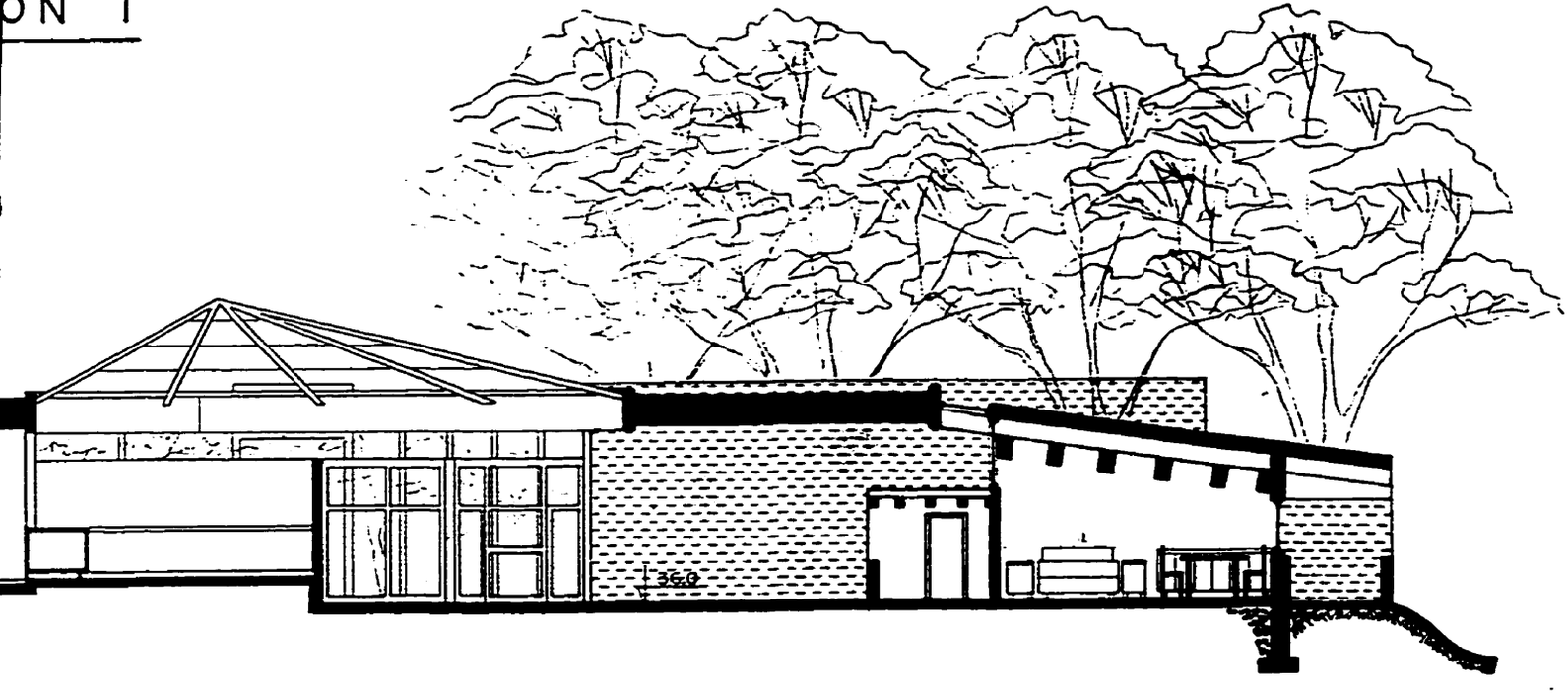

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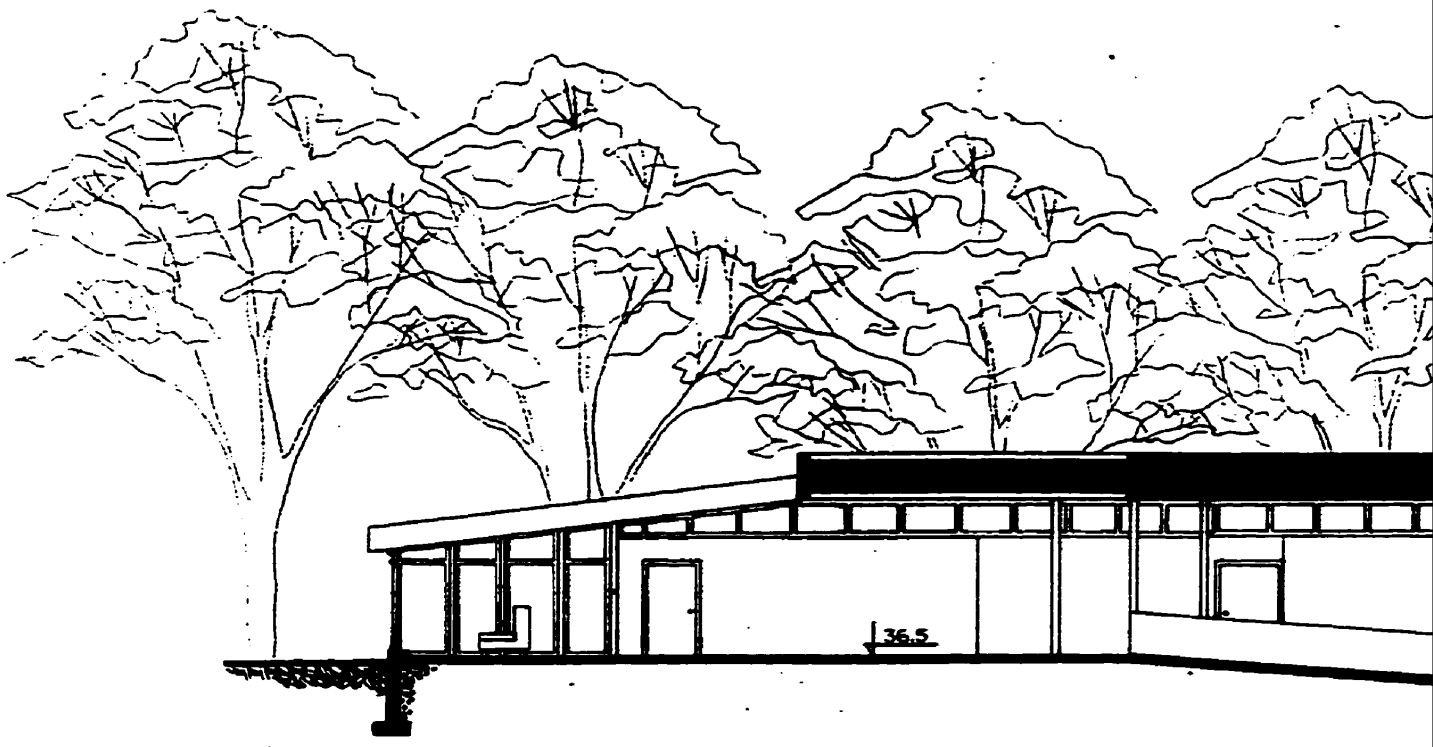

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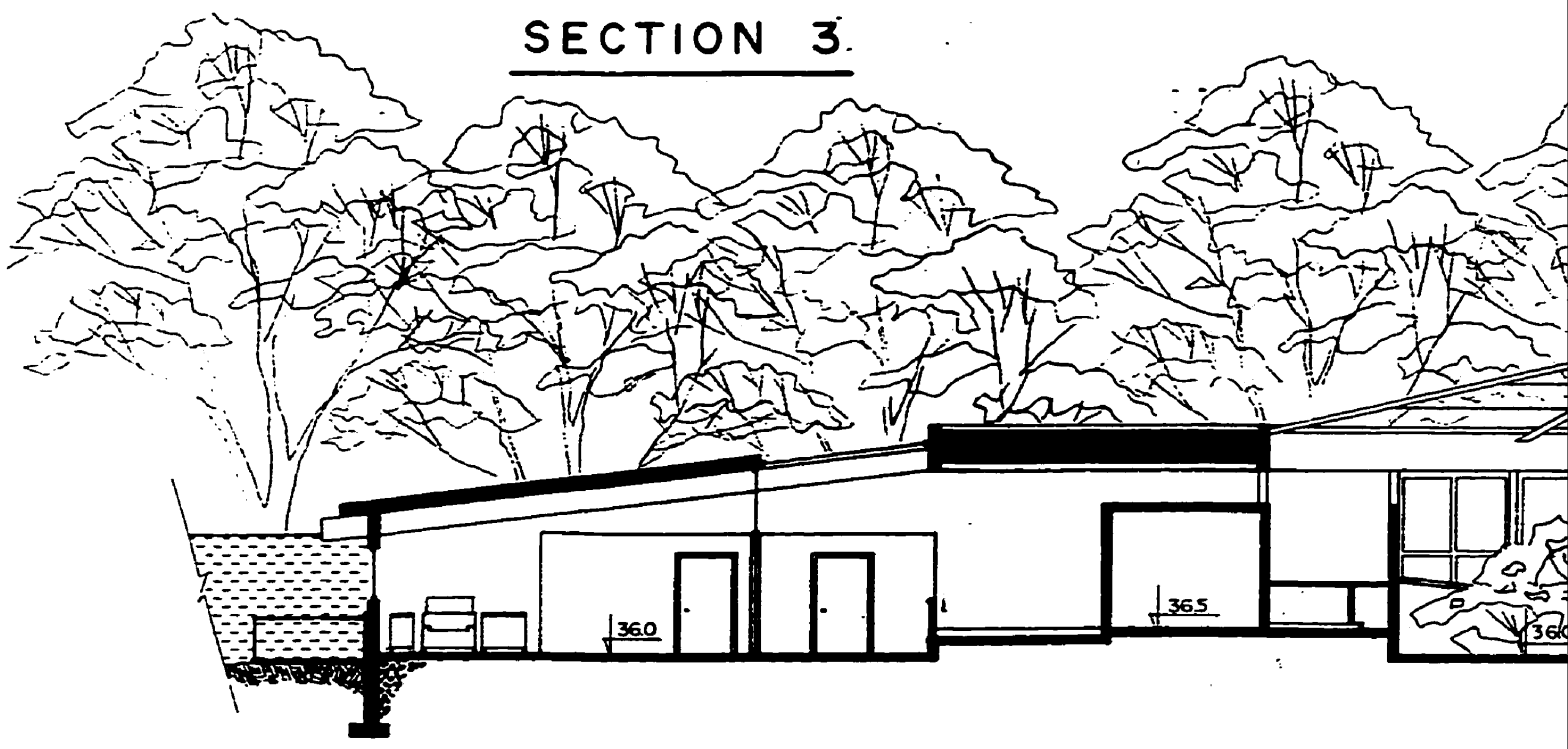

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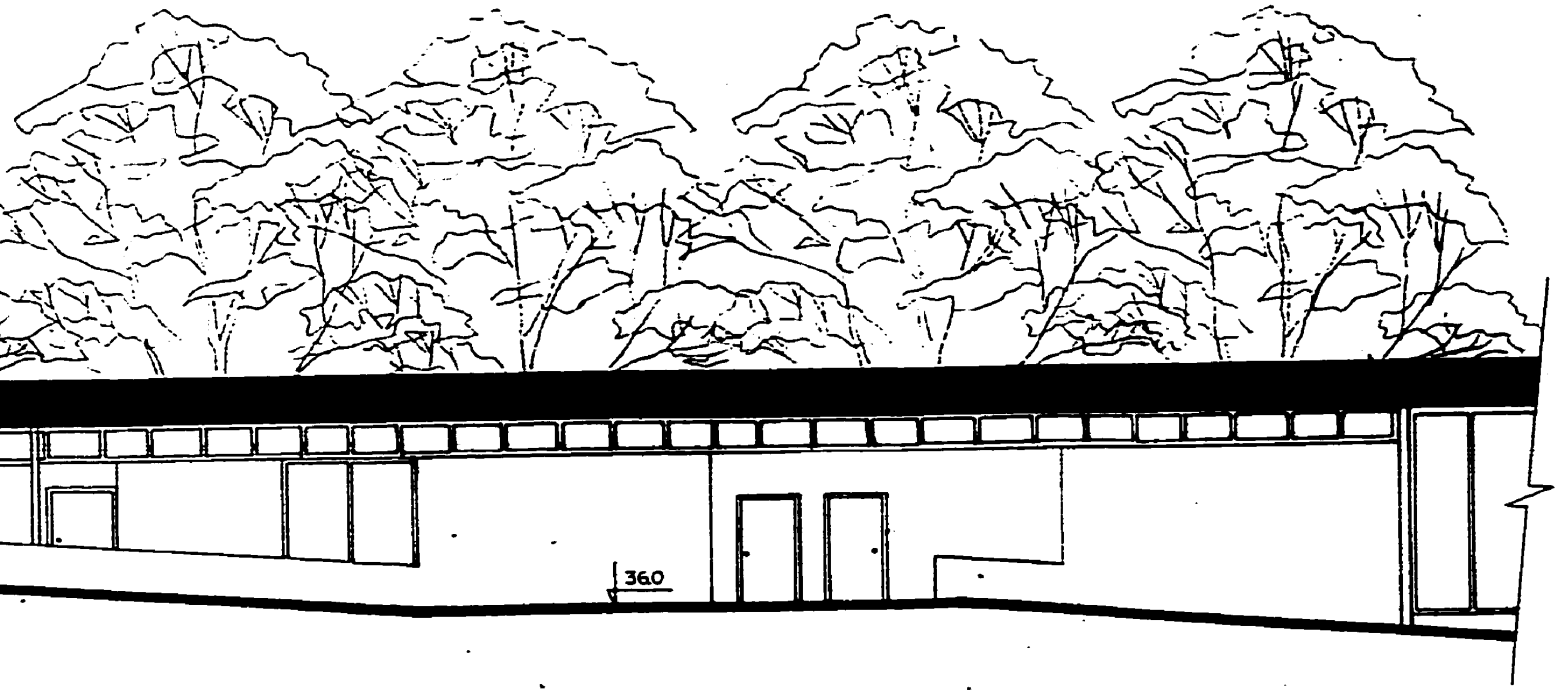

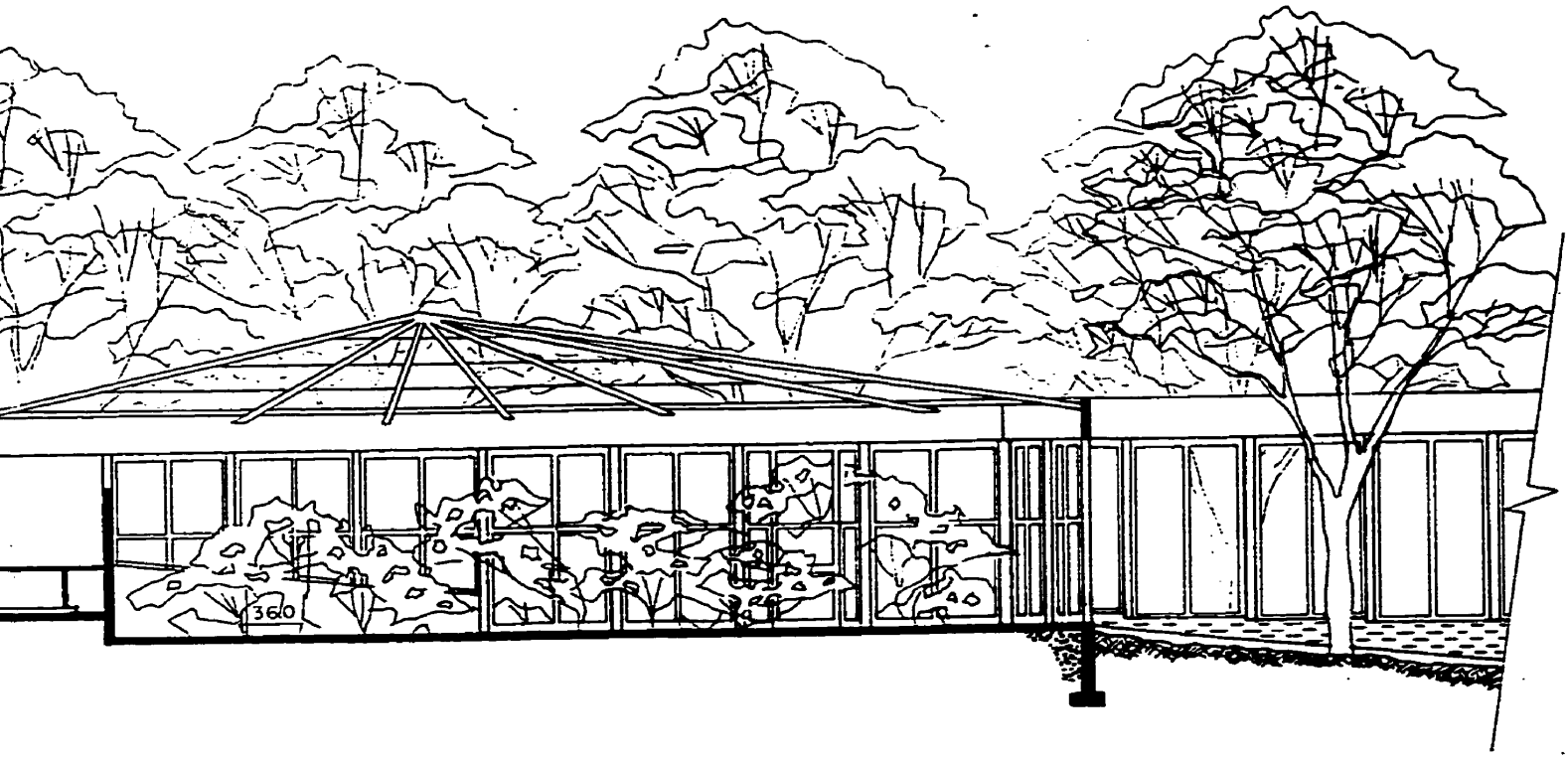

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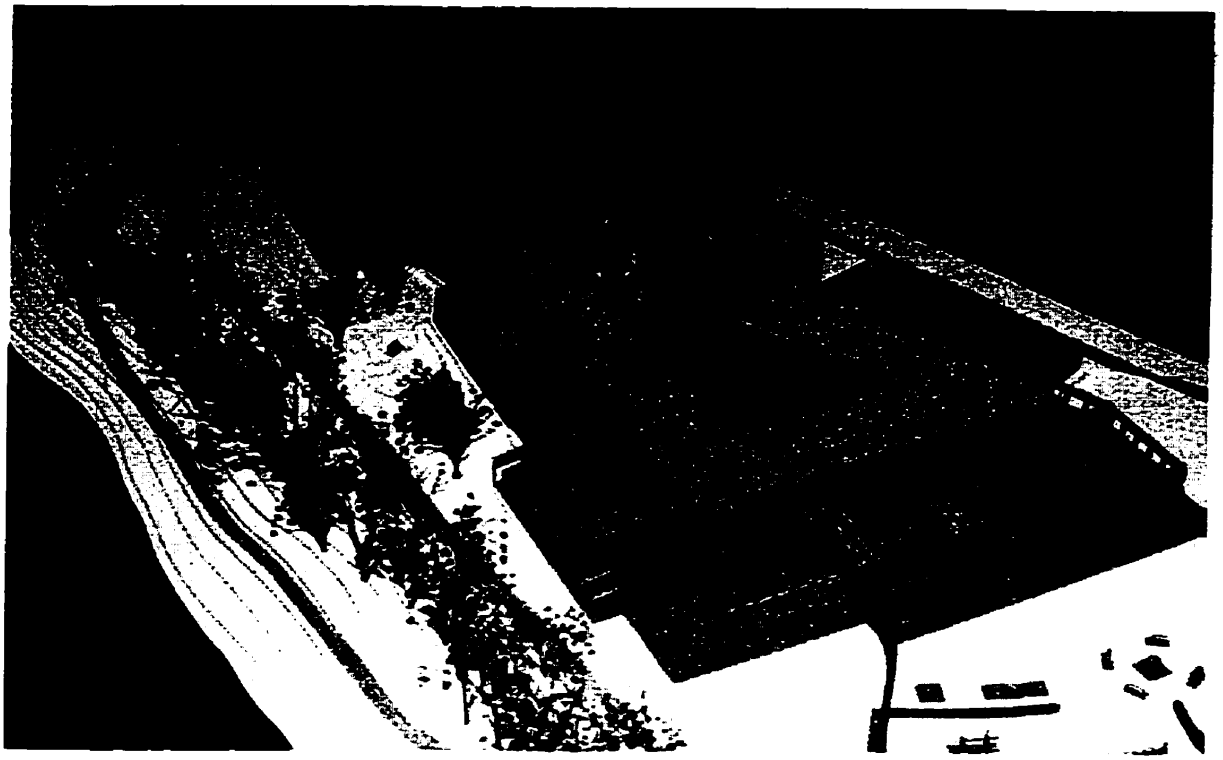

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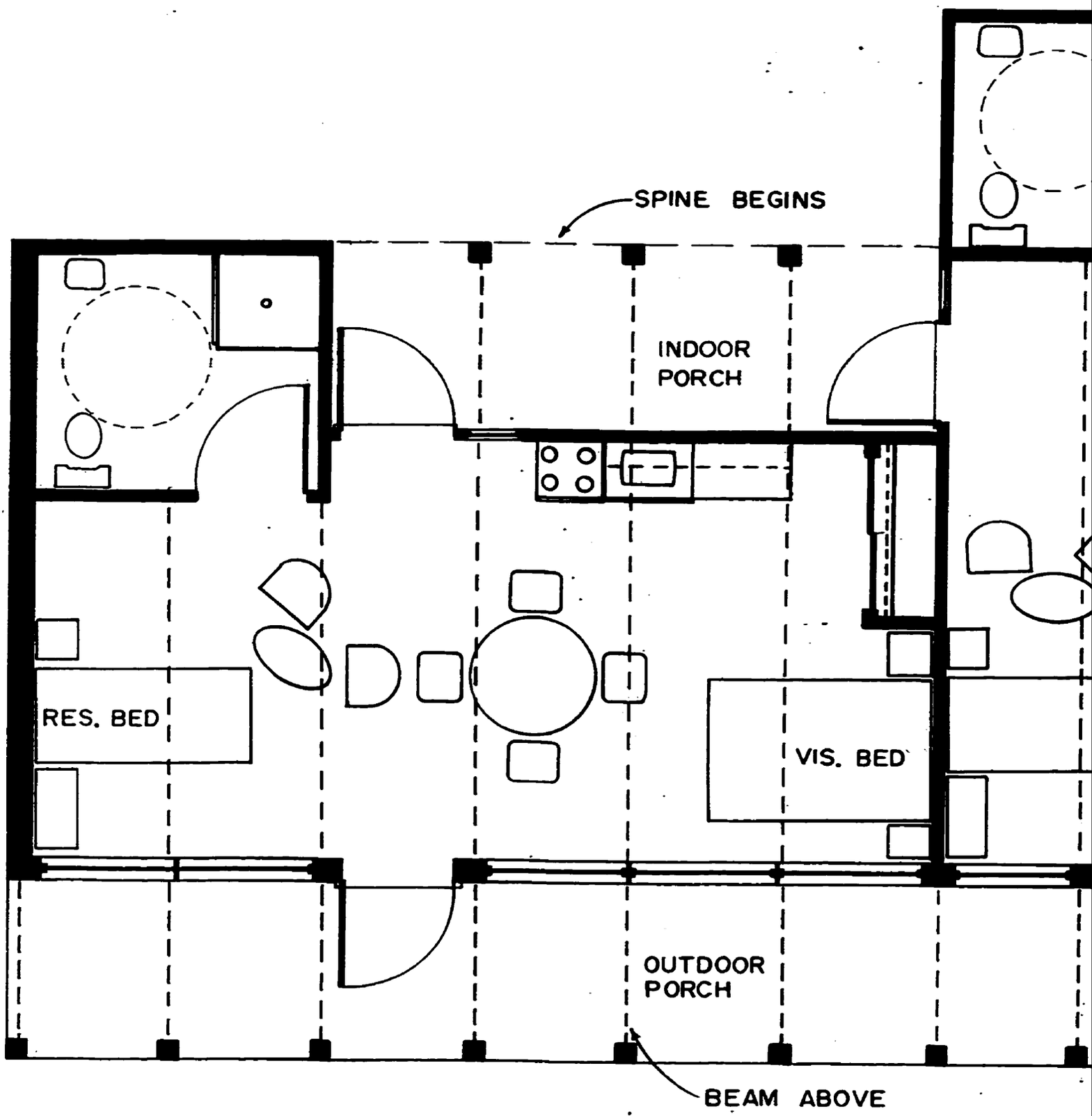
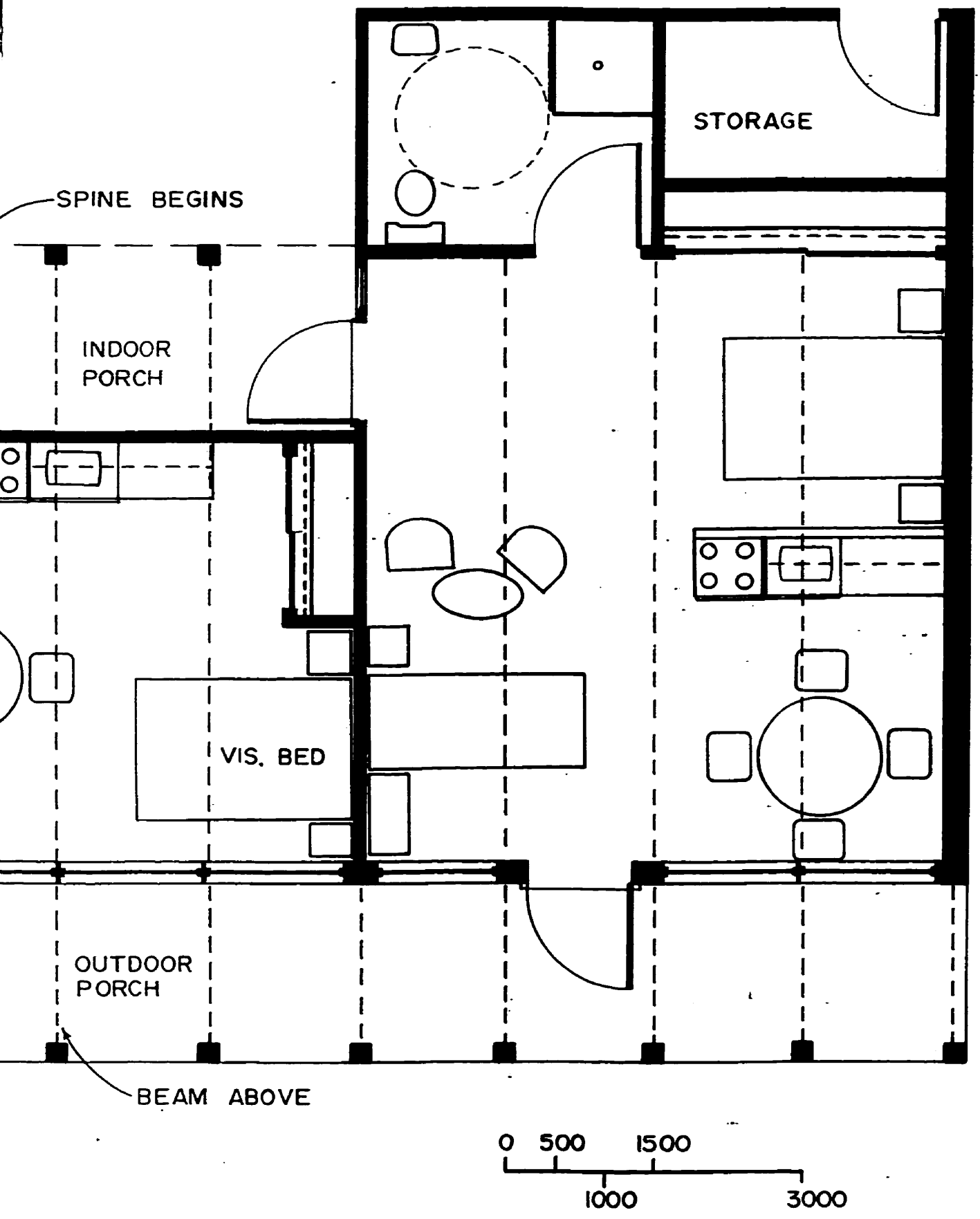


RIVER-SIDE UNITS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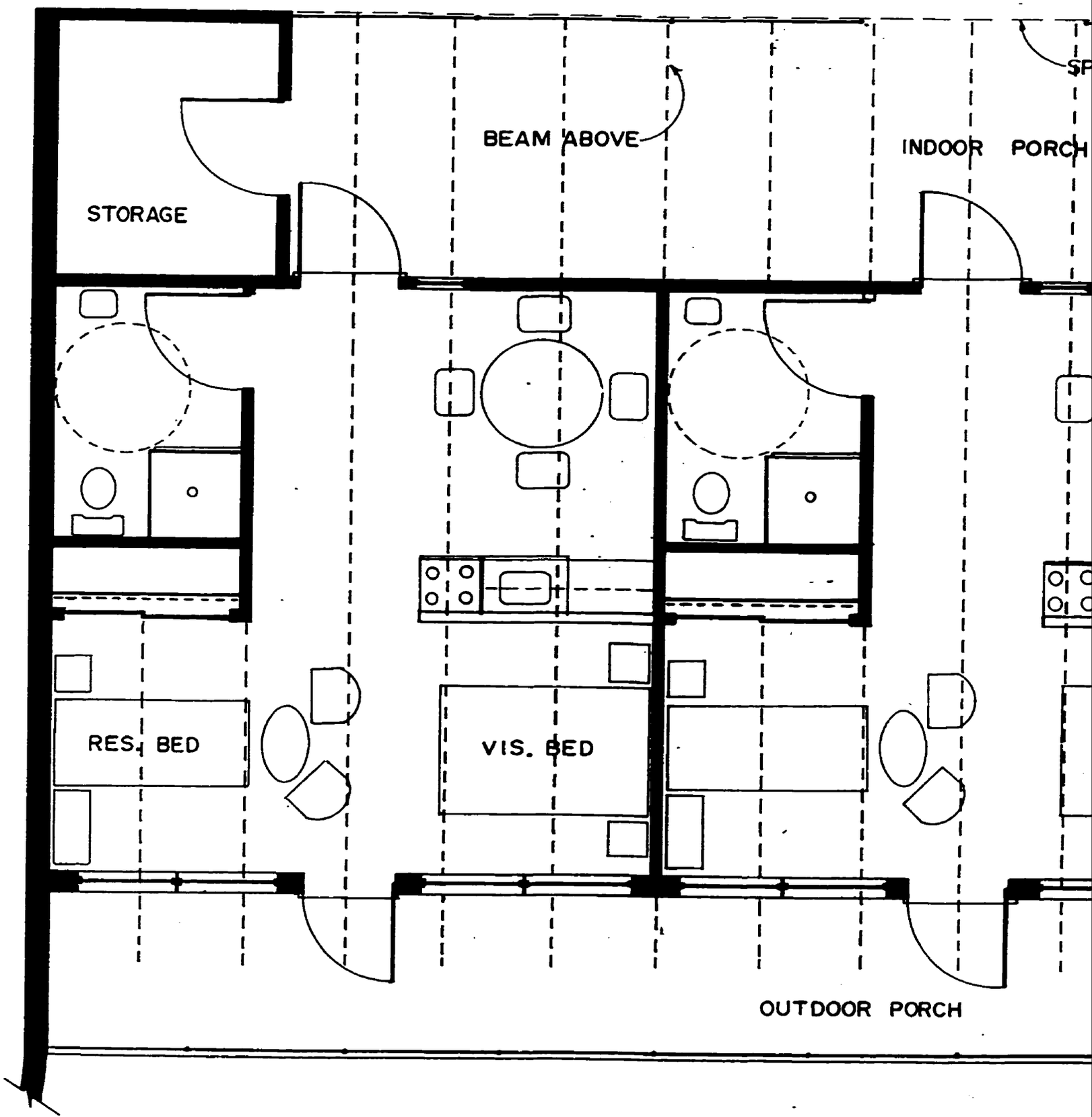

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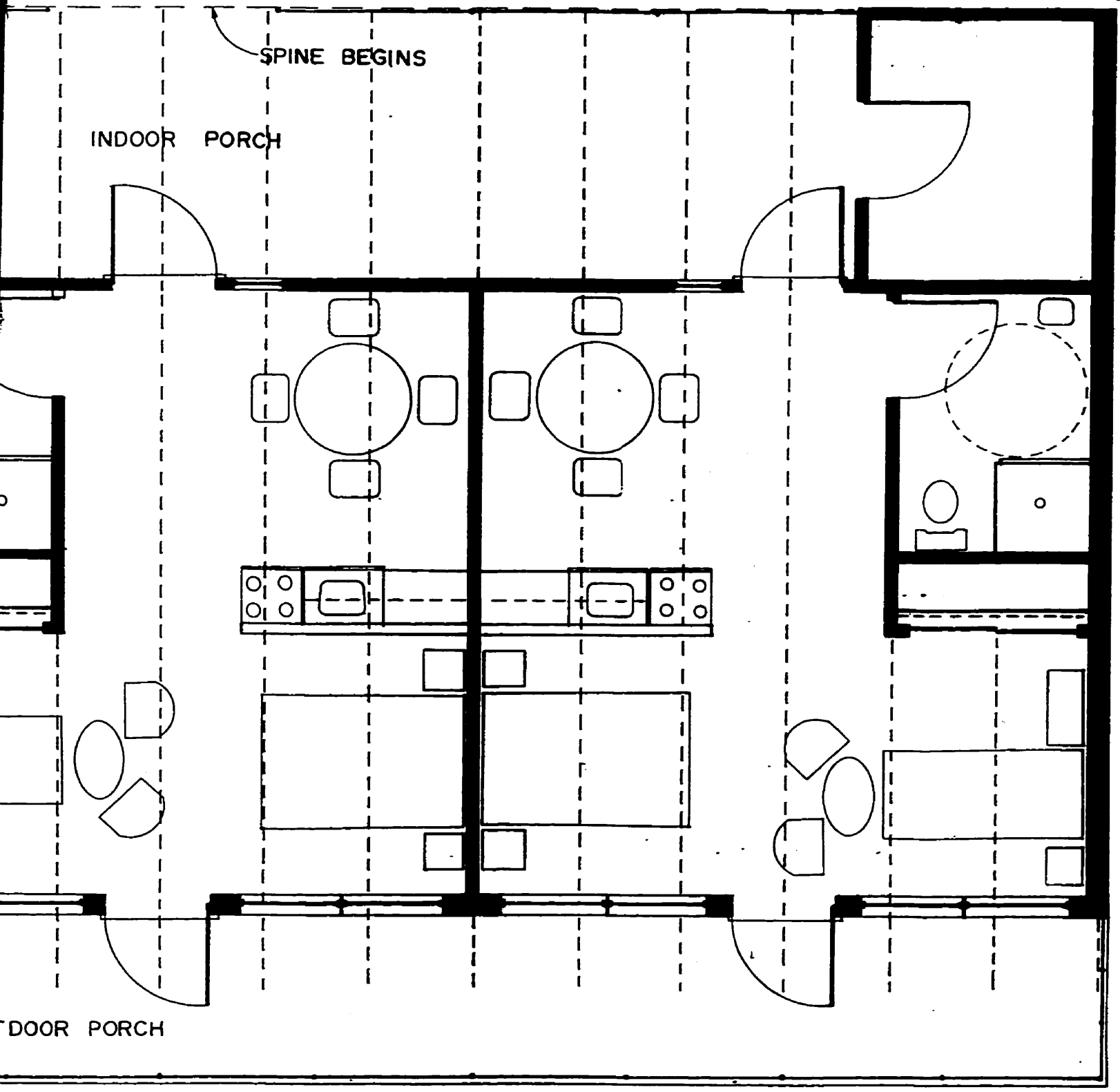

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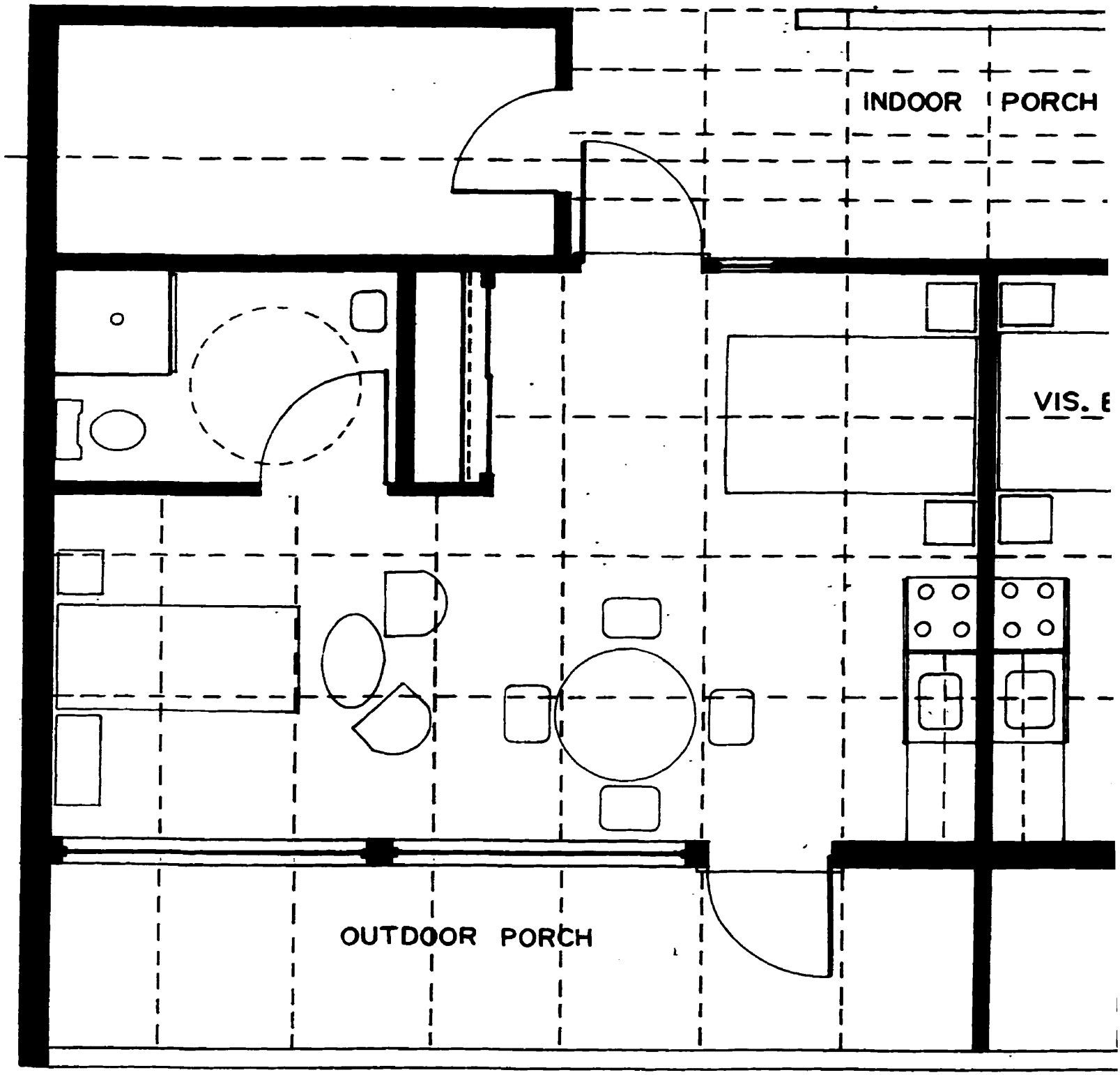
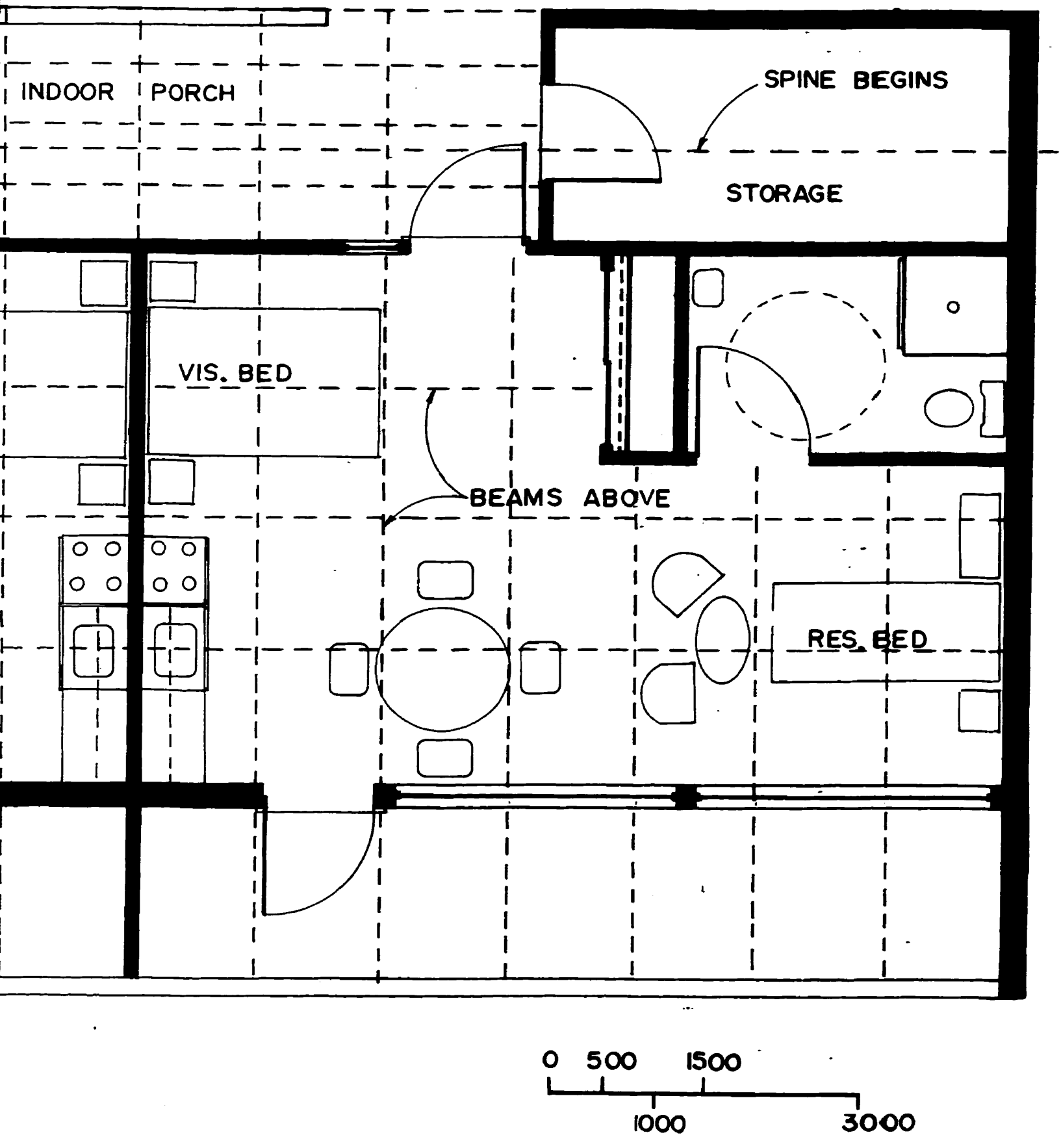


COMMUNITY UNITS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9.0 CONCLUSION: HOW SHOULD A HOSPICE BE DESIGNED?

While the palliative care received may be the most important thing in a dying person's last few weeks of life, the person's physical environment also plays a significant role and can actually make a difference in that person's life. The question has arisen as to whether a hospice should be designed as a home or as an institution, like a hospital. The author has argued, in this thesis, that the hospice should be designed as an authentic place to die, grieve and care for the dying. This means that it should not try to mimic any particular building type but, rather, allow for necessary and desirable qualities from different building types to enter into its design. The resulting architecture should not only help to foster community acceptance of the hospice, but it should improve the quality of life left to the dying as they pass from this frontier to the next. This thesis answers the question as to how a hospice should be designed.

To create a hospice environment is to create an environment that caters specifically to the needs of the dying person, but also to his or her family's needs and the needs of the caregiving staff. Knowledge of the psychological profile of each of these three user groups is important because from their needs, design goals can be established and striven for. Their needs ultimately translate into an architecture that caters to their holistic well-being, that is, a therapeutic environment that enhances their quality of life. For example, for both the dying and their families, the architecture should induce a relaxing frame of mind by promoting calmness and

serenity. As in a home, people need to feel cared for and welcome. The architecture should also promote choice and control of the environment, as well as respect for privacy, as in a home. From the hospital building type, the hospice borrows the provision that the environment enhance the working conditions of the caregiving staff. Staff working conditions can be enhanced by an architecture that not only promotes safety and efficiency, but also one that induces a positive and personable frame of mind, by promoting calmness and serenity. To do their job well, staff, too, need an environment which is as stress-free as possible. All of the above, therefore, are design goals in a hospice project which should be met by the final design.

Though these design goals are important in hospice design, this thesis has shown that what is most important is the fact that architecture can go further; it can meet the basic needs of its users, but it can also encourage the search for meaning in life and in death by creating a spiritual place in which to die, grieve and care for the dying. Architecturally, an environment for self-reflection and inner transformation can be accomplished in two major ways: by creating places where boundaries blur and by creating places of nature. Architecturally, a place where boundaries blur is a place of transparency, which means that a person can perceive him/herself as belonging to different spaces at the same time. A situation is created that allows the possibility for multiple meanings or interpretations on the part of the participant, so the same place can be experienced in different ways. The

architecture provides the mechanism that allows the person to slip into the place of the in-between, where self-reflection and inner transformation can occur within the spiritual journey to death. A place of nature, on the other hand, is a place that has life (in the form of landscape, people, or animals) integrated with the architecture. It is a place of silence, in that it does not dictate specifically how one ought to feel in the space or what one ought to think about there; everyone can relate to life in some way and can come up with their own meanings or interpretations in experiencing the space. Again, the physical environment provides the mechanism for spiritual growth.

This thesis explored the ways in which places of blurring boundaries and places of nature may be created architecturally, and this knowledge can be used in the design of any hospice. Places where boundaries blur were of two types in the design. One may perceive oneself as being part of the inside but also as part of the outside, and one may perceive oneself as being part of the public space but also as part of the private. Places of nature were also of two types in the design, in that landscape and architecture were integrated, as were people and architecture. From the architectural precedent, Frank Lloyd Wright's Taliesin West, the following were used in the design to bring life to the poetic idea: transparency, orientation, integration with the landscape, materials, movement, variety, and geometry. However, with the operation of the poetic idea must also come the integration of the chosen site and the programmatic elements into the design at every level: the plan,

the elevations and tectonics, and the sections. Furthermore, in this thesis, Michael Benedikt's philosophy of architecture also influenced the design outcome. According to Benedikt's view, a hospice should be designed as a "real" building, particularly with a strong "emptiness" component. This means that the architecture should provide the potential for self-reflection and inner transformation and should allow its inhabitants to engage the building with their whole being (mind, body and soul).

Rossman gives a brief discussion about the radical hospice environment of the future, which he claims will use either psychedelic drugs and/or laser projectors and electronic sound panels to provide the dying with a tailor-made dying experience, an experience that could, for example, "...transform a dying patient's wall into a splashing waterfall or the roaring waves of the ocean..." (Rossman, p. 137). Although completely unauthentic, this could be the hospice of the future. However, for the present generation of the terminally ill, it falls to architecture to create that special place to die. To be completely successful, a hospice cannot be a re-decorated building or a Jager home; it must be architecturally designed with its specific purpose in mind.

10.0 APPENDICES

10.1 LOCAL HOSPICE FACILITIES

Calgary's three architecturally distinct hospice buildings, namely, Rosedale Hospice, Agape Manor, and Beswick House, were investigated by the author, and the following is an account of the findings of her investigation. Beginning with the exterior of the facilities and the image they portray to the community, the situation at Rosedale Hospice serves as a prime example of community dissatisfaction and opposition. The Rosedale building was built in 1986 as home for the Basilian Fathers (priests), who lived there for a while and then donated the building to the Hospice Calgary organization. The building is large, 1,115 square metres, and sits on a quiet, well-treed cul-de-sac in the Rosedale community. It is a beautiful, domestic type of structure, in that it appears smaller in scale than an institutional facility and its form appears welcoming to humans because of its warm materials and unintimidating design (See Figure 31). After great difficulty in dealing with

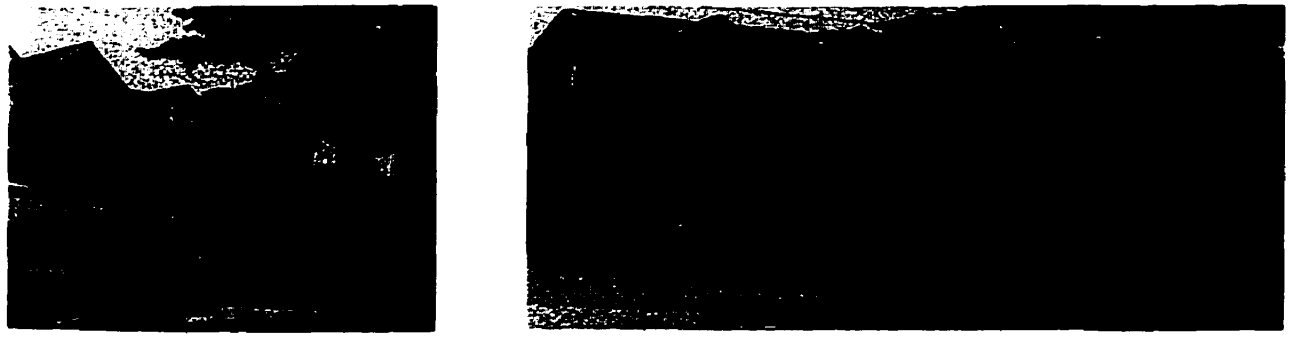

Figure 31 A: Rosedale Hospice

the community, the building was opened as a hospice for dying cancer residents in 1996. According to the tour guide, Shirley Gordon, the average length of stay for residents at

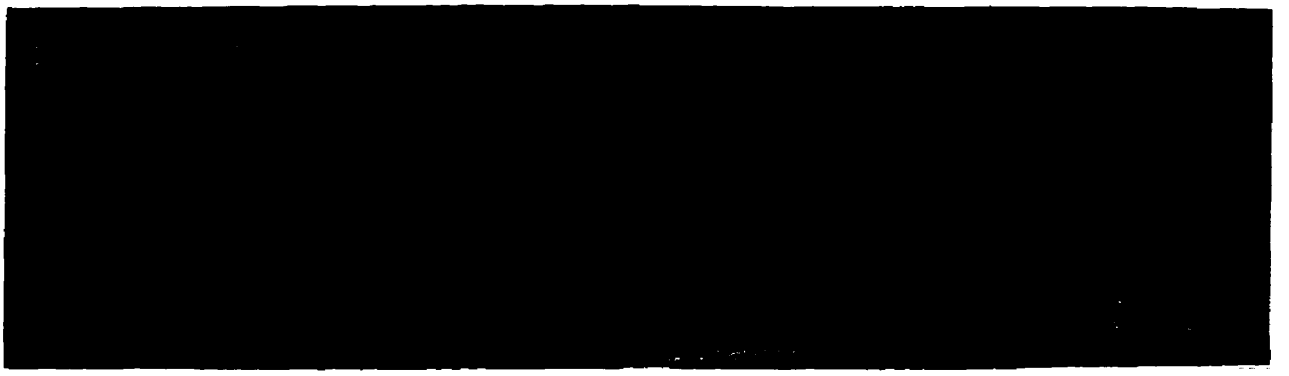

Figure 31 B: Rosedale Hospice Back

Rosedale is around two weeks. Regardless of the appearance of the facade, the stigma associated with death, dying and disease was almost too much for the Rosedale community to bear. To receive its development permit, Rosedale had to agree never to admit AIDS patients into its facility and to hold its business meetings and all counselling sessions at Hospice Calgary's 4th Avenue south-west location. Furthermore, Rosedale was forced to build a tall wall around its premises and had to agree to deliver all residents and dead bodies through a rear entrance, hidden from the public's view. Although Rosedale Hospice, with its beautiful domestic exterior, tall evergreen trees and well-kept yard, fits architecturally amongst its residential neighbors, to the community's dissatisfaction, the building serves as a reminder that death and the dying are among them. In the case of Rosedale, therefore, the community was completely against having a hospice located within its boundaries, regardless of its appearance, and this suggests that even before design is considered in a new project, community acceptance of the facility must be given strong consideration.

Using the domestic type of architecture described above, rather than a medical or

institutional form, does create a more human type of building. An extremely obvious example of this, discovered by the author on tour, is the difference between the Bethany Care Nursing Home in Calgary and the newer Bethany in Airdrie (See Figure 32). The

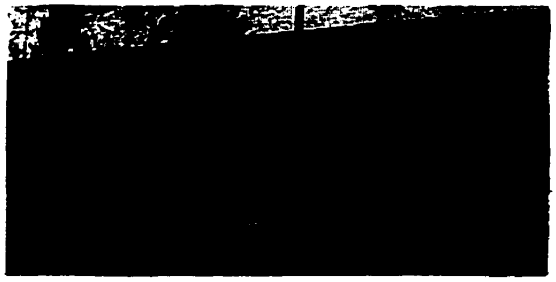

Figure 32A: Bethany Care Centre Calgary

Figure 32 B: Bethany Care Centre Airdrie

Calgary facility, appearing very institutional, stands several stories tall, as one big mass, with a harsh, smooth block facade, and strips of windows running the length of the building. In comparison, the newer Bethany in Airdrie appears more welcoming and less intimidating, in that its form consists of clusters of smaller scaled units, and its materials (such as its red roof tiles, curved stucco recesses, and band of brick along its base) are used in a carefully articulated combination that in no way make the building appear forboding. Its windows are also much larger and vary in length. Similarly, copying its neighbors in residential style helped Beswick House to gain acceptance within the Forest Lawn Community (See Figure 33). The site was purchased in 1989 by the S.H.A.R.P.

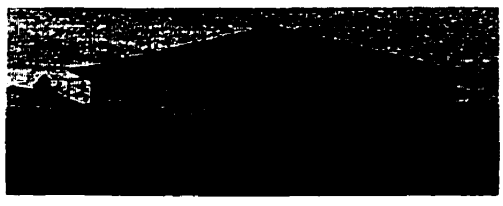

Figure 33: Beswick House Front

Beswick House Back

Foundation (AIDS housing), and the building was erected as a hospice in 1992.

The Beswick hospice admits only AIDS patients who are palliative and tend to be homosexual, drug ausers, or prostitutes. As in the Rosedale case, the opening of Beswick House was protested by the community even though the building, a peach stucco duplex, fit in amongst its residential neighbors. Because the neighborhood is somewhat transient, it was easier to open Beswick House than it was to open Rosedale. Nevertheless, Beswick House also was required to build a tall wall around its premises and set up its visitors' parking, drop-off and pick-up at the rear of the building. In addition, Beswick House was required to purchase its own dumpster (with a lock) for its wastes, which are put into sealed containers before leaving the building. Apparently the hospice has not had any further problems with the community since its opening, and because it is "...situated in a thriving community, the neighborhood itself becomes a reminder to the hospice patients that life goes on about them and that they need not be separated from it until death" (Carey, p. 29).

Agape Manor, owned by the Salvation Army, was originally a senior citizens' lodge and was renovated as a hospice in 1993. It admits any palliative patients and is, therefore, not restricted to cancer or AIDS patients. It is a very large red brick building situated across from Riley Park and adjacent to a pediatric clinic (See Figure 34). There is a nearby

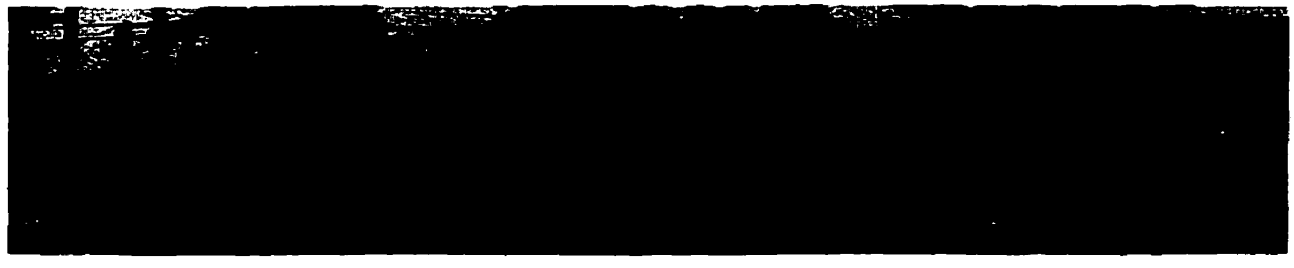

Figure 34: Agape Manor

church and a school on its street. The community did not raise objections to converting the building into a hospice. The author's tour guide suggested that this was probably because the community had already accepted the seniors' complex into the community, and since no changes would be made to its exterior appearance, changing the nature of the building was not seen as a problem. Interestingly, this is not to say that the community is not a strong one, as the tour guide indicated that the community would not allow the Salvation Army to develop an alcoholism centre next door to the hospice. Although Agape's overall image appears very institutional, with its huge mass and strung out, box-like structure, its entrance with its heavy wooden and glass doors, nevertheless, appears very welcoming. Thus, as precedents, the exterior images of the Calgary hospices suggest that not only is it important to architecturally blend a hospice into its surrounding community (see 6.3 Development Constraints), but the community itself, as a site for the hospice, must be carefully considered to allow for social acceptance of the hospice.

All three of Calgary's hospices attempt to make the bedroom appear pleasantly homelike, as this is where residents spend most of their time. Rosedale Hospice has seven bedrooms, Agape Manor has 13, and Beswick House has nine. All three have single resident rooms only which, as the author believes, actually improve the residents' quality of life, in that it gives them the choice whether or not to leave their rooms for socialization and participation. Nevertheless, the author feels that all facilities could have had larger bedrooms. Movement within these spaces is definitely limited because of the small area and the big furniture cramped into the spaces. While Rosedale's bedrooms are

all very similar in arrangement, Agape has some variety by providing two basic private room designs (See Figure 35). Its larger room design has an attached family lounge

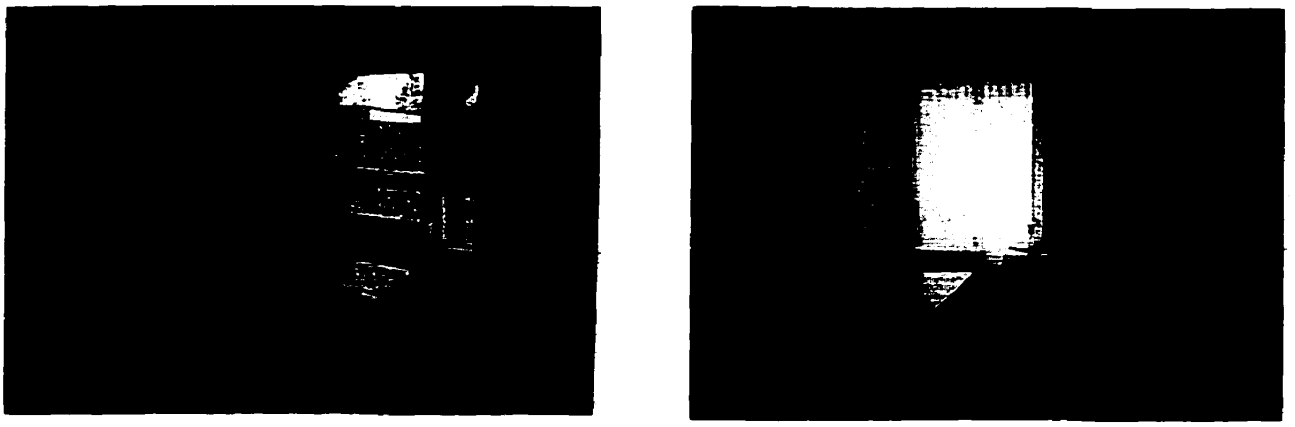

Figure 35A: Agape's Smaller Bedroom Design

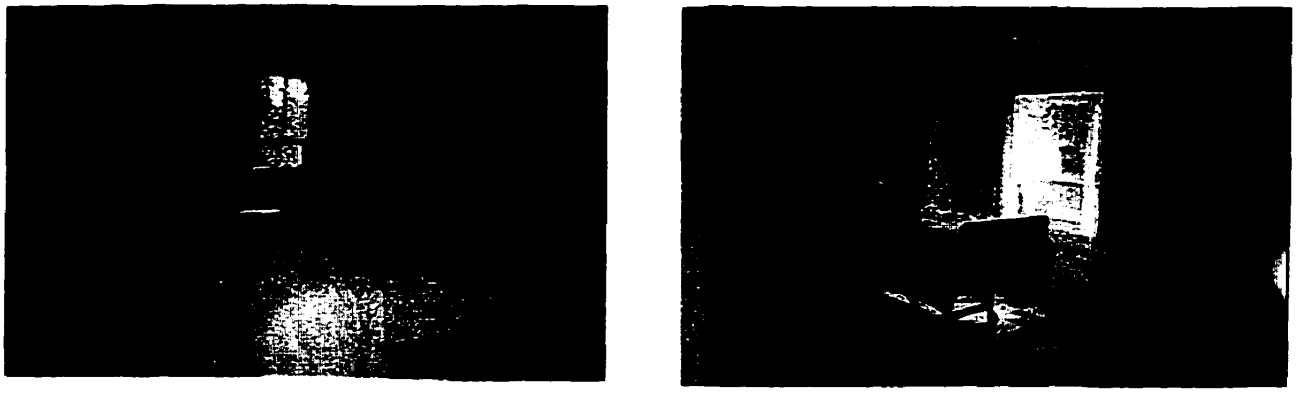

Figure 35B: Agape's Larger Bedroom Design

area with chairs and sofas, which increases the activity options within the space. Beswick House, being a split-level, has some bedrooms downstairs and some upstairs. Although the rooms themselves do not vary much in terms of appearance, Beswick's lower level bedrooms are intended for the more "able" residents, since they require use of a lift in order to get to them. Two of Beswick's upper, rear-facing bedrooms have balconies, and these "special" rooms are kept for the completely bed-ridden, very ill residents. Therefore,

some attempt was made to bring the outside in to the less mobile residents. Neither Rosedale nor Agape have balconies or patios directly adjacent to their bedrooms.

Although hospital beds are used in the bedrooms of all three of the hospices, the beds have printed sheets and nice quilts. All of the hospices provide bedside tables, shelves of some sort, sitting chairs and a closet. All use only incandescent lighting in their bedrooms. Furthermore, all have private telephone lines in the bedrooms. Agape has given each room a name, rather than just a number; for example, the "thistle room", which de-institutionalizes the bedroom even more. Rosedale and Beswick House have carpet, rather than vinyl tiles, on the floor, which adds to the homelike quality of the bedroom. All three hospices allow residents to personalize their rooms.

The author found that all three of the Calgary hospices have bathrooms adjacent to the bedrooms. Beswick House has full bathrooms across from the bedrooms on the lower floor and half-baths upstairs, with one centrally located shower room. Rosedale Hospice provides each bedroom with a full bath (with a tub), although the author was told the most residents are bathed in the special bathing room. Agape has only half-baths adjacent to the bedrooms, with a special bathing room elsewhere. This special bathing room, which both Agape and Rosedale have, has a lift device connected to the bath tub which lowers residents, who are unable to take their own baths, into the water (See Figure 36). Such a contraption could appear very intimidating and is for some residents. However, the design of the room itself can do much for easing any stress associated with bathing in such a machine. Of all the bathrooms and special bathing rooms seen by the

Figure 36: Special Bathing Room at Rosedale

Figure 37: Special Bathing Room at the Bethany in Airdrie

author on tour, Airdrie's Bethany Care Nursing Home, by far, has the "friendliest" tub room (See Figure 37). The room appears intimate and safe with its homelike decor and natural light.

In terms of views to the outside, Agape has large openable windows in its bedrooms. Rosedale's bedrooom windows are also fairly large but the openable portion of the window is out of the resident's reach. Someone has to come in (with a stick) to open the window if the resident so desires. Similarly, Beswick's basement bedrooom windows look like little cell windows. They are located too high above the ground for a view but, nevertheless, do let light into the bedrooms. One of the hospice tour guides mentioned that residents want to feel as though they are still a part of the outside world, and this desire to participate in the goings-on of the outside world was observed first hand by the author at the Chinook Care Centre. The nursing home residents congregate in the sun-room facing Glenmore Trail just to watch the traffic go by. Without the windows that connect the residents to the world outside, this room would have little to offer the residents with huge scale, shiny surfaces and drab institutional decor (See Figure 38). On the other hand, the Chinook Care Centre is also an example of poorly planned views, in that its dining room faces the parking lot. In terms of "views" within the hospices, all have diversional areas outside

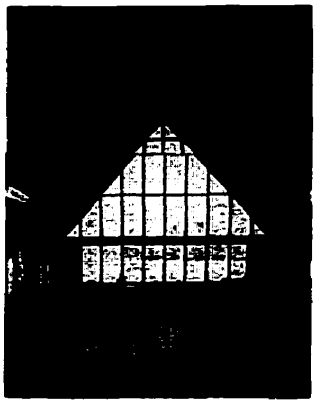

Figure 38: Chinook Care Centre's Sun-Room

the bedrooms to which residents could "travel".

With respect to corridors, transition spaces and circulation, neither Agape nor Rosedale is ideally arranged. Agape, having been a seniors' lodge, has long double-loaded corridors, from which one enters the rooms directly, without transition spaces. Elevators are used for vertical circulation. Rosedale, similarly, has long halls with rooms directly adjacent to these and, therefore, has no transition spaces. Two sets of elevators, a circular stair and a back stair are used for vertical circulation. Even Beswick House, the smallest hospice in terms of size, has an upstairs hall and a downstairs hall, along which the rooms are strung. In terms of its vertical circulation, it has two sets of stairs and a handicap lift.

Agape Manor has many small, "quiet" areas scattered throughout its facility for introspection, private conversations or family-only meetings, and some of these even have attached outdoor spaces (See Figure 39 ,40 and 41). Furthermore, some of these small

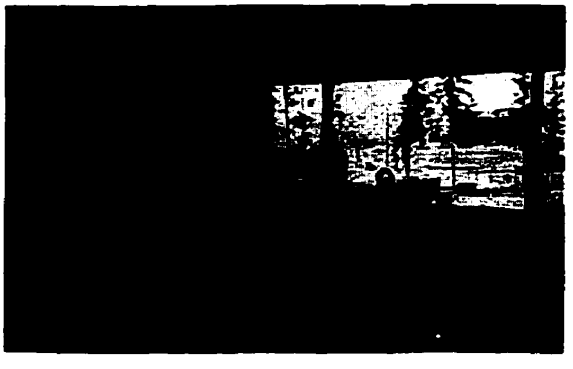

Figure 39: One of Agape's Smaller Lounges

Figure 40: One of Agape's Smaller Lounges

Figure 41: Agape's Medium-sized Lounge

lounges can be converted into over-night accommodation with pull-out beds. Rosedale, similarly, has small lounges with a variety of different diversions. There is the "Fire-side Room" (see Figure 42), the "Library" (see Figure 43), a lounge with a bird cage and exit

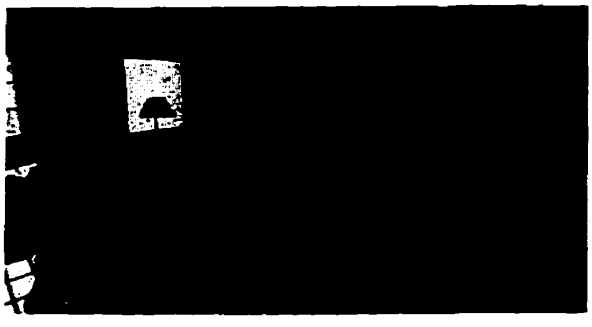

Figure 42: Rosedale's "Fire-side Room"

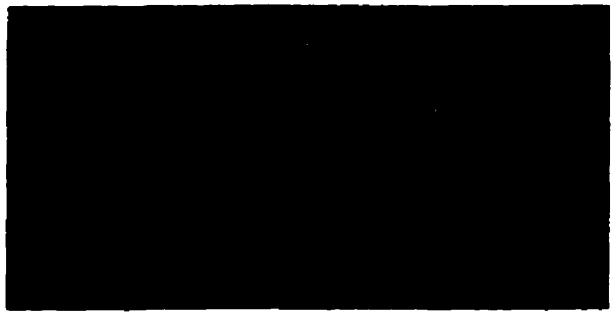

Figure 43: Rosedale's "Library"

to an outdoor space (see Figure 44), and other little lounge areas with friendly light colored

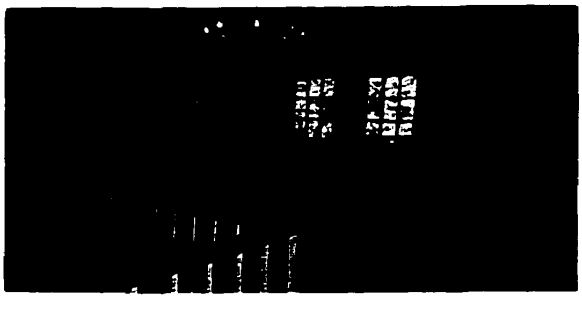

Figure 45: Rosedale's Bird Lounge

Figure 46: Rosedale's Wicker Lounge

furniture (see Figure 45). A children's room filled with games and toys is also provided at Rosedale (See Figure 46). As discussed, children are special "features" in a hospice, as they represent growth and continuity of life. Rosedale, in fact, even provides a lounge

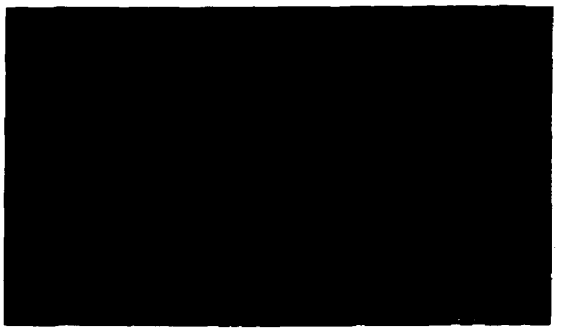

Figure 46: Rosedale's Children's Room

Figure 47: Rosedale's Overnight Visitors' Room

just for teens, but the hospice found that it was rarely used, since teens tend to either be glued to the bedside or are in and out of the hospice as quickly as possible. In addition, Rosedale has a special room set aside for family over-night accommodation with an adjacent bathroom (See Figure 47). Beswick House only has two lounge areas, one upstairs (for smokers) and one downstairs (for non-smokers). During the tour through Beswick House, the upstairs lounge was occupied by the residents, who were watching T.V. as they waited for breakfast. As with Rosedale, Beswick House also has a room set aside in the basement for family over-night accommodation. Therefore, in terms of small gathering places for residents and visitors, all three of Calgary's hospices are very accommodating. As discussed, these small "break out" spaces improve the well-being of the hospice users.

Of the three Calgary hospices visited, the author found that Agape Manor provides the largest communal gathering space (See Figure 48) . It has big, beautiful windows with blinds, clusters of sofas and soft chairs, and a gas fireplace. The author was told that this space is used for celebrations or for family group counselling sessions. Although the space is very large and could, therefore, feel intimidating to one or a small handful of people, it

Figure 48: Agape's Largest Lounge

is the furnishings, fireplace and moveable clusters of furniture that, together, create a warm, cozy atmosphere. Agape also has a smokers' lounge in its basement for those who are so inclined. Washrooms for family and visitors are provided in all three of the hospices.

All three of the hospices have larger kitchen facilities than what would typically be found in a home. Agape Manor has a commercial kitchen, and adjacent to it is the dining area, which has small tables than can be pushed together for larger functions (See Figure

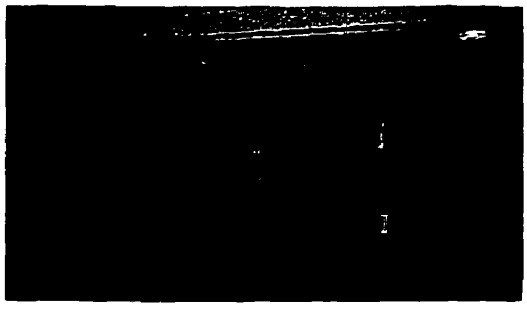

Figure 49: Agape's Kitchen

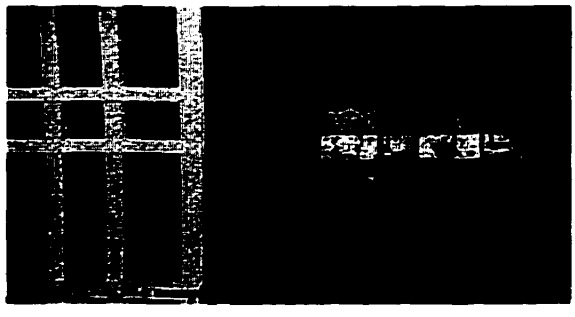

Figure 50: Agape's Dining Room

49 and 50). Although Rosedale's kitchen appears residential, it, too, is larger than what is typically found in a home. Its dining room similarly is adjacent to its kitchen, but apparently the dining room is only used for special gatherings (See Figure 51 and 52.)

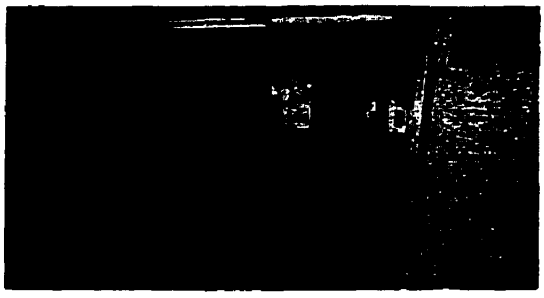

Figure 51: Rosedale's Kitchen

Figure 52: Rosedale's Dining Room

Neither Agape nor Rosedale, however, have smaller kitchenettes for resident and family use. Beswick House has both a kitchen and a kitchenette for its residents, as many of its residents are still well enough to do their own cooking. The dining room at Beswick House is used constantly throughout the day.

It is important for the bereaved families to confront death in a realistic way and have some time alone with the deceased for quiet reflection. None of Calgary's hospices have a viewing room or room similar to this for this purpose. However, because all bedrooms are single resident rooms, the author thinks that a viewing room is not necessary. For meditation and services, both Agape and Rosedale provide a chapel (see Figure 53 and 54), something that is not found in any form in Beswick House.

Figure 53: Rosedale's Chapel

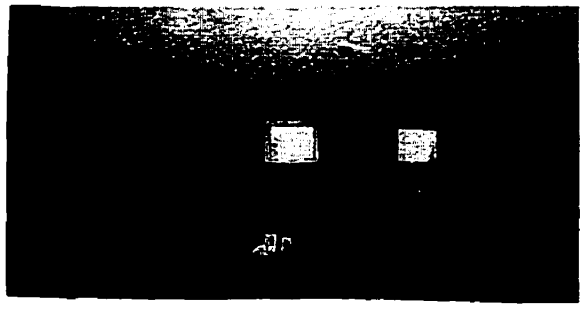

Figure 54: Agape's Chapel

In terms of staff spaces within the hospices, both Rosedale and Agape Manor have a reception area and administrative office space near their entrance doors. Although Beswick House has one room designated as the "house manager's" office, there are no other business or clerical staff on its premises. Both Rosedale and Agape have a chaplain's office, but to the author's recollection, there are no separate offices for social workers, dieticians or physiotherapists, although Rosedale does have a maintenance office. Both Rosedale and Agape have staff rooms, which is important for the staff's well-being (See Figure 55). Furthermore, the staff should have separate washroom facilities, which all three hospices have. None of the three hospices visited have the conventional hospital-type of nurses' stations (See Figure 56). This no doubt is done to de-institutionalize the hospice setting, although residents' feeling of abandonment may be an issue. A hospice must have a laundry facility of some sort, and one is provided in all three of the hospices visited (See Figure 57). In the tour of the Bow Crest Nursing Home, the Director of Care indicated to the author that the ideal laundry room is set up so that there is a flow from the dirty laundry to the clean laundry area. While this may be the case,there did not appear to be any sort of organizational flow in any of the hospice laundry

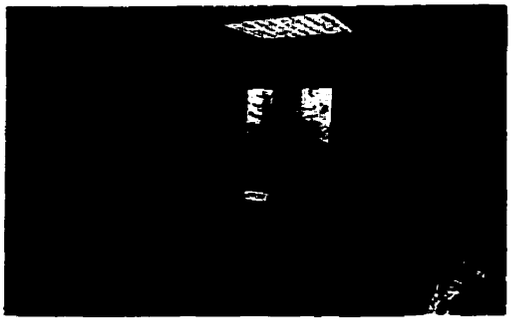

Figure 55: Staff Room at Rosedale

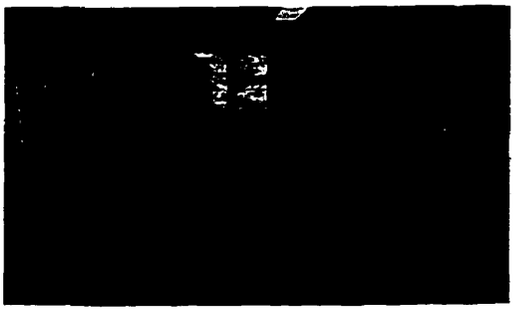

Figure 56: Rosedale's Nurses' "Station"

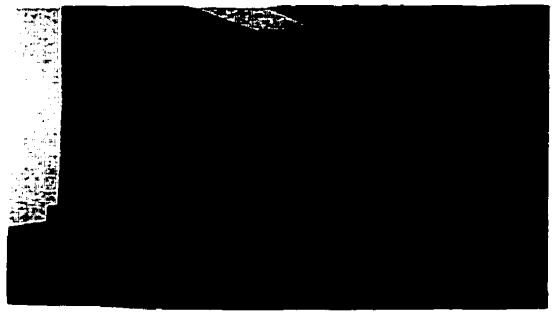

Figure 57: Laundry Room at Rosedale

rooms visited. However, Agape Manor did have an additional, separate laundry facility just for family use. It was evident that Beswick House needs lots of storage space within the laundry room for bleach bottles. In terms of other storage needed, all of the hospice tour guides indicated the lack of general storage space within their particular hospice. Agape even uses space, approximately the size of a half-bath, for a special blanket heater machine.

All of Calgary's hospices avoid the traditional hospital look by introducing many residential features into their schemes. Comfortable residential furniture is used throughout. In terms of thermal comfort, however, the staff at both Agape and Rosedale wish that they had air-conditioning. Nevertheless, other residential features, such as fireplaces, wall clocks and artwork add to the homelike decor. Rosedale even has pet birds. All three hospices have many plants, and all have adequate fenestration to let natural light in, although none have atriums or skylights. None of the hospices have indoor gardens, however, although Rosedale has a small indoor planter at its entrance (See Figure 58). A wonderful example of the way indoor gardening can be incorporated into a hospice can be seen at Bow Crest Nursing Home (Figure 59). The bedrooms of the nursing home are arranged around an enormous courtyard atrium space that is filled with plants, like a jungle. The bedrooms have sliding glass patio doors that open up into the courtyard, which is lit up with natural light from a ceiling of skylights.

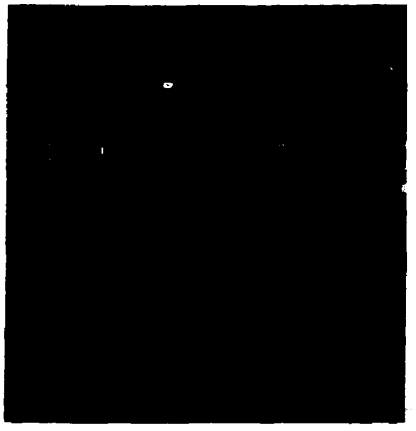

Figure 58: Rosedale's Interior Planter

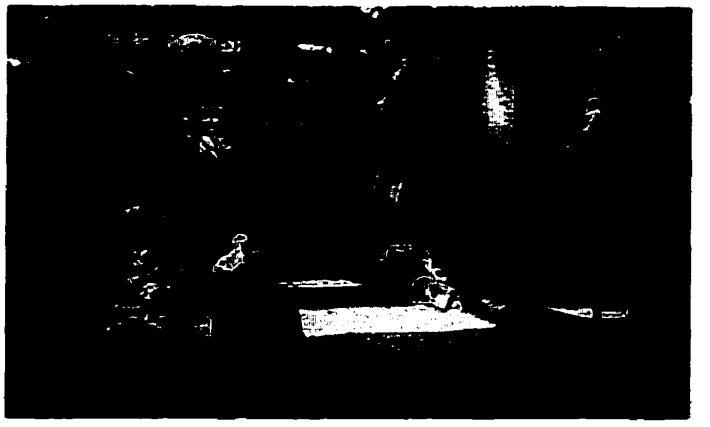

Figure 59 A: Interior Garden / Jungle at Bow Crest Nursing Home

Nonetheless, both Rosedale Hospice and Agape Manor did provide some very peaceful outdoor spaces. Some of Rosedale's indoor lounges have balconies that overlook its outdoor garden (See Figure 44 and 45.) At the back of the hospice, the sidewalk had been widened

Figure 59 B: Bow Crest Jungle

Figure 60: View from Rosedale's Outdoor Gazebo

to accommodate wheelchairs that can be rolled to a gazebo with a spectacular view of down-town Calgary (See Figure 60). Agape, similarly, has a few secluded and peaceful deck-like spaces outside (see Figure 39), although given Calgary's climate, these outdoor spaces probably are used only a few months of the year. Beswick House is the least successful in terms of introducing nature inside and outside of its facility. Its two rear-facing bedrooms have

balconies, but these overlook a bare back yard and the hospice dumpster in the alley (See Figure 33).

10.2 PROFILE OF THE DYING

Of all the events in life, dying can be the most emotionally draining experience for all concerned. Keleman suggests that "dying, like any turning point, is a place of transition, a facing of the unknown and the emerging complexity of new ways of being; new actions, thoughts, feelings" (Keleman, p. 23). The dying require a therapeutic environment. According to Canter, "...a therapeutic environment is most simply one that recognizes and supports both the strengths and weaknesses in people without stigmatization and isolation" (Canter, p. 30). If the architecture caters to the holistic well-being of its residents, their quality of life will be enhanced. Therefore, in order to design such a place, it is necessary first to have an understanding of the characteristics and needs of the dying person.

Hospice residents are not necessarily only elderly people. Although there seems to be some variation in the literature, hospice residents range from 45 years (Gordon) to 65 years of age (Bass, p. 65). Nevertheless, both figures suggest that residents are not necessarily "old" people. The average hospice resident is also white, afflicted with some form of cancer (or AIDS), and is being taken care of by his or her spouse upon arrival at the hospice (Bass, p. 65). Studies vary in terms of the percentage of bed-ridden versus ambulatory residents, but both are found in the hospice.

People are admitted into hospice near the end of their dying trajectory, that is, at the end of the process or course dying takes. This varies with each individual

person, in that

> living with a terminal illness is a temporal process characterized by critical events, shifts in roles and role relationships and other major social changes affecting not only the person who faces death but also the social groups of which he [or she] is a part (Rossman, p. 122).

Usually the dying process is a gradual process of steady decline, and even when it seems that the person cannot decline any further while being alive, further decline always seems to be possible. While residents vary in terms of their illnesses, they share one fact in common: dying is often uncomfortable and painful, although it need not be.

Pain and symptom control is a major component of palliative care, not only because suffering goes against palliative care principles but also because of the fact that it is difficult to counsel dying persons if they are in pain. It is a fact that "90 percent of people admitted to hospice programs are admitted because of mismanaged cancer pain" (Ley, p. 33). Rather than being generalized for most dying patients, pain management should be individualized to each person's needs, sensation of pain and illness, since the experience of pain is subjective. Three levels of medication are used in the hospice to treat pain. For mild to moderate pain, residents may receive medication such as aspirin or acetaminophen. When the pain worsens, a weak opioid such as codeine or oxycodone may be prescribed. For severe pain, strong opioids such as morphine or hydromorphone are used. (Librach, p. 28) Since quality of life is the important concern in palliative care,

addiction is not a hospice issue. If pain can be eliminated, it should be. Other medications may be required to deal with other symptoms, such as for constipation, arthritic pain, and breathlessness. Nevertheless, with the aid of pain medications, "...the vast majority of people can be relatively pain-free and alert until hours or days before they die (Ley, p. 42).

Although it is not possible to predict the time of death accurately, some physical signs are indications. The hospice resident may withdraw, sleep more, and/or may be difficult to awaken. He or she may become confused about time, place and identity of people and may refuse food and fluids. Loss of control of bowel and bladder may occur as death draws near. Days to hours before death, the dying person may either lie with eyes open, while not appearing to see, or may slip into a coma. Some of the dying, on the other hand, become agitated, restless and even hallucinate. Breathing patterns change significantly as the end approaches. Due to a decrease in food and fluid intake, the dying person may not be able to cough up secretions, which may collect in the back of the throat causing the "death rattle". Breathing may be irregular, and there may be moments of no breathing at all. Blood pressure drops, as does body temperature and urinary output. Arms and legs may become cool to touch. Waxy-looking, bluish skin often becomes mottled or blotchy in appearance, and the underside of the body may become darker as circulation slows.

It is important to distinguish between pain and suffering. Pain is a physical

experience which can be eliminated, as discussed above. Suffering, on the other hand, is psychological or spiritual and may exist without any physical symptoms. "People can suffer because of the illness or loss of a loved one or because they feel lost relative to the world or their relationships" (Ley, p. 44). Eliminating all suffering from hospice residents is impossible although it is a goal of palliative care. In fact, some dying individuals view suffering as a necessary part of life and, therefore, do not wish it to be completely removed. Nevertheless, residents' "psychological pain" may be eased by a deep understanding and compassion on the part of the staff and visitors of the dying person's experience as death approaches.

Elizabeth Kuebler-Ross, who wrote the well-known book On Death and Dying (1969), views dying as the final stage of growth in a person's life and suggests that dying people go through five stages. The first stage is that of denial and isolation, which is a period of shock and disbelief, in that the dying person wants to believe that a mistake has been made. Anger eventually sets in, and the person seeks a scapegoat, someone or something on which the blame for the terminal illness can be placed. Bargaining with God, by promising something in exchange for an extension of life, is the third stage in the dying process. Depression begins stage four with the dying person realizing that a mistake has not been made. Deep sorrow is expressed at the approaching loss of life and love. The final stage is that of accepting death as a sure outcome. If Kuebler-Ross is correct in her stages of dying, it might be thought that the dying would probably be in the final acceptance

stage upon arrival at the hospice. This, however, has been found not to be the case.

Although Kuebler-Ross' stages of dying exist as familiar coping responses exhibited by dying persons, "...dying behavior is more complex than five universal, mutually exclusive and linear stages" (Lemming, p. 218). Pattison suggests that the period between knowing one is going to die and the point of death has three phases which are more encompassing than Kuebler-Ross' five specific stages (Pattison, p. 44). First, during the phase of acute crisis there is an increasing anxiety which eventually reaches a peak of tolerance. The first response to this state is immobilization and then an overwhelming feeling of inadequacy. Bewilderment, confusion, and indefinable anxiety plague the dying person. Second, during the chronic phase, the dying person faces a number of fears (discussed below). Third, during the terminal phase, withdrawal begins to set in. Based on Pattison's theory, most dying persons probably enter the hospice while they are in the chronic phase or the terminal phase. Regardless of the specific phase he or she is in, the hospice resident experiences a number of fears and, therefore, has a number of needs which must be met by the caregiving staff and visitors, or by the built environment, or both.

Studies of dying patients have confirmed that nearly two in every five experience distressing symptoms of anxiety and depression (Wilkes, p. 233). Fear of the unknown is perhaps the biggest source of anxiety among the dying, death

being the ultimate unknown. The dying who are religious may view death more calmly, but most patients question, at some point, why the fatal illness was inflicted upon them (Wilkes, p. 240). Many patients are terrified that they will suffer pain and not be able to withstand it. There is anxiety about time, not enough or too much, and dignity is more highly valued than is life with pain, indignity and suffering.

The dying need to feel accepted and loved by the people in their lives. The pain of loneliness and the fear of abandonment can be as excruciating as physical pain. In fact, "it is possible that patients' fears of unacceptability and isolation may be greater sources of depression than fear of death itself (Bass, p. 55). The fear of the loss of family and friends can actually become a reality, in that significant others often withdraw, and "the patient seems to take on a status somewhere between the living and the dead (Lemming, p. 214). The need for socializing in the hospice is, therefore, important, as is having the knowledge that one is not totally isolated from the community with which one identifies.

The dying need self-respect and want to feel like people who matter. Therefore, it is important that they be allowed to make decisions that affect themselves. Self-esteem needs become important as the dying individual loses more control and becomes more dependent. The fear of loss of personal control often focuses on the loss of mobility. Research on the elderly in nursing homes shows that "...the problem is not the illness [of the patients], but the inability to function socially that their immobility brings them" (Manard, p. 102). Whether one

is an elderly person in a nursing home or a dying person in a hospice, not being able to leave one's room or bed leads to feelings of confinement and a lack of autonomy.

The dying have a fear of losing their individuality or their identity as a person, in that "when an individual's condition has been defined by self and others as terminal, all other self-meanings take on less importance, [and] the terminal label becomes [that person's] master status..." (Lemming, p. 216). Many feel as though they are no longer regarded as human beings. Furthermore, research shows that dying people "...cling tenaciously to their deepest moral values. They tend to become more moralistic and judgmental..." (Lemming, p. 213). Most want to share their dying experience with others. All seek hope, in that they want to believe that some good or a purpose can yet come out of their dying.

The problems of the dying fall under three main headings: pain, loneliness and loss of control. These can be overcome by an atmosphere of special caring and a specially built environment. Understanding the characteristics and needs of the dying lays the foundation for determining the way in which one might create a therapeutic environment that would cater to their holistic well-being.

10.3 PROFILE OF THE VISITORS: THE FAMILY AND FRIENDS

One of the most difficult experiences in life is the experience of loss. While bereavement designates the state of loss, that is, the entire process of accommodation to a specific loss, grief refers to the response of emotional pain, which is experienced primarily psychologically. It is important to understand the experience of the family and friends of the dying in order to design a hospice which can meet their needs before and after death has taken place.

The difference between a sudden death and one that has been anticipated, as in the case of a terminal illness, has nothing to do with the amount of pain the survivors suffer, because in both situations there is pain. The difference is in the impact that the death has upon the survivors' abilities to cope and to go about the remainder of their lives. The term "anticipatory grief" refers to any grief occurring prior to a loss, that is, mourning for a loss that has not yet happened. This grief occurs before the onset of the "normal" grief which occurs at and or after the loss.

The period of time between diagnosis and death is complex and burdensome. A short illness can make bereavement very difficult because of the lack of time to prepare for the death. A long illness, however, also can make bereavement more difficult, because the extra time is often filled with a painful witnessing of progressive debilitation over which there is no control. The tremendous amount of stress that the family members endure contributes to psychological conflicts, emotional exhaustion, social isolation and family discord.

Whether the illness is short or long, all the little losses, that take place throughout the illness, help the survivors prepare for the ultimate loss, which is death. Anticipatory grief, therefore, is alleged to possess natural adaptational value, in that it is a rehearsal of what to expect after an impending loss. In fact, "the longer the bereaved-to-be knows in advance, the greater the opportunity to accomplish...most of the painful job of mourning in advance and to reduce the intensity and duration of the acute grief reaction (Schoenberg, p. 276).

Healthy anticipatory grief involves four sets of psychological processes that overlap and are not exclusive of one another. One process involves becoming aware of and adjusting to the fact that one's loved one is dying. As a result, one begins to prepare oneself. By interacting with the dying loved one, the family is able to finish its "unfinished business", which is a crucial part of anticipatory grief. In addition, emotional processes are also occurring. The grief one experiences during the terminal illness is stimulated by losses that have already occurred in the past, by losses that are currently occurring, as well as by those that are yet to come. The family of the dying person must balance the contradictory demands of simultaneously holding on to, letting go of, and drawing closer to the dying patient. "There may be intense ambivalence toward the ill member, vacillating wishes for closeness and distance, and fantasies of escape from an unbearable situation" (Walsch, p. 145). Experience of anticipatory loss involves intensified emotional responses that may include: separation anxiety, aloneness, denial, sadness,

disappointment, anger, resentment, guilt, blame, exhaustion, and desperation. A family's loss of a sense of control often is extremely debilitating. As emotional resources become depleted, the emotional tide of anticipation can shift from a fear of death to a wish for death.

Another set of psychological processes involved in healthy anticipatory grief are thought processes. As one faces the approaching death, one may begin to bargain with God for a reprieve from the illness, or one may begin to develop a philosophy about how to cope with the dying person's remaining time. The remaining set of psychological processes involve planning for the future. The family may begin to reorganize itself without the loved one being available to fill his or her roles. It may begin to consider what the future will be like without its loved one. In general, then, although an anticipated death may put a great deal of emotional demands on the individuals involved, the people are at least able to begin to prepare for the loss to come.

The bereavement following an anticipated death still involves the same phases as the bereavement does following a sudden death. However, as discussed, the climax of the grief reaction takes place some time before the actual occurrence of death and becomes a resigned acceptance. Because the actual event of the death occurs as something long expected, the initial shock is usually not as intense as it is in the case of a sudden death. The loss makes sense. Furthermore, the survivors' feelings about their actions during their loved one's

dying process will profoundly affect their grief after the death. In addition, there often is a sense of relief after the death, especially if the dying person was suffering. Some survivors may initially find themselves so exhausted that they do not even have the energy to grieve. Grief may be experienced at a much later date. Nevertheless, "anticipatory grief may reduce the intensity of normal grief, but it does not necessarily eliminate it" (Schoenberg, p. 38).

The ultimate purpose of grief is to help the bereaved recognize that his or her loved one is gone and to adapt to the reality of that loss and live healthily without the deceased. To successfully achieve this purpose, three sets of processes must be completed by the bereaved after the death. The first of these involves acknowledging, understanding and accepting the loss, because "it is not until the bereaved person has faced up to the fact that the dead person can never return...that they can begin the task of adjustment" (Penson, p. 9). In other words, only if death is accepted can it actually be overcome.

The second set of grief resolving processes involves experiencing the pain. That is, undergoing an emotional chaos is normal. Feelings should be expressed. One should cry when one needs to cry, express one's anger rather than holding it in, talk about one's loss with someone who is willing to listen, review the part of one's life that one spent with the deceased, and so on. Experiencing the pain also involves becoming accustomed to the absence of an integral part of one's life, and the bereaved must readjust to this new world without his or her loved one. The

bereaved must change his or her emotional attachment to the deceased and investment in the deceased, in order to reflect the reality of the death.

The third set of grief resolving processes involves moving adaptively into the new life, but without forgetting the old life. The bereaved must develop new ways of relating to his or her deceased loved one, by developing an appropriate loving and symbolic relationship with the deceased. Furthermore, the bereaved must develop a new identity to reflect the many changes that have occurred since the death. It will take a long time to develop different expectations, beliefs, assumptions, and knowledge about the world, that reflect the fact that the deceased is no longer a part of the bereaved's life. Eventually, however, the emotional energy that used to be invested in the deceased will be reinvested in other relationships, objects, activities, roles, hopes, or beliefs. This is considered to be the most difficult task. Nevertheless, it is part of the work of mourning to seriously examine the opportunities for a possible new way of life, even if, at first, this seems to the bereaved a disloyalty to the deceased.

By the time the dying person has been admitted to the hospice, the caregiver of the dying person (usually a close relative) may have already developed "role fatigue" (Goldstein, p. 26). He or she "...is likely to have become separated from important sources of emotional support....[being] both physically and emotionally drained by the burden of continued...care" (Wilkes, p. 242). Hence, the caregiver family member is in desperate need of role relief and some relaxation.

Furthermore, " the stress of coping with a person who is dying is less likely to cause serious psychological problems if the close relative or friend is able to share their worries, feelings and concerns with someone else" (Wilkes, p. 246). The family, therefore, needs to be listened to and comforted and must rely on the hospice staff for this support.

Coping with grief, both before and after the death of their loved one, is the major problem that confronts the family and friends of the hospice resident. The special caring provided by the hospice staff and a specially built environment can help to alleviate some of the suffering associated with grief. An understanding of the characteristics and needs of the grieving person lays the foundation for determining the way in which one might create a therapeutic environment that would make him or her feel cared for and welcome.

10.4 PROFILE OF THE CAREGIVING STAFF

It is said that "there is probably no more difficult problem in clinical practice than the provision of care to dying patients and their families" (Klagsbrun, p. 127). The hospice caregiving team includes many people. Doctors and nurses, physiotherapists, dieticians, social workers, pharmacists, chaplains, and trained volunteers may all be part of the team. Although it is the doctor who specifies the medicine required for a particular dying patient, it is the nurse who ultimately cares for the patient. The duties of other members of the caregiving team are performed mostly in conjunction with the nurse's care, whose role is a demanding one. The hospice social worker, for example, spends time counselling the families, because "while family members may be aware that the patient is dying, they may never have discussed it with each other or with the patient" (Lemming, p. 251). The social worker also deals with social problems, such as alcoholism and marriage problems, and works with the children. Trained volunteers are an essential part of the hospice team. They themselves have often gone through a death and can easily relate to the families and the dying residents. "In being a stranger who provides a 'listening ear', without emotional involvements or professional entanglements, the volunteer can support the patient and family members like no other participant in the social network of dying" (Lemming, p. 253). Sometimes the family, and/or the dying person, is afraid of questioning the medical staff, and the volunteers often speak up on their behalf and make their needs known.

The palliative care nurse provides leadership in the provision of personalized palliative care by coordinating team efforts toward finding a proper balance between care and cure and by serving as a primary communication link among the many persons involved in the care. Patients' needs are first and foremost physical in nature, requiring sound clinical knowledge and judgment on the part of the palliative care nurse. Furthermore, to help patients and their families go through the experiences produced by fatal diseases, the palliative care nurse must have a clear understanding of the cultural and socio-economic dimensions involved in dying and of the psychological reactions to death and the stages of grieving. The nurse helps the dying and their families to live with uncertainty, ambiguity and a continuous undercurrent of tension. Support also takes the form of listening with sensitivity and concern to the verbal, emotional, and implied or non-verbal messages of the dying and their families. The palliative care nurse holds a special position in the care of the dying and their families, in that the way she carries out her role, she can greatly increase the quality of life that the dying have left

Nurses who care for patients throughout their illness come to know both the patients and their families very well. Watching patients decline often becomes increasingly difficult for nurses to bear. In fact, "caregivers go through many of the same physical and emotional ups and downs as family caregivers and they need similar support" (Ley, p. 41). The stressful conditions often cause various psychological responses, and these may detrimentally affect clinical care. For

example, a tremendous amount of anger and guilt is sometimes built up against patients because of their hopeless circumstances and their physical needs and demands. Nurses may appear to act uncaringly towards patients, or stress may be expressed as displaced hostility towards other members of the caregiving team. Anxiety and depression are common experiences for nurses that can result from seeing a patient gradually lose control of his or her life. Connected with this anxiety is the danger of identifying too strongly with the dying patient and his or her family. Nurses may find themselves withdrawing. Feeling drained and overwhelmed, because of the problems inherent in working with the dying is not uncommon, and Mandel suggests that "appropriate means must be developed within institutions to ventilate these emotions in a positive and supportive atmosphere as they arise" (Mandel, p. 1197).

Thus, the caregiving staff, particularly the palliative care nurses, play a major role in delivering the special hospice care (as discussed in 2.0 Background) to the dying residents. However, the architecture also plays a role in helping the caregivers provide the best care possible to the hospice residents. Understanding the roles and duties of the caregiving staff, as well as their needs, lays the foundation for determining the way in which one might create a positive environment for their work.

10.5 AREA CALCULATION FOR DESIGNED PROJECT

SPACE	AREA (sq. metres)
1 unit	42.6
1 unit	45.4
3 units @ 44.2	132.6
2 units @ 44.3	88.6
Lounge	33.9
	30.2
	25.1
	40.2
Chapel	51.0
Indoor Garden	124.5
Nurse	21.4
Med. Room	7.1
Mech. Room	31.4
Physio	17.0
Bathing	17.0
Laundry	10.4
2 W. Rms. @ 7.4	14.8
2 W. Rms. @ 12.0	24.0
2 Storage @ 7.2	14.4
1 Storage	3.6
1 Storage	9.0
1 Storage	9.7
Janitor	9.7
Janitor	9.0
Reception	16.4
Waiting	12.0
Conf. Rm.	18.4
Office	17.0
Office	13.6
Laundry	17.0
Garbage	8.4
Kitchen & Stor.	10.8

SPACE	AREA (sq. metres)
Staff	34.8
Dining	58.1
Circulation	518.2 = 27% of area
Nooks	27.9
Interior Porches	140.4
Walls/Partitions	165.5 = 8.6% of area

Total Gross Area = 1,907.5 sq. metres

Add Outside Porches	27.0
	36.5
	30.5
	61.0
	155.0 sq. metres

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