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Social milieu: a service center for the forgotten aged

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2010-07-27T13:41:08Z
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SOCIAL MILIEU

A SERVICE CENTER FOR THE FORGOTTEN AGED

ACKNOWLEDGEMENTS

This thesis is dedicated to and inspired by my late grandfather, Elias Mukombachoto.

Kuna amai nababa, i would like to thank you for bringing me to where i am and i will never forget that, to my brothers sister I'm sorry i haven't seen you guys much but our time will come. Niki, you have been more than just the wind beneath my wings, i cant find the words to express. To Nicole and Ikeletse, thank you for more than just believing in me, and for the tremendous support.

To Ariane and Lone, thank you for the guidance and support through the most crucial times.

Khula we've fought through this fight together all the way thank you always. TC and Tin Tin, u guys are much appreciated. Guy, Andrew and Kirsten, thanks for making the studio a cool place, i have really learnt a lot from you guys. To all the unmentioned names, i did not forget you, my printer was running out of ink.

DECLARATION

I, Donald Takura Changwa 0202280n am a student registered for the course Master of Architecture [Professional] in the year 2009. I hereby declare the following:

I am aware that plagiarism [the use of someone else's work without permission and/or without acknowledging the original sources] is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas, and visual materials of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my in my own work.

SIGNED.....

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The western concepts and ideologies that shaped South African cites into what they are today have come at a cost to the recipients of colonisation. Communities previously that thrived on kinship systems have now been replaced by groups that coexist in a in a said context. In traditional African village, each age group had their role within the society, the young adults would go out and work, hunting, farming etc while the elderly became the guardians, the caretakers of the children, and they would provide guidance for the impressionable youth while passing down a great body of knowledge. Within this traditional system the social obligations of the aged were multi dimensional in the sense that they encompassed religion, education, politics, recreation, economic, and prophetic issues. In those days, people looked forward to getting old. In a sense this can be coined within the bounds of Ubuntu. In these contemporary times, social and economic changes have put into doubt the continued viability of such traditional arrangements for the elderly. Changes like increased emphasis on smaller family units, migration to urban areas, new life styles and changing values all have effects on the traditional forms of care of the elderly. Financial difficulties have made it imperative for many women to now work for pay outside the home and also the issues of education for the young have reduced the caring role of the grandchildren. Within modern society one could also attribute the deterioration of moral fiber to the breakdown of Ubuntu and the rise of individuality.

This thesis aims to understand the benefits of the traditional African system for the elderly as a means to develop an appropriate architectural response to the plight of the forgotten aged. In order to contribute towards the creation of a more locally relevant architecture for the aged, this paper proposes the development of a hybrid building prototype that would facilitate the inclusion of the elderly into a community while allowing them to play an important role in the moulding of its youth.

ABSTRACT

01

INTRODUCTION

THE PHENOMENON OF **UNIVERSALIZATION**, WHILE BEING AN ADVANCEMENT OF MANKIND, AT THE SAME TIME **CONSTITUTES** A SORT OF SUBTLE **DESTRUCTION** ... OF THE TRADITIONAL CULTURES...

1.1 INTRODUCTION

Certain architectural typologies in the world which have been derived from physical need have become homogenous and generally prototypical. While discourse in the built environment revolves around how architecture should be a culmination of its culture and context, these architectures still seem to be immune from this discourse.

One such example is the architecture for the elderly, specifically the old age/ nursing home. Derived from medical needs of catering for the elderly, its functions have become standardized and thus have seen it duplicated across the world.

The question arises that, is this relevant for the African context? In an introduction to critical regionalism Frampton says “The phenomenon of universalization, while being an advancement of mankind, at the same time constitutes a sort of subtle destruction ... of the traditional cultures... “(Frampton 2003:314)

Mitias speaks of what may be a remedy of universalization of architecture.

“To be truly expressive, a building should grow out of its natural, social, and civilization context. It should reflect not only the personal values, needs and interests of its dwellers but also its relation to its natural and architectural site. Thus the formal organization of a building cannot be imposed on a people from the outside; it should originate from the context of human life in the given region. In this origination the process of spatial articulation results from a thought- full grasp of the dynamic interaction between the material elements of the architectural work and the human vision which guides this activity.” (Mitias 1994:103)

In order to contribute towards the creation of a more locally relevant architecture for the aged, this paper proposes the development of a hybrid building prototype that would facilitate the inclusion of the elderly into a community while allowing them to play an important role in the moulding of its youth.

02

MOTIVATION

YOU CAN'T BE **HUMAN** ALL BY YOURSELF, AND WHEN YOU HAVE THIS QUALITY - **UBUNTU** - YOU ARE KNOWN FOR YOUR **GENEROSITY**. UMUNTU NGUMUNTU **NGABANTU**

I am an African
Not because I was born there
But because my heart beats with Africa's
I am an African
Not because my skin is black
But because my mind is engaged by Africa
I am an African
Not because I live on its soil
But because my soul is at home in Africa

When Africa weeps for her children
My cheeks are stained with tears
When Africa honours her elders
My head is bowed in respect
When Africa mourns for her victims
My hands are joined in prayer
When Africa celebrates her triumphs
My feet are alive with dancing

I am an African
For her blue skies take my breath away
And my hope for the future is bright
I am an African
For her people greet me as family
And teach me the meaning of community
I am an African
For her wildness quenches my spirit
And brings me closer to the source of life

When the music of Africa beats in the wind
My blood pulses to its rhythm
And I become the essence of music
When the colours of Africa dazzle in the sun
My senses drink in its rainbow
And I become the palette of nature
When the stories of Africa echo round the fire
My feet walk in its pathways
And I become the footprints of history

I am an African
Because she is the cradle of our birth
And nurtures an ancient wisdom
I am an African
Because she lives in the world's shadow
And bursts with a radiant luminosity
I am an African
Because she is the land of tomorrow
And I recognise her gifts as sacred

Wayne Visser 2005

2.1 MOTIVATION

Authenticity refers to the truthfulness of origins, attributions, commitments, sincerity, devotion, and intentions. It is the degree to which one is true to one's own personality, spirit, or character, despite external pressures. In society, the study of authenticity can provide an overview of the shortcomings of social structures. Architecture is subject to such discourse as it is a facilitator of social structure.

As the world accepts globalization it slowly destroys authenticity of architecture and buildings become archetypes of design. It becomes difficult to define architecture by region as is begins to embrace the global concept. In this sense authenticity is no longer a valid ambition of architecture. We can modify the prototype to suit the context but the prototype still remains ubiquitous. It seems unlikely that this homogeneity of architecture can be reversed and in many ways is driven by economic mandate. As such through standardization comes simplification which can in turn mean the loss of essential authentic elements in an attempt to create a common solution. An argument to this concept is that authentic architecture best serves its social context. Mitias speaks of what may be a remedy of universalization of architecture.

"To be truly expressive, a building should grow out of its natural, social, and civilization context. It should reflect not only the personal values, needs and interests of its dwellers but also its relation to its natural and architectural site. Thus the formal organization of a building cannot be imposed on a people from the outside; it should originate from the context of human life in the given region. In this origination the process of spatial articulation results from a thought- full grasp of the dynamic interaction between the material elements of the architectural work and the human vision which guides this activity." (Mitias 1994:103)

Authentic architecture is both reasonable and necessary to become socially and culturally representative. Authentic architecture may be considered on a social basis as a form of social mediation, social mediation means a balance between real and perceived social inequalities of a system.

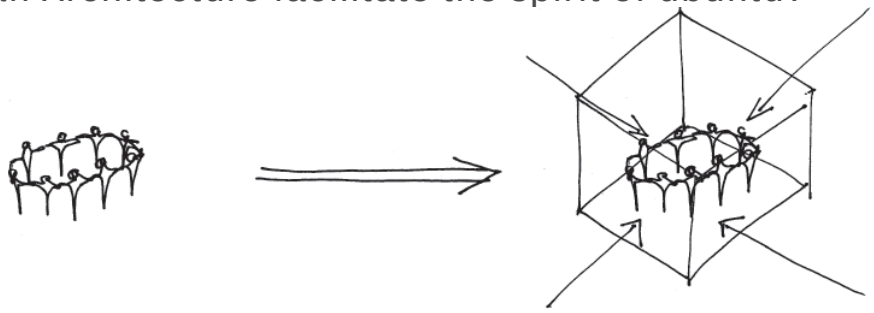
In an introduction to critical regionalism Frampton says "The phenomenon of universalization, while being an advancement of mankind, at the same time constitutes a sort

of subtle destruction ... of the traditional cultures... "(Frampton 2003:314) Elements of the discourse on Critical regionalism are applicable to the concept of authenticity. Frampton sees regionalism in a new light against the backdrop of the hegemony of modernism and the pastiche scenography of postmodernism. He expresses this notion with a higher sense of urgency and highlights its critical nature against placeless monotony. (Frampton 2003)

The poem, 'I am an African' by Wayne Visser signifies the sense of place and pride of culture, Ubuntu is a culture of Africa that seems to get lost every day with the embrace of global culture. Without the spirit of ubuntu, people who are part of the African society get left behind. The elderly of the African society are sufferers of such plight. The architect has a responsibility for creating environments that nurture and not destroy human spirit. When architecture works to create this social balance it becomes authentic.

"One of the sayings in our country is Ubuntu - the essence of being human. Ubuntu speaks particularly about the fact that you can't exist as a human being in isolation. It speaks about our inter-connectedness. You can't be human all by yourself, and when you have this quality - Ubuntu - you are known for your generosity. We think of ourselves far too frequently as just individuals, separated from one another, whereas you are connected and what you do affects the whole world. When you do well, it spreads out; it is for the whole of humanity." Archbishop Desmond Tutu (2008)

Can Architecture facilitate the spirit of ubuntu?



03

THE OLDER PERSON

PHYSICAL HEALTH HAS BEEN FOUND TO BE CLOSELY RELATED TO **PERFORMANCE**...FROM A PSYCHOLOGICAL PERSPECTIVE A HEALTHY PERSON VIEWS THE WORLD **POSITIVE**LY...

3.0 THE PROFILE OF **THE OLDER PERSON**

The theoretical base deals with review and analysis of collected data and literature relating to aging individuals and their environments.

Firstly, the health, and psychological characteristics of the elderly will be discussed which will assist in compiling a profile of the typical older person, after which a listing of basic needs and how some of which can be addressed by the architect. It is essential to note that the information derived from the literature may not be fully comprehensive as it deals with the generalisations even more so in the case of the older person.

3.1 **PHYSICAL HEALTH** CHARACTERISTICS

To begin a process of comprehensive planning for the elderly, one has to take into consideration the health problems faced by the elderly. One cannot be truly accurate in this respect as a person's health is as a result of variables leading up to the current state.

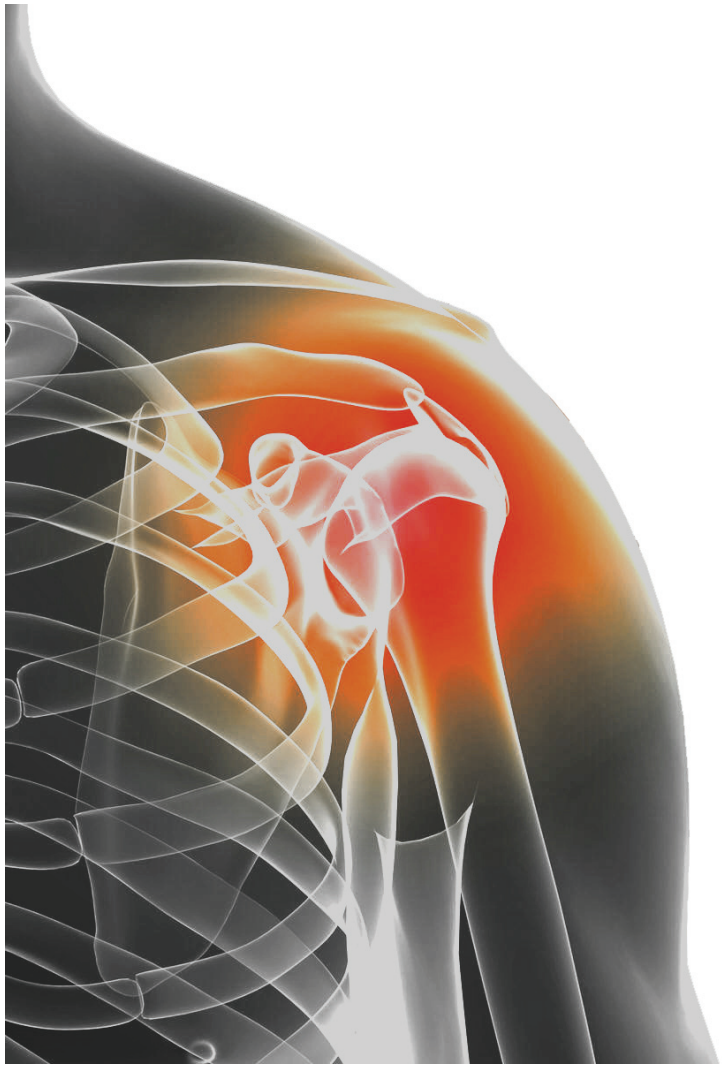
Physical health is very important as it has been found to be closely related to performance. Looking at it from a psychological perspective a healthy person views the world positively, lives a happy fulfilling life and is alert. If one is healthy he/she is less orientated to his immediate environment and can participate in a wide range of activities beyond his immediate environment. On the other hand the unhealthy person is focussed more on his/her immediate environment thus limiting his/her social context which has adverse effects on morale.

The health needs of an older person while similar to those of any other person are increased by a tendency for health to decline with age. Many theories have emerged to try and

understand the process of ageing. According to Moody (2002), at present there is no single theory of aging that explains the entire complexity of the process. However, ongoing research is under way that is leading to new ideas of aging.

According to Moody (2002), the *Wear and Tear Theory* sees aging as a result of changes taking place in human bodies. The author indicates that all human bodies with their multi-cellular organisms are constantly wearing out and the cells are being repaired each day. Moody (2002) makes an example of degenerative disorders in joints over time; for example in osteoarthritis, in which cartilage in joints disintegrates. Moody (2002) also discusses the *autoimmune, the aging-clock, cross-linkage, free radical* and *cellular theories.* Individually these theories may not be relevant to the architect but as a whole make up a body of knowledge which creates an understanding of the functionality of the body as it ages and thus the ergonomics involved.

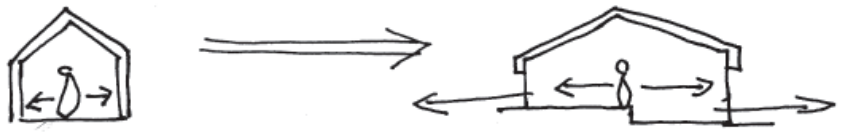
Some of the relevant physical symptoms of aging are decrease in energy, strength, and speed, loss of balance, reduction of visual and aural ability



3.1 Joint wear in human body with onset of age (Getty Images 2009)

It is not only how long an old person lives that determines the overall health burden but also how well they live. (Moody 2002) According to the Department of Health, it is now widely recognised that regular physical activity is associated with reduced risk for several chronic diseases including osteoporosis, and depression (DOH 2000). In developed countries, over 10% of deaths each year may be attributable to lack of regular physical activity. Exercise may slow the progression of joint damage, and with resistance training in osteoarthritis patients there is an improvement in muscle strength and proprioception (the sense of the orientation of one's limbs in space) as well as having a positive psychological effect.

Can architecture create physical activity conducive environments for the elderly?





3.2 Elderly exercise through activity (Getty Images 2009)

3.2 **PSYCHOLOGICAL** CHARACTERISTICS

To understand the life cycle of the older person, the processes and changed which are attributed to aging are summarized and listed below (Lawton 1975)

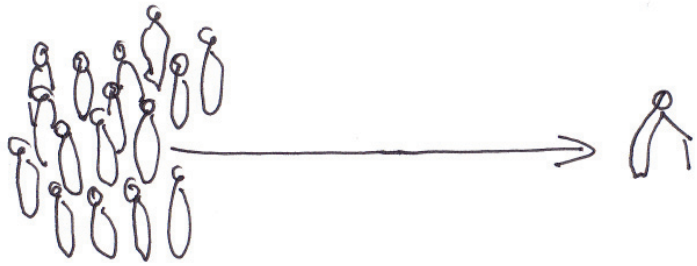
- The feeling of inadequacy and uselessness coupled with depression and a loss of motivation for living
- loss of prestige due to retirement and relinquishing of functions associated with authority
- unwillingness to give up position of supremacy when children grow older and become independent
- loss of economic security which results in feeling of diminished worth on a financial level
- an increased dependence on other people
- narrowing of interests leading to introspection
- increasingly restricted social activity and a feeling of isolation
- tendency to relive and over talk about the past
- fear of physical frailty

While we cannot stereotype the elderly into a single group a certain amount of categorization is needed to be able to plan for the elderly, while it may be outdated, Rosow (1967:110) came up with a five point classification, each with the neighbourhood preference

Cosmopolitan:	little contact with neighbours, no desire for more friends
Phlegmatic:	socially inactive , prefers little outside contact but is not demoralized
Isolated:	has few friends and desires more contact with neighbours and is frustrated
Socieables:	satisfied with their present level of contact
Insatiable:	high levels of contact and wish for more

As mentioned earlier, this may be outdated but certainly has relevance in understanding the different needs of the elderly and thus has implications for design.
In the early 60s American sociologists and gerontologist began to derive theories of aging to understand the psychosocial elements of aging

The **Disengagement theory** proposes that ageing entails a gradual withdrawal or disengagement from personal relationships or society in general. This results in the marginalisation of older people in society. However, this theory has been strongly criticised by researchers who found little evidence that older people disengage themselves from their surroundings. They found that while older people's social relationships change, and they have fewer social relationships, these are often deeper relationships. Where disengagement does occur it may be due to other factors such as disability, poverty, retirement or widowhood.



Another sociological theory is the exchange theory which proposes that interaction is only sustained as long as it is profitable to the participants. This theory argues that as older people have less to give in an economic sense, they become powerless, passive and compliant. However this fails to acknowledge that older people have currencies other than money to barter within their exchange with other people. These include knowledge and experience. This theory is evident in a later chapter where I discuss the roles of elderly in primitive society. Also in modern society there is a high priority on productivity and economic activity; it seems difficult to move away from that way of thinking and to value other forms of social exchange. Older people contribute to society in numerous ways. For example, older people provide a lot of informal care which is of economic benefit to society.

The **Activity theory** is based on the concept that successful ageing is due to maintaining the attitudes and activities of middle age. This excerpt from 'The Activity Theory of Aging' by Knapp explains; (knapp (1977) The Gerontologist17: 553-559)

"Except for the inevitable changes in biology and in health, older people are the same as middle aged with essentially the same psychological and social needs"

There is consequently a natural tendency for the aged individual to seek associations with others and to participate in group and community affairs, although these tendencies or needs are often blocked by social norms such as enforced retirement or by physiological decline. This constriction of self-enhancing roles, interests, and activities "produces a crisis in self-evaluation for the individual. The probability that he will develop a negative image of the self and feel alienated from his environment . . . increases as activity with and within that environment decreases" .



The **life course theory** is a much more elaborate theory of life course development which examines the ways in which cohort and historical periods affect the life course structure of the individual and sees development as a series of transitions and choice points that are influenced by both the immediate social context and the larger socio-historical period. A classic example is the study done by *Elder (1974 as cited from Carolyn et al 2003)* of the effects of the great depression on subsequent development in the lives of individuals. In the study he found Children from working class families that were economically deprived and generally had difficult lives, thus became less likely to finish school, had poorer working histories, less savings, worse relationships with their children (Carolyn et al, 2003). This is applicable in the South African context, as a result of apartheid, non white elders are more likely to be poorer than their white counterparts and this can be attributed to a number of factors with work reservation and wages being examples.

Without typifying the older person we can predetermine characteristics from a theoretical research basis and note that these are not applicable to every older person. Most generally the older person will;

a. Probably be a widow
b. Be capable of living independently into an advanced stage of old age
c. Desire to remain independent as long as possible
d. Fear having to move into an old age home
e. Rely on familiarity of environment
f. Find difficulty in giving up accustomed roles
g. Have deteriorating health
h. Have unchanged basic desires
i. Be unemployable due to obsolete skills as a result of technologies
j. Be computer illiterate
k. Have lack of finances and survive on meagre pension
l. Have little choice on living environment
m. Desire to lead active life
n. Feel isolated and thus lonely
o. Become increasingly dependent on others as a result of financial status and deteriorating health
p. Have limited mobility but can move about neighbourhood without great difficulty

While these are not all significantly related to aging, they have a tendency to occur in the later stages of life.

3.3 HUMAN NEED

According to Kaplan and Sadock, a healthy older age is a state of maintaining a level of social activity that is only slightly changed from that of earlier years (1998). Growing evidence shows that maintaining social activities is valuable for physical and emotional well-being. Such social activities include contact with younger people, providing care to younger generations, and continued interactions with relatives and friends.

They rate the following factors as essential to a healthy old age:

Developing and using sensory perceptions as an effective way of keeping in touch with self and of relating to others. Old age can be a time of creative development when one has more time to pursue interests overlooked in earlier stages of life.

Maintaining friendship and social interaction in one's life appears to be one of the most important factors for positive ageing and is one of the most important characteristics of activities and groups specifically designed for older people e.g. active retirement groups. It is impossible to develop the art of living on one's own. Interaction is therefore central to positive living and to positive ageing.

Intergenerational contact provides an opportunity for older people to share their knowledge and experience with younger people helps older people to establish their rightful place in society and is a social resource which is currently underused and undervalued.

Learning how to cope with mortality and coming to terms with death is an essential part of living which must be learned throughout life and not just in old age. This acceptance of mortality is an important prerequisite for positive ageing and a major factor in combating negative attitudes to ageing and older people. Successful living and positive ageing cannot be achieved without internalising the reality of death.

Maslow's Hierarchy of Human Needs

In physiological sciences, Maslow's Hierarchy of Human Needs is often presented as a pyramid, with self-actualization at the top as the highest of human's needs in one's life. The base of the pyramid is the physiological needs, which are necessary for survival. Once these are resolved, an individual can concentrate on the second layer, the need for safety. The third layer is the need for love and belonging, followed by the need for esteem, which includes also status. Finally, self-actualization forms the apex of the pyramid.

3.1



3.3 Maslow's Hierarchy (derived from Wikipedia by author)

The needs of the elderly can be categorized under two headings, namely, physical needs, which are the most basic needs needed for survival and psychosocial needs which include emotional and social needs that accept the self concept.

Physical Needs

A place to live
Good quality of air and water
Basic necessities like food
Reliable and adequate income
Access to medical facilities
Reasonable physical activity

Psychosocial Needs

Two way love relationship
Social interaction and identification with kin, neighbours and friends
Meaningful activity involvement
Preservation of independence in a community
Maintenance of personal identity and individuality
Meaningful intellectual stimulation
Degree of privacy to allow for self evaluation or emotional release
Security for the rest of life
Choice of living environment

It is evident from the comparison with Maslow's Hierarchy that humans whether old or young have the same basic needs, however more often than not these needs go unsatisfied for the elderly because society considers them of a lower social status. Most of these needs can be affected by the environment in which an older person is exposed to and thus the responsibility of the architect or planner to take into consideration.

04

THE SOCIAL SPHERE

"EVEN THOUGH THE AGED HAVE **HAD TO WITHDRAW** FROM THE RIGORS OF LIFE ....THEY HAVE **NOT** BEEN ENTIRELY **DOOMED** TO PASSIVITY. THE AGED HAVE **NOT** BEEN MERE **SOCIAL PARASITES**."

4.1 THE ELDERLY IN **TRADITIONAL SOCIETY.**

“Even though the aged have had to withdraw from the rigors of life and betake themselves to domestic shelter, they have not been entirely doomed to passivity. The aged have not been mere social parasites.” (Simmons 1945:176)

In primitive society, as vitality declined, the aged would have to depend more upon personal relations with others through the use of reciprocation. An example was in the Xhosa tribes where old women in need where received into a kraal and set to work on small chores as long as they could do this they would continue to be looked after and fed but became liable to neglect once they stopped working. The aged would continue to execute lighter socially useful tasks like exercise of knowledge, skill, and experience in supervision and instruction in complicated skills, rituals and ceremonies of daily life.

“The elderly formed an integral part of a kinship system which made full provision for the elderly. Within the extended family there was communal sharing and every person had a function to perform according to age and status. The elderly performed their functions as prescribed by social conventions and coped effectively (Dubazana 1985)”.

Dubazana describes how the elderly coped in the economic realm by relief of some duties and where not compelled to work hard because it was felt they had already done their fair share for the survival of their families but they still contributed actively by taking responsibility of livestock and children when the parents when cultivating the land. In the Zulu society, the elderly where taken care of by their extended family allowing them to cope well with their daily tasks.



4.1 Elderly playing with young children

Modern society seems not to take cognisance of the potential of the elderly, it associates aging with physical, psychological and social disablement and hence dependence. “Knowledge, wisdom and experience are social assets which normally accumulate with age and outlast stamina.” Simmons (1945:176) It is evident from Simmons studies that the in the absence of family, the elderly in primitive society were taken care of by the community as a result of reciprocal action. A possible reason for the abandonment of the elderly in modern society is the lack of recognition of that reciprocity. A challenge for the planner would be to make understood the potential of the elderly as a resource within a community.

Can modern urban society learn from the past and meaningfully integrate its elderly in to urban society?

Can modern elderly make a meaningful contribution to modern society?



4.2 THE **RURAL ELDERLY**

The rural elderly face a number of economic problems and live far below South Africa's standard of living, while they receive pensions as a form of financial support this aid is inadequate, this may be the reason that their communities partially still function like those in the traditional society. While the roles that their traditional counterparts partook in have now mostly been taken over, they still depend on kinship.

4.2



4.2 Elderly grandparents taking care of grandchildren while parents are away at work on the farms

The rural elderly encounter problems as a result of social change; this can be attributed to a number of factors (Ferreira et al 1989),

-The roles that their fathers performed like educating the youth have been taken over by institutions like schools.

-Their importance in contributing to a subsistence economy has been diminished by the demands of a capitalist economy driven by urbanization and industrialization.

-The change of the family pattern from the extended to a nuclear family unit has disrupted the kinship welfare system
The demand for literacy in modern technological era has rendered them obsolete

-The complexity of modern society and resulting alienation requires the elderly to adjust.

Nevertheless, South Africa's rural elderly cope relatively well with interpersonal problems as a result of the supportive social networks that still exist in the rural areas. The elderly receive support from their neighbours who may not necessarily be relatives. Also rural elderly are supportive to one another and visit each other to share reminisces of the good old days and are there to console or advice in times of trouble. This community participation is as a result of the high esteem in which the community holds its elderly. (Dubazana 1985)

Can the urban society take lessons from community participation of the rural elderly?

Is it possible to create a network for the elderly in an urban context?

4.3 MODERN ATTITUDES TOWARDS AGING

South Africans portray conflicting views on aging and the elderly. On a local South African radio show (Yfm, April 2009), whose listenership is mostly black youth, the DJ put to his audience the question of taking grandparents or parents to an old age home. The results of this showed how a majority of black people believe old age homes are a western thing, with one respondent saying “ugogo passed away at home with us, she was a blessing to us and we wouldn’t have had it any other way”. A majority mention how it is not normal for black people to put their elderly relatives in old age homes unless it is a nursing home for purely medical reasons.

Other respondents on the show spoke of how modern life is demanding and that they would not have time to spend with their aging parents or grandparents and thus would consider an old age home. It also emerged in this show that there is a general belief in that grandparents should become baby-sitters of their grandchildren. The aged were considered as having responsibility of transferring norms and folklore to the younger generation. Nevertheless, a majority of black people believe that the elderly should age in their homes or family homes according to that particular survey.

Until recently, little attention had been paid to the problem of the care of South Africa’s black elderly, the assumption was that their families where able and willing to take care of their aged, this is no longer viewed as a given fact especially for the urban population. Black urban families have become nuclear families and at the poorer end live in small houses and are unable to provide for their aged. In cases where the families care for their aged, the care is often inadequate. Welfare organizations and churches like the Mes-Aksie in the inner city of Johannesburg have had to intervene providing shelter, health care transport and food for the elderly. (Ferreira et al 1989)

In 1985, a study was conducted by Ester Chinkanda, in which 1297 blacks from Gauteng aged 18 years and above where interviewed on their opinions on suitable care for the aged. The findings where that 78.5% stated that care for the elderly should be the responsibility of welfare organisations, 64% mentioned community groups as care providers, 17.2% mentioned government and only 1.9% mentioned family and relatives. The combined suggestion of government and family care was found favourable by 40.2%. The respondents were asked whether they would like to live in an old age home when they grew old and a majority of 58.8% said yes, 37.7% said no and the remaining 8.5% were unsure. The suggestion of a service centre for the aged, which was fairly new at the time and is still rare today in South Africa, was made, to which 94.3% agreed. Seeing as community involvement is necessary for the operation of such a centre, they were asked if they would be willing to be involved, with 86% responding positively to the idea. (Ferreira et al 1989)

Another study was done by Valerie Moller in 1986; the study was to ascertain the KwaMashu community's views on 'Educare' training for senior black women. Educare is designed to develop the skills of preschool child minders. The sample was 302 residents of the area who were questioned on their views. The results indicated that such a programme would be well received by the community. Respondents anticipated that this programme would benefit their community by raising the standards of child minding service in the community and increase alternatives to crèche facilities. They also anticipated parents would welcome this scheme as expose their children to traditional manners and customs while providing more convenient and less expensive childcare. It was also seen as beneficial for the elderly in that it exposed their generation to employment and income earning opportunities, social recognition and the learning of new skills. (Ferreira et al 1989)

05

DEMOGRAPHY

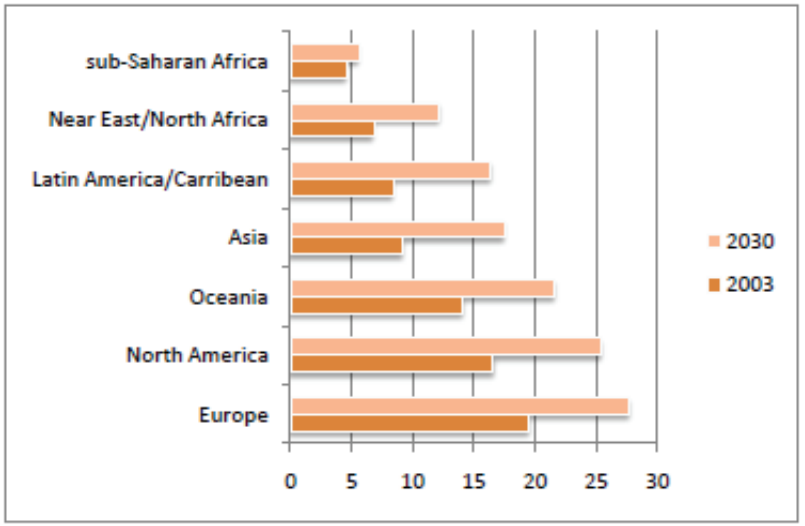
SA RANKED AMONGST THE WORLD'S **TOP 30** COUNTIES WITH THE MOST **AGED PERSONS** ... ESTIMATED TO HAVE JUST **OVER 3 MILLION** IN 2003...THIS NUMBER IS ESTIMATED **TO INCREASE** TO 5 MILLION BY 2030

5.1 THE **DEMOGRAPHIC PROFILE** OF SOUTH AFRICA'S ELDERLY

The world is aging at an unprecedented rate and the numbers and pace of aging vary widely between and within the different regions where typically more developed regions have higher proportions of aged than developing regions as seen in figure 5.1.

The small increase in the proportion aged over 60 masks the large increase in the actual numbers of people in this group. The number of people over 60 is projected to double from over 32 million in 2003 to almost 63 million by 2030. The number of older people is growing more rapidly in sub Saharan Africa than in the developed world and is projected to continue on this path as seen in figure 5.1

In 2003 South Africa ranked amongst the world's top 30 counties with the largest number of aged persons along with Nigeria. South Africa was estimated to have just over 3 million in 2003 and this number is estimated to increase to 5 million by 2030



5.1

5.1 (Population in Millions) Proportion growth projection of aged over 27 years (author, derived stats SA)

According to the Department of Health the following is true of South African elder Based on analysis of information extracted from the 1996 population census regarding the living conditions and life circumstances of South Africans aged 65 years and older:

In October 1996, there were approximately 1,94 million aged persons (65 years and older), of which 61,4% were females.
The aged population constituted about 5% of the total South African population (40,6 million).

Females tend to live longer than males. The aged males made up only 3,8% of the total male population, while the aged females made up 5,7% of the total female population.

46 000 aged persons (about 0,1% of the total population) approximately 8,6% of white, 2,8% of coloured, 1,3% of Indian, and 0,1% of African people resided in homes for the aged. Females made up the bulk (78,4%) of these institutions. Homes for the aged were primarily situated in urban areas, away from (rural areas) where the majority of the African aged population (68,8%) lived.

More than two thirds (76,8%) of the African aged individuals had no formal schooling. The white aged group recorded a no-schooling figure of 2,0%. Females aged 65 years and older were less likely (36,0%) than their male counterparts (64,0%) to have received any formal education.

Individuals without any formal education increased as the age category increased. Only 6,4% of those aged 20-24 year old had no formal schooling while 58,0% of those aged 85 years and older had no formal schooling.

Africans constituted the largest section of the aged population with 1,3 million individuals (67.0%), followed by whites with 455 000 (23.5%), coloured persons with 129 000 (6.7%) and Indians with 39 000 (2.0%). This clearly indicates that the white population in South Africa is living longer than the other population groups. In general, as is the case in most countries, the female population tends to live longer than males.

Approximately 430 000 (23,1 %) of the aged population were disabled. The most common disability suffered by the aged was loss of sight (47,1%) followed by physical disabilities (20,4%) hearing impairment (14,3%), multiple disabilities (10,5%) and mental disability (2,9%). The highest proportion of aged individuals with disabilities was recorded among the African population (28,2%) while the white population had the lowest level of disability (10,5%). The largest section of the aged disabled population was resident in the non-urban areas (57,1%), while disability was more prevalent among the aged female population than their male counterparts (23,1% and 22,0% respectively). Lower levels of disability among individuals from all population groups for those aged 0-64 years, than for the 65 years and older group, were recorded.

Provision of basic services, such as water, refuse removal and electricity, supplied by local authorities, are mainly limited to urban areas.

Approximately 6 out of every 100 aged persons were employed. Individuals living in urban areas were more likely to be in employment (7,2%) than their non-urban counterparts (4,7%). More than half (53,3%) of the employed aged received an income of R1 000 or less, while the bulk (85,8%) of those not working had an income of R1 000 or less. Employed females were generally worse off than employed males with 62,1% receiving an income of R1 000 or less compared to 49,7% of their male counterparts.

Approximately 1,19 million (61,4%) of the aged population was female as against 740 000 (38,6%) males. This amounted to 5,7% of the total female population in South Africa and consisted of about 810 000 Africans (68,1%), 270 000 whites (22,7%), 77 000 coloureds (6,47%) and 22 000 Indians (1,8%).

Among the aged, the majority of Indian (97,0%), white (92,2%) and coloured (84,9%) people lived primarily in urban areas, while the majority of Africans (68,8%) lived in non-urban areas.

Overall, of the non-urban aged population, 93,6% were African, 3,9% were white, 2,0% coloured, 0,1% Indian and 0,4% people of unspecified race. The urban aged population consisted of two dominant groups that were more or less evenly represented, namely Africans (41,8%) and Whites (42,7%). The rest of the urban community consisted of approximately 11,2% coloured, 0,9% Indian and 0,4% people of unspecified race.

Of the 1,94 million aged persons, the large component, comprising 39,1% (759 000) of the aged, was aged between 65 and 69 years. Approximately 83,5% (1,62 million) of the aged were younger than 80 years.

Census 2001 revealed that Gauteng's three metropolitan areas (City of Johannesburg, City of Tshwane and Ekurhuleni) contained the bulk of Gauteng residents, with the City of Johannesburg being occupied by approximately 37% of the Gauteng population. (Statistics SA 2005)

The 2001 census shows that the elderly made up 4.9% of the total population. Among the African elderly, 58,1% of men and 64,2% of women had not received any education, compared to 2,1% of elderly white men and 3,0% of elderly white women. It was found that 5% of the countries elders were employed at the time of the census. Across all age categories, the majority of the working elderly were found working in formal or registered businesses. More elderly males were working than elderly females. The number of working African elderly was the largest, followed by white, coloured and then Asian or Indian working elderly. (Statistics SA 2005)

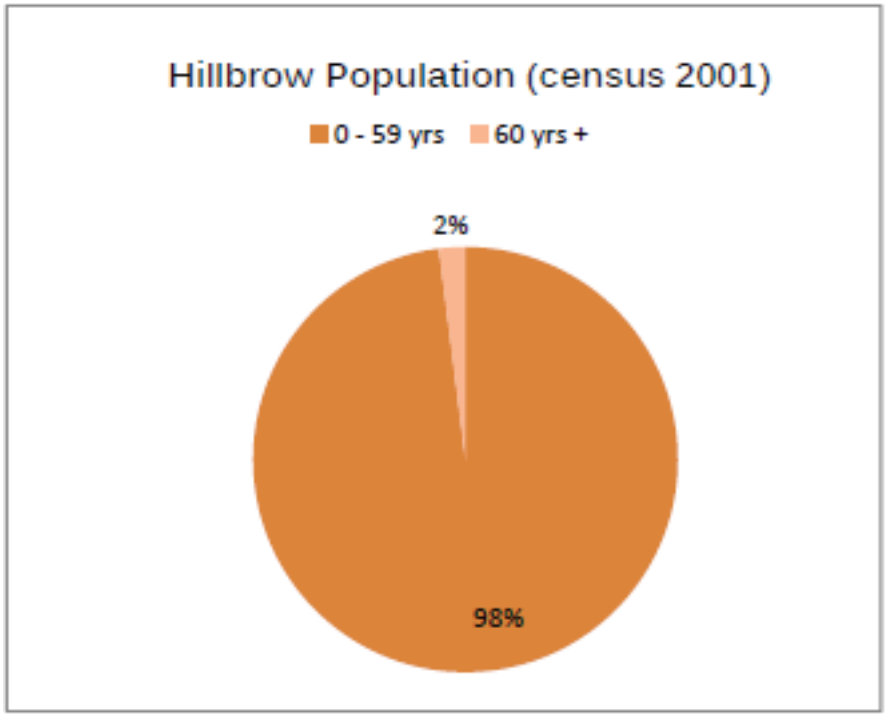
Altogether, of the 2,2 million elderly counted in Census 2001, 17.9% were reported as being disabled. Of these, 32.1% had a visual disability,14.2% a hearing disability, 2.0% a communication disability, 25.5% a physical disability, 2.7% an intellectual disability, and 5.9% an emotional disability, while 17.6% had multiple disabilities. The percentage of those with visual, hearing, physical and multiple disabilities increased steadily with increasing age while of those with emotional, communication and intellectual disabilities remained stable with increasing age. (Statistics SA 2005)

5.2 DEMOGRAPHY OF **THE ELDERLY IN JOHANNESBURG**

It is estimated that, in South Africa, by 2015 approximately 75% of the population will be residing in metropolitan/urban areas. Among the current population it is also estimated that people with disabilities and the elderly, collectively comprise approximately 20% of the population (currently 8 million people) and are in great need of social and economic upliftment and integration in society.

Gauteng is the smallest province in the country occupying an area of 17 010 square kilometres, which is approximately 1,4% of the land area of South Africa. It accommodates almost 19,7% of the total South African population making it second to KwaZulu-Natal with 21,0%. It is inhabited by people of different cultural backgrounds from all the provinces of South Africa and also from other countries. According to current (2008) population estimates based on the 2001 census, 4% of Gauteng's population is above the 65 year old mark. (Statistics SA 2008)

The central region, (region F) in which Hillbrow is located has an estimated population of 433,054 (Census 2001, Stats SA). However, this figure is inaccurate because the number of people living in the inner city on a temporary basis is unknown. According to the 2001 census 2% of Hillbrow's population are over the age of 60.



5.2

5.2 percentage of elderly in Hillbrow

THE PRIMARY LOCUS OF LIFE FOR THE ELDERLY IS WITHIN THEIR RESIDENTIAL SETTING.. URBAN CONTEXTS LIKE HILLBROW PROVIDE A NUMBER OF CHALLENGES FOR THE ELDERLY

6.0 INTRODUCTION

For the majority of the disadvantaged elderly, the city is the most accessible and as such should offer a refuge for them. According to Karen Meyer (who heads the Johannesburg branch of *Age-In-Action*) many elderly are abandoned by their families and come to Johannesburg in search of their family members but unfortunately get lost. Some elderly people who no longer afford to pay for their accommodation may also become destitute and find their way in to the city. In these situations it is very difficult to find a place for the elderly in old age homes and there are very few temporary shelters that take in these elderly people.

She says all the homes and shelters for the elderly want a fee to take in these elderly and thus become affordable only for the financially able elderly with the majority of these located outside the city. Some homes take elderly if they have pensions so as to use these funds to pay for the care they provide. Many elderly are found without any identification documents and thus cannot collect pensions and therefore excluding them from any care. Age-In-Action processes as many as 10 lost or homeless elderly per week.

Johannesburg has two organisations, (**Mes-Aksie and Age-In-Action**), which cater for the disadvantaged elderly. They are both located centrally in the city of Johannesburg with *Mes-Aksie* using different buildings around Hillbrow, while *Age-In-Action* renting space in the *Budget Insurance* high rise in the inner city to operate. Both organisations need facilities to operate from and Hillbrow would be ideal. A central location like Hillbrow would also be ideal to cater for the disadvantaged elderly as it is close to the entry ports of Johannesburg like the Park station.

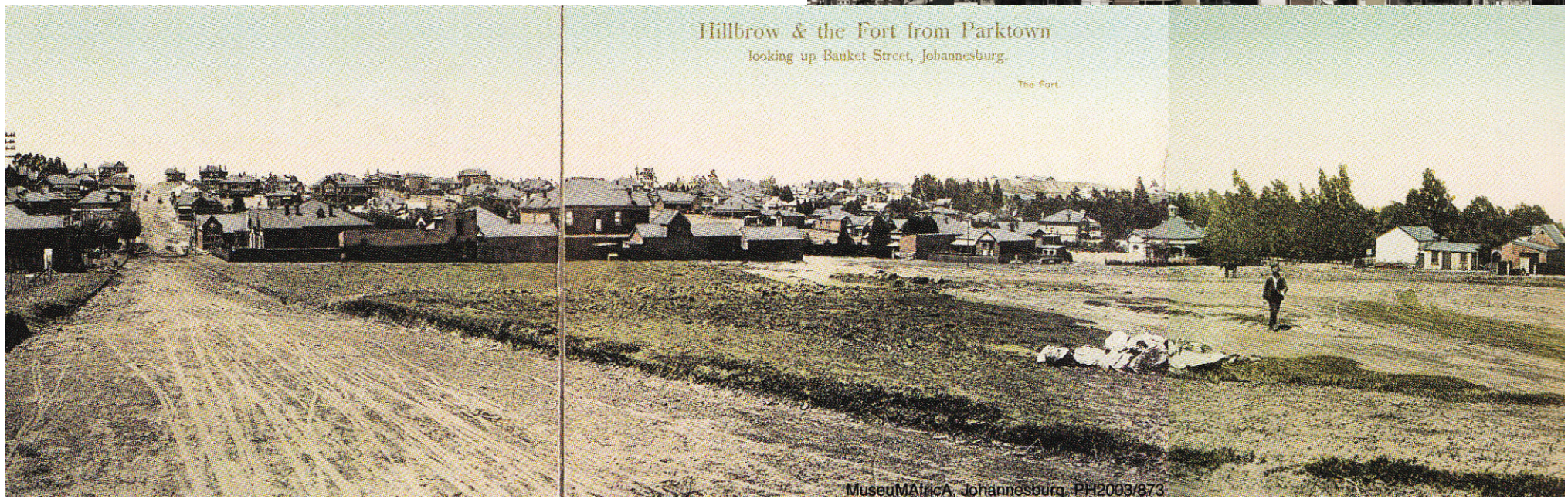
According to Karen Meyer, there are great shortcomings in service provision for the elderly because of the following reasons

- Lack of funding, be it government or NGOs.
- The elderly are considered low priority by society
- Elder rights are not really recognized
- Elder abuse is not yet recognized by law
- Old age homes are not affordable for most elderly
- Most younger people don't know how to care for the elderly

6.1 **HISTORICAL DEVELOPMENT** OF HILLBROW

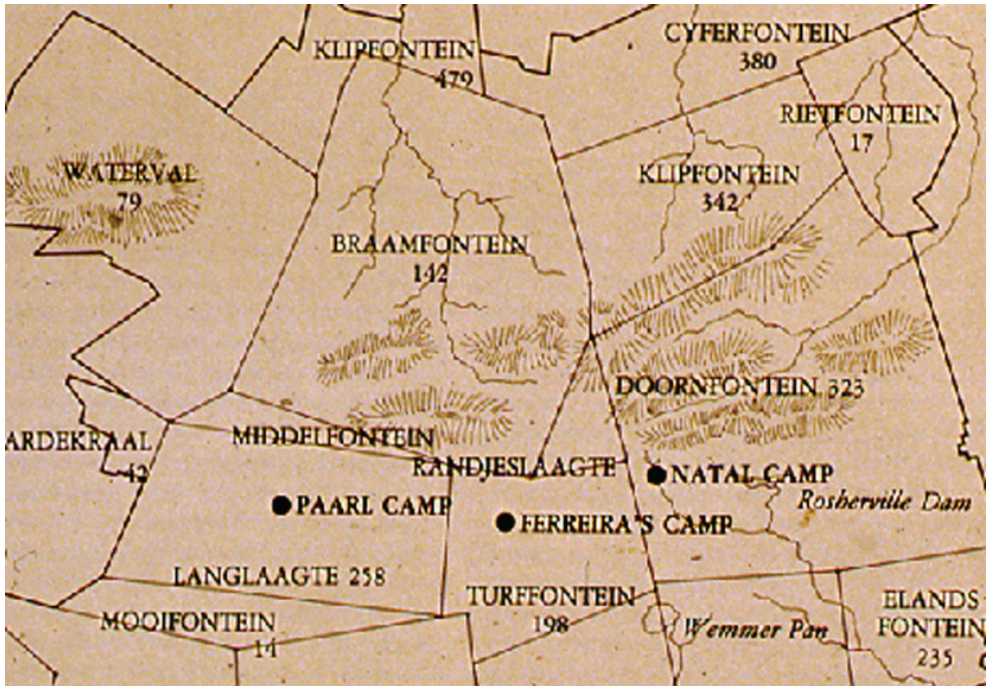
Hillbrow is a small high-density suburb (about two kilometres square) in the heart of Johannesburg, South Africa's largest city and makes up part of the Region F, along with 97 other suburbs , central Johannesburg's inner city. The city is located in the Gauteng province of South Africa, the province was once named Pretoria-Witwatersrand-Vereeniging and was renamed to Gauteng in December 1994.





6.1 Hillbrow skyline today (derived 2009 flickr) Christo Doherty
6.2 Hillbrow as seen from Parktown in the 1880s (Brodie 2008:158)

Johannesburg began in the late 1800s as a pioneering town with negligible services and impoverished shops and hotels, encouraged by an increasing demand for middle to high income housing. Residential suburbs began to emerge on the periphery of the town, which offered greener and more peaceful living environments to the towns' privileged (Clay 1982). After the discovery of the Witwatersrand gold reef in 1886, the city of Johannesburg became, within a very short period of time, the financial and commercial hub of sub-Saharan Africa. Within the first 10 years of its existence, banks, finance houses and mining company headquarters lined its streets (Chipkin, 1993). By 1890, Berea was laid out. Due to its overwhelming success, the land adjacent to it was bought by the Transvaal Mortgage and Loan Company for development in 1894. With this purchase, Hillbrow residential estate was proclaimed and marketed as 'the wealthiest and most fashionable' portion of Johannesburg. The suburb was initially zoned residential only, and developed as detached housing with gardens. This remained for twenty years; a clean suburb where the children had plenty room to play (Clay 1982)



6.3

6.3 Farm boundaries and mining camps (van der Waal 1986:1)

As a result of technological advances in the building industry, Hillbrow began to develop multi-storey buildings, and because it was located ideally between the inner city and the northern suburbs Hillbrow proved to be the best location for the development of flats. The balance of five and six storey flats provided reasonable pricing for the flats. Hillbrow's proximity to the city made it ideal as the gateway to the city. By the 40s it had become a place of transit to better housing in the city. (Clay 1982) By 1946 the city council had removed building height restrictions which saw the rise of the multi-storey building. (Morris 1999)

The 50s and 60s saw a surge in the development of Hillbrow and this was driven by the then economic boom At the time, Hillbrow was portrayed as "the healthiest and most fashionable portion of Johannesburg, within two minutes of the Hospital Hill tram" (Clay 1982). Its proximity to transport links and its proximity to the job opportunities accounted for its attractiveness. The area attracted predominantly young, upwardly mobile people who were either single, living alone or with friends and relatives and young married couples, with a number of immigrants, mostly Europeans and Jewish using Hillbrow as a transitory home. (Morris 1999) Both Hillbrow and Berea saw the last of new flat block construction in the early 1970s, and over the next decade the area remained relatively stable with the essential physical fabric having been put in place: Hillbrow and Berea functioned as high-density, primarily residential neighbourhoods characterised by large amounts of rental stock accommodating a white largely middle-class population.

This image began to be tarnished by the 1970s, as growing opposition to apartheid revealed the city's racial segregations and political divisions. According to the 1923 Urban Act, native domestic workers could only reside on the employer's property if the employer provided proper accommodation, and with an increase of the African urban population, roof tops saw fitting as accommodation for them. 1955 saw the passing of a law which restricted the number of Africans who could live on roof tops, this led to the removal of between eight and ten thousand people by 1962.(Morris 1999) The city's image was an exclusive one that "celebrated white dominance and brushed aside the alternative black experience of the city" (Rogerson, C.M., 1996. in Bremner 2000)

The late 70s saw a radical change for this part of the city, uprisings led to the emigration of foreigners (Europeans) and thus left a high vacancy rate in the area. This set the stage for the multi-racialisation of the area. This was coupled with a severe housing shortage experienced in coloured, Indian and black areas and thus push factors for white tenants and pull factors for blacks led to a rapid change in the demographics of the neighbourhood with increasing numbers of black tenants moving into the area in defiance of the prohibitions of the Group Areas Act. At the same time, the Apartheid government began to experience some doubts about the efficacy of the Group Areas Act, with the result that racially based evictions were not pursued systematically (Morris 1999). Landlords, happy to fill their vacant spaces, facilitated what became known as the 'greying' of Hillbrow. This rapid "greying" of the inner city was accompanied by physical decline and racial stereotyping of new residents (Morris, 1999).

In many cases, the exodus of white residents had been aided and abetted by landlords, who saw the "illegal" status of black tenants as an opportunity for raising rents and reducing building maintenance (Morris, 1999).

Many residents could not afford to buy their homes or pay rapidly increasing rent, were forced out of the area, while landlords were able to charge higher rents to 'illegal tenants'. Morris (1999) relates that these tenants were vulnerable

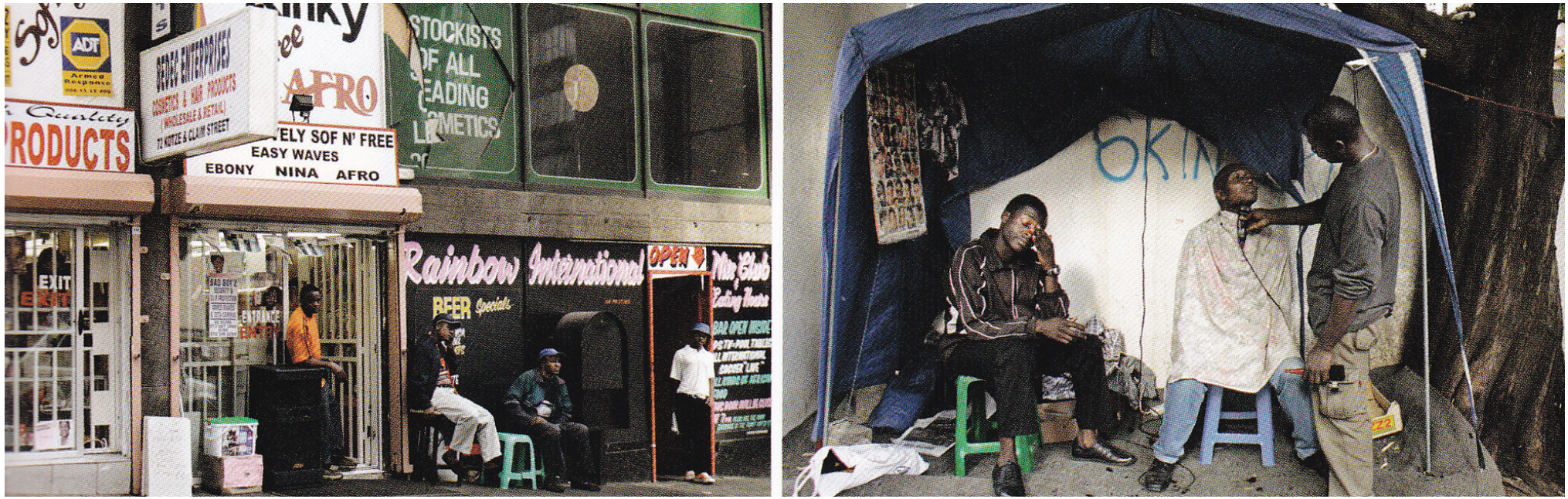
to police raids and lived in constant fear of discovery and evictions. 'Illegal tenants' organized themselves into Act-stop, a legal body which provided representation to tenants charged with contravening the Groups Areas Act in 1979.
The ruling of a landmark court case declared that tenants could not be evicted without the provision of suitable alternative accommodation, which worsened the segregated situation of Hillbrow. A financially incapable government faced a dilemma since they would not be able to conduct mass evictions in a neighbourhood the world was watching and thus Hillbrow came to represent the government's unwillingness or inability to enforce strict racial segregation.

The lack of land management opened the door for illegal activities in the area with crime, prostitution, drug trafficking and general lawlessness being the order of the day. Many residents, in particular the elderly, were fearful. The situation was particularly bad for tenants living in apartment blocks with poor security. They felt unsafe both in and outside their blocks. The constant residential flux and the lack of homogeneity also worked against the formation of close social ties. Many people were isolated and distrustful of their fellow residents (Morris 1999). This led to the internalising of many activities and destruction of any hope for a sense of community. A common response was for residents to spend their leisure time with people from their home towns and to socialise within their flats, undermining the role of Hillbrow as a vibrant local and regional entertainment centre.

According to Bremner (2000) the most rapid transformation of the inner city area from the early 1990s onwards, however, was the growth of the informal commerce and catering sector. Informal trading became one of the most "spectacular expressions" of the desegregation of urban space associated with the end of apartheid (Tomlinson et al, in Bremner 2000).

Large formal enterprises moved out of the neighbourhood to be replaced by smaller shops and street traders providing an increasingly limited number of services to an exclusively local population. By 1993, it was estimated at least 15 000 people were earning their living on the streets of Greater Johannesburg, mostly at a survivalist level. Four thousand of these were located in the inner city, and 45% of them were foreign (Star and Citizen 1993, in Bremner 2000).

By the late 1990s, a new wave of immigrants from other African countries arrived in Hillbrow, and in the same sense Hillbrow is used by these immigrants as a transitory neighbourhood. Increasing heterogeneity of the population and ongoing flux has undermined whatever sense of community Actstop had engendered in the 1980s.



6.4 Street scenes from Hillbrow (Brodie 2008:165)

6.2 THE **ELDERLY IN HILLBROW**

The primary locus of life for the elderly is within their residential setting as they spend most of their lives in it. Urban contexts like Hillbrow and the surrounding metropolis provide a number of challenges for the elderly and must be understood and dealt with appropriately when designing for the elderly in such a context. Life in the city shows little if any form or sense of community, and this is the source of some of the problems faced by the elderly, ranging from crime to simple loneliness in a city of millions.



Mobility and accessibility

The buildings in Hillbrow were built right up to the street edge to give the township a tighter, more urban character (Silverman et al 2005). The lack of provision for informal trade means this retail activity takes place on the very narrow and already congested pavements or at the ends of the service lanes.



This creates an unfavourable environment for the elderly to walk through thus their preference to stay indoors.
Most buildings are taller than five storeys, which suggest the needs for lifts. Lifts are often the first services to break down due to inadequate maintenance, thus making it difficult if not impossible for the elderly or the disabled to continue living in these buildings. (Silverman, Zack 2005)



The sighted person has an enormous quantity of information with which to achieve dynamic obstacle avoidance and landmark recognition. For the visually impaired person this information is diminished to a large extent or is totally absent.

6.5 (previous page) Busy streets of hillbrow (Flickr 2009)
6.6 Visual impairment makes city life difficult (author)

Vulnerability to crime

Since the greying period of Hillbrow's history crime has been on the rise and because of frailty and vulnerability. Most Johannesburg residents over the age of 15 years are equally at risk of robbery and mugging, but residents of the Hillbrow and the elderly are much more vulnerable to crime.

Location of public space

The Hillbrow area has a few main public spaces but due to distance may become inaccessible dependant on the older person living in the area. This results in the elderly staying in their small apartments and thus isolation from the outside world and a poor quality of life

6.3 DOORNFONTEIN

Because of the harsh conditions that make Hillbrow unfriendly for the elderly, the site chosen is on the edge of Hillbrow and Doornfontein where these conditions begin to change.

Doornfontein, is an inner-city suburb of Johannesburg, South Africa, located to the east of the city centre. Doornfontein was the first suburb established outside of the central city, named from the farm in which it was located. The farm was initially owned by Barend Christian Viljoen who named it ‘thorn fountain’ (Doornfontein) because of its thorny trees and freshwater spring.

Around 1886 when the first few miners settled on the farm Doornfontein was initially perceived as too far from the city which coupled with the uncertainty in gold investments resulted in estate developers buying leases for 1 pound. The suburb was laid out in the late 1880s by Thomas Yeo, and became the first residential suburb of Johannesburg. By 1890 it had become a much sought after suburb and stands went for as much 500 pounds. From the barren Johannesburg

veld sprung a tree lined suburb with gabled villas. Saratoga Avenue which led from Doornfontein to town was established and because of the mansions of big names such as John Dale Lace, Friedrech Eckstein, Barney Barnato etc, it became known as millionaires' row.

Doornfontein and its surrounds are home to many of Johannesburg's oldest places of worship which where resultant of its residents through time. Following the Anglo-Boer War, many of the wealthier residents moved north to Parktown, and Doornfontein became home to many Jewish immigrants. The Lions Synagogue, built in 1906, is the only remaining shul in Doornfontein.

A legion of workers was required to keep the industry going, by 1911 Johannesburg's native population had reached over 100 000 which lead the need for native housing to surpass the small supply. The official native location of Klipspruit which was well outside the city bounds was only able to accommodate 3000 people, a far cry from the demand and also a great



6.7 Lions Shul in Doornfontein (Brodie 2008:107)

inconvenience due to its distance. The segregationist policies of town planners clashed with demands of employers and lead to the creation of residence permits for natives which allowed them to live within certain limits of the city but did not provide suitable accommodation for them. At the same time land owners and property speculators were trying to make money out of the now vacant properties in Doornfontein which had been left so by the departure wealthy and middle classes and thus plummeted property values. By turning their properties into slum houses or yards, they were able to make profits again, with natives willing to pay exorbitant rates for the chance to live within the bounds of the city. By the mid-1930s these areas were cleared and turned into light industrial manufacturing areas most of which still stand as such.

Large areas of Doornfontein are now occupied by the Technikon Witwatersrand, which is now a part of the University of Johannesburg. There are also quite a number of schools in the surrounding area with one such, JH Harris Primary school being adjacent to the site. Ellis Park Stadium and Johannesburg (Athletics) Stadium are also situated in Doornfontein. The area has undergone substantial transport renewal at present in preparation for the soccer world cup in 2010, especially the introduction of a key route of the new rapid transit bus system.

SOCIAL CASE STUDY

7.1 SOCIAL CAPITAL

Social capital is defined by Robert D Putham as “the collective value of all social networks (who people know) and the inclinations that arise from these networks to do things for each other.” (Wikipedia Cited April 2005) Social capital contributes to building up mutual trust and reciprocity. This concept of social capital can be seen in a similar way as ubuntu.

7.2 A case study in Brazil

In 1994 a pilot intergenerational project was started in the city of Taguatinga, Brazil, to promote the well-being of both elderly and adolescent populations using reminiscence processes as a means of interaction. The purpose of the study is to evaluate the project from the participants’ viewpoint and to improve the contribution of those age groups in building up social capital.

From November 1999 to April 2000 a qualitative study using focus groups technique was conducted. Using a discussion guide, 9 groups of students, ranging in age from 13 to 19 years old, and 3 groups of elderly aged 60 years and over were interviewed to collect data regarding their interaction before and after an intergenerational program. Approximately 200 seventh and eighth grade students participated, with an average of 25 elders of both sexes attending about ten sessions a year. Each session comprised of five groups with 40 students and 5 elders each with sessions of approximately held in the classrooms fortnightly.

Reminiscence, the process of recollecting past experiences, was chosen as a means of interaction given the value of this practice for elderly people and its significance as a cultural resource for the community. The project was aimed to improve social cohesion, self-perception of elderly health status, reduce stereotypes and prejudice between generations, enhance components of social capital such as trust and reciprocity, and provide a source of social and emotional support for the participants.

The main findings suggested a change in attitude of young people toward old age and elderly people. Participating elderly people reported improvement in their health status. For both age groups the findings suggested a better understanding between generations. An important finding was the perceptions some groups of students had that they felt free to talk to elders and the contact with elders made them more peaceful. It led them to believe that this kind of activity can prevent violent behaviour and drug abuse among young people. The elder male group also reached the same conclusion.

It seems that this engagement with elders could provide affection ties that encourage trust, reciprocity, and autonomy and become a protective factor for those resilient children from disrupted families. In the study sample it was discovered that young people initially had stereotypical negative attitudes toward elders and old age. This study showed strong evidence that social cohesion has a positive effect on health and that increasing the level of participation reduces social exclusion and improves quality of community life.

Such a model of social interaction has potential for the youth of Hillbrow and Johannesburg as a whole. Further exploration could be taken into the exchange between elderly and youth with possibilities like skills exchange for destitute youth of Hillbrow or even story telling for young school children after school.



6.7 Elder advising his grandchild (HelpAge.org 2009)

08

PRECEDENCE STUDY

8.1 **SANTA RITA GERIATRIC CENTER** / MANUEL OCAÑA

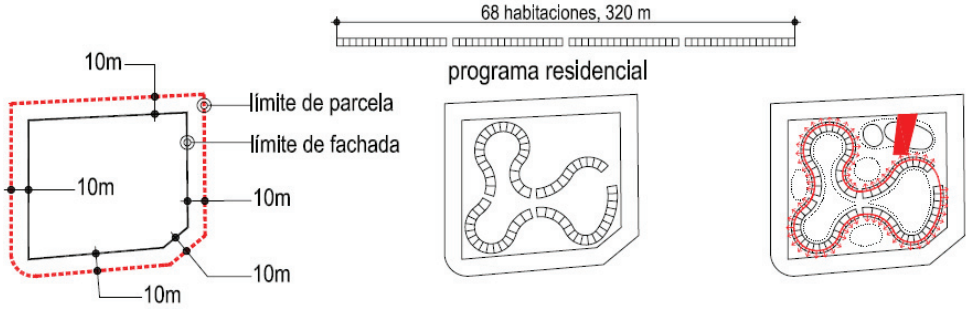
The Santa Rita geriatric centre is designed with a focus on creating a non hospital like environment where frail elderly residents spend the last years or months of their lives. This building perpetuates the fact that it is possible to build a geriatric centre that does not look like a hospital.

Project details

Usage:	Geriatric center, assisted accomodation
Access:	Fluid internal and external access
Units:	68
Construction type:	Reinforced concrete, steel frame, polycarbonate walls
Architect:	Manuel Ocaña
Location:	Ciutadella, Illes Baleares, Spain
Budget:	$5.200.000 € (garden included) - $868€/sqm
Area:	5.990 sqm building + 6.200 sqm gardens
Construction time:	2004-2009

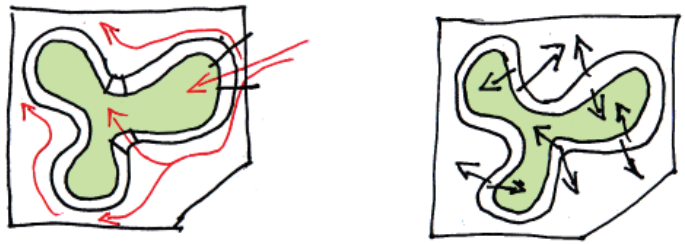


9.1



8.2

With neither corridors nor architectural barriers and on a single floor, the building has 68 units in an organic form such that each room has direct access to indoor activities and the outdoor garden. The aim is to ensure total accessibility, physical autonomy, psychical security and respect to individual privacy, facilitating access to visitors.



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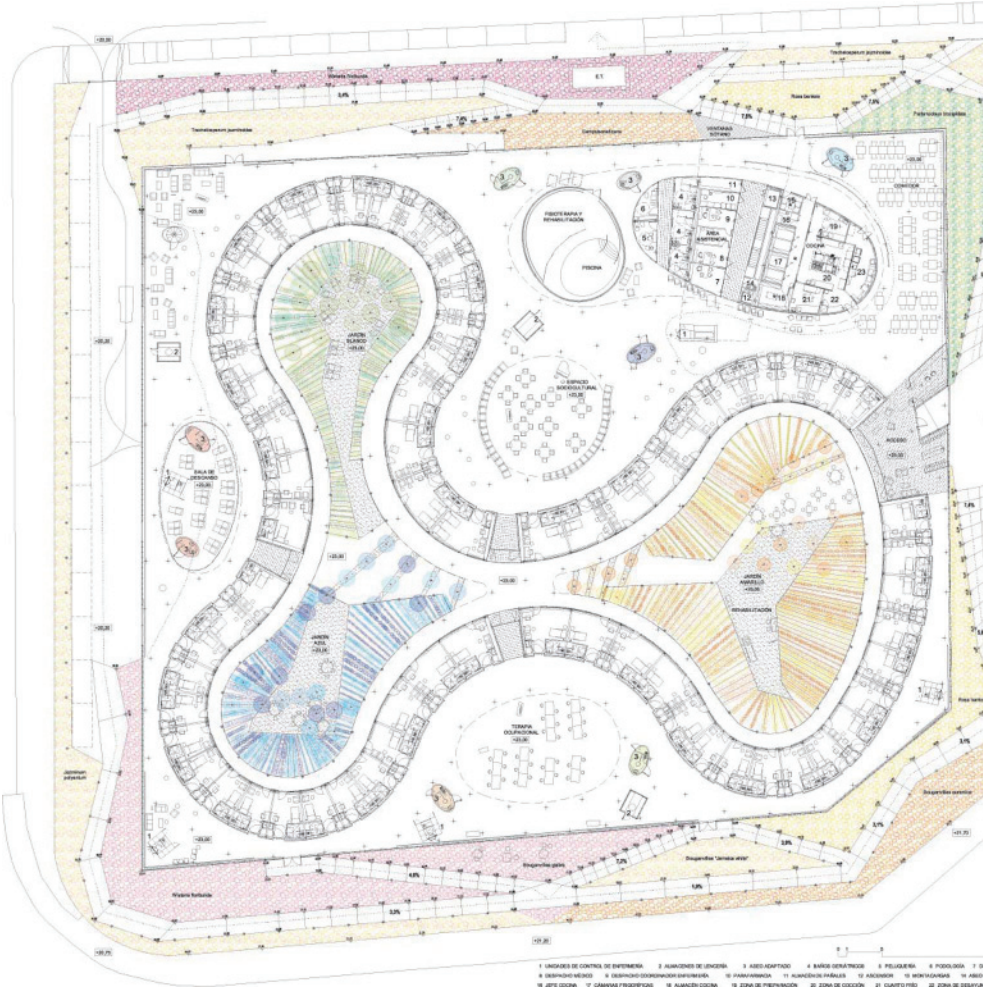


8.4

8.2 Site boundaries and unit arrangement (archdaily.com 2009)

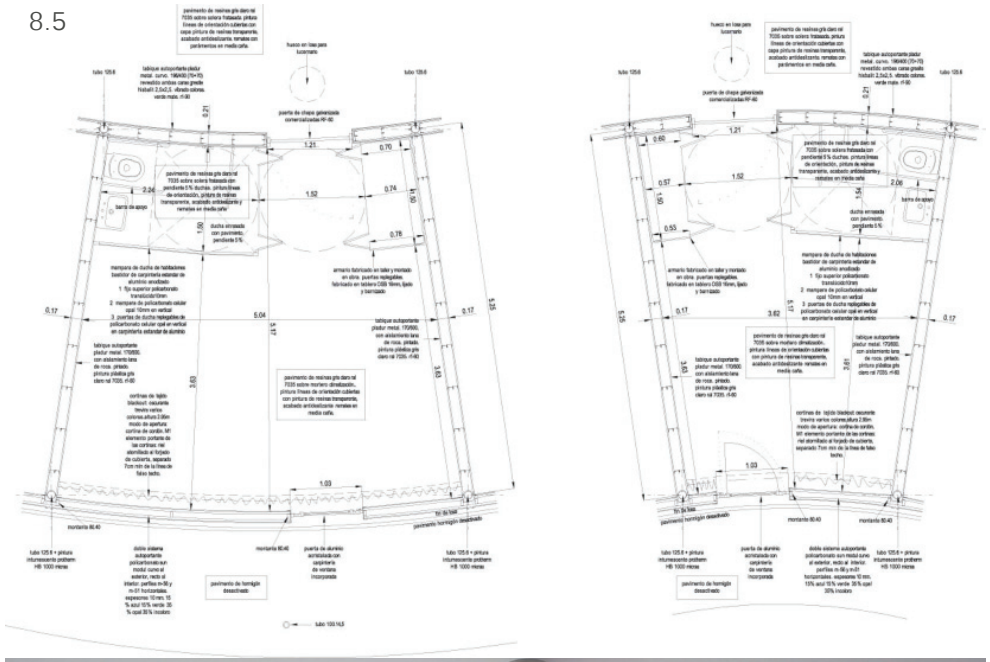
8.3 free flow of movement between garden space and internal spaces (author)

8.4 Floor Plan (archdaily.com 2009)

The rooms are fitted with all necessary medical units while do not necessarily look like hospital or frail care rooms. The importance of lighting for the elderly is taken into consideration and as such the use of translucent poly-carbonate walls that face the garden to let in maximum light while allowing for privacy. The light from the translucent walls offers more comfort than direct light as glare affects the retina more when one gets older. (See appendix 12.1)

The doors from the units into the garden are dual purpose (door and window) with part of the door being a pivoted panel to allow for ventilation.

8.5



8.6



8.5 Unit variation (archdaily.com 2009)

8.6 Photograph showing translucent walls (archdaily.com 2009)

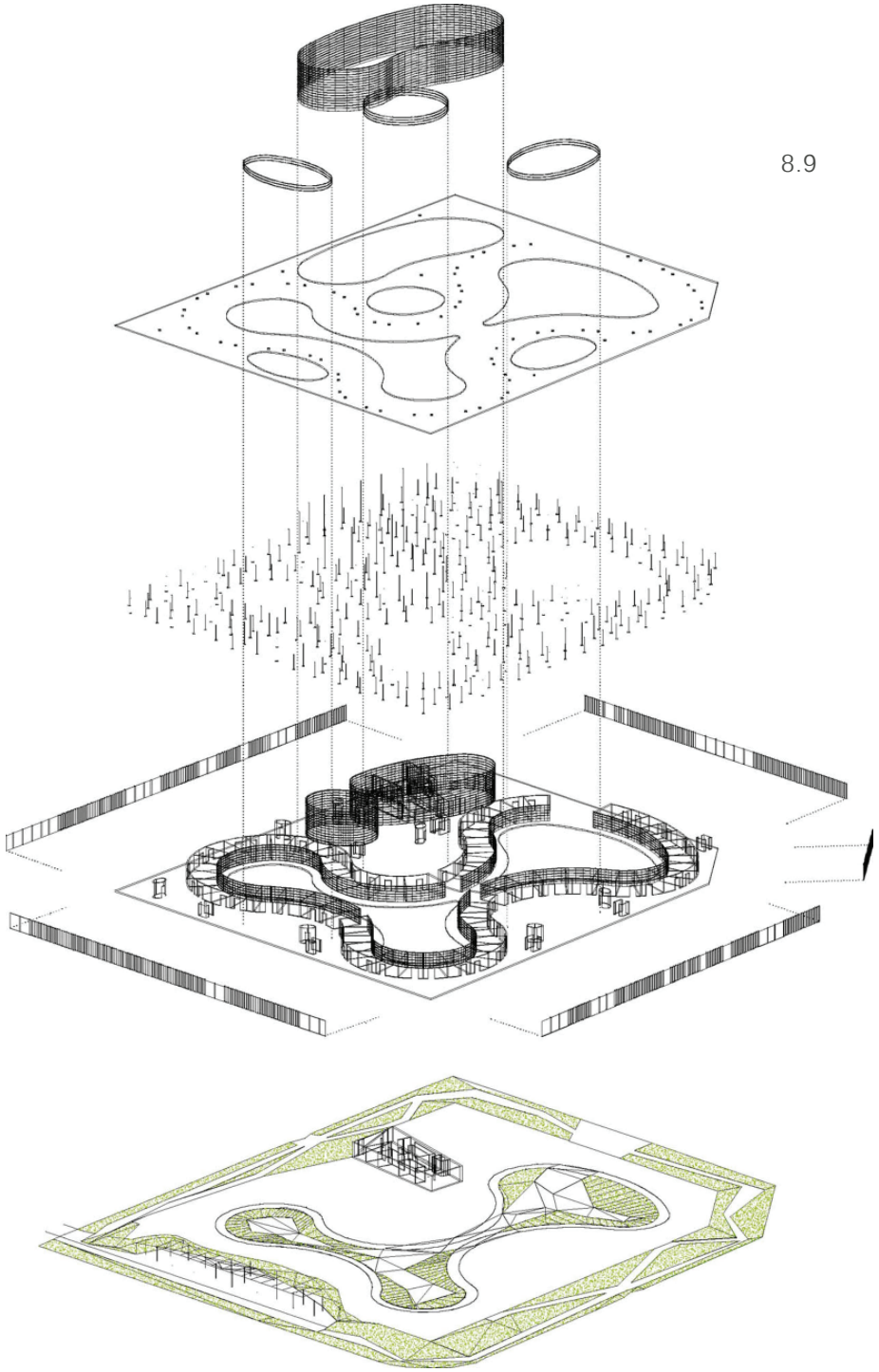


8.7



8.8

8.9



8.7-8 Aerial photographs showing building location (archdaily.com 2009)

8.9 Exploded view (archdaily.com 2009)


8.10


8.11

For elderly with memory problems routes and objects have been clearly marked through colour-coded lines, columns, seating and wall paint

8.10-11 Colour coded routes and areas (derived archdaily.com 2009)
8.12 Well lit common spaces (archdaily.com 2009)



8.12











8.13-5 Covered walkways around the internal garden space

8.16 Junction between building and internal gardens

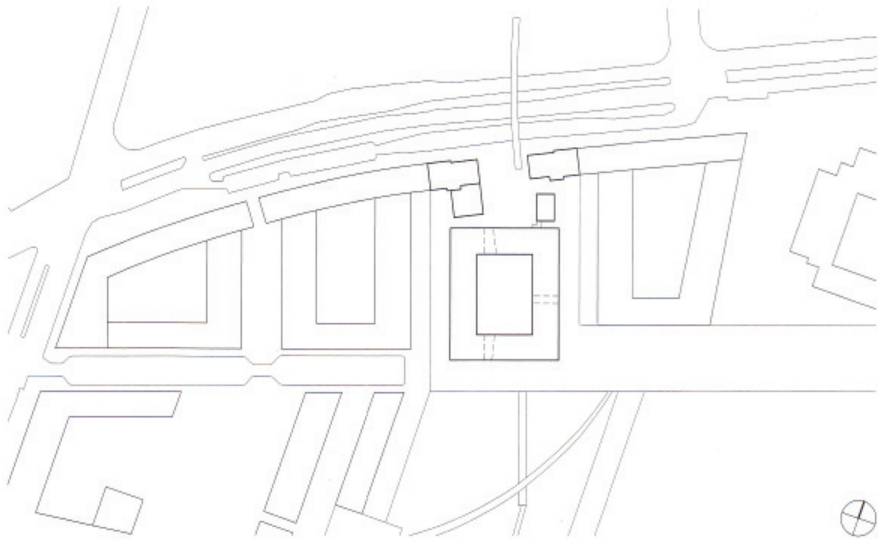
8.17 View of building from garden

The project was chosen as a case study mainly because of its varied programme which allows for the creation of a community within the building and its appropriate response to its urban context.

Project details

Usage:	shops, cafe, offices, medical practices, apartments
Units:	30 assisted living apartments (51.46m²)
	12 mini-lofts (31.39m²)
	6 maisonettes (98.65m²)
	26 two-room apartments (54.72m²)
	13 three-room apartments (78.81m²)
Access:	access walkways
Internal height:	3.65m Ground floor
	3.15m first floor
	2.76m second-fifth floors
Construction type:	Reinforced concrete
Total floor area:	2.040m²
Residential area:	4.905m²
Total site area:	6000m²
Construction cost:	800 €/m²
Construction time:	1998-2001

8.18



8.19

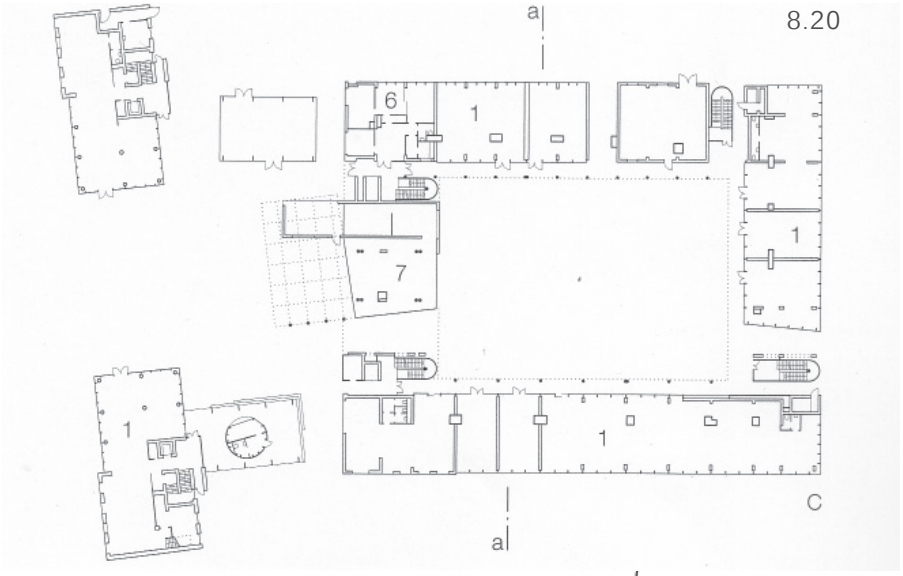


8.18 Site plan (Schittich 2007:37)

8.19 View from southern entrence (Schittich 2007:36)

The programme caters for shops cafe, offices medical practices, assisted living apartments and mini lofts for temporary accommodation. The five storey building is set back from the street creating a public open plaza which indicates the commencement of the urban district. Various businesses operate on the plaza providing the residents most of their daily needs with a cafe that enhances and animates the plaza.

A semi private courtyard is encompassed by the development allowing for more protected private activity for the seniors living in the development.



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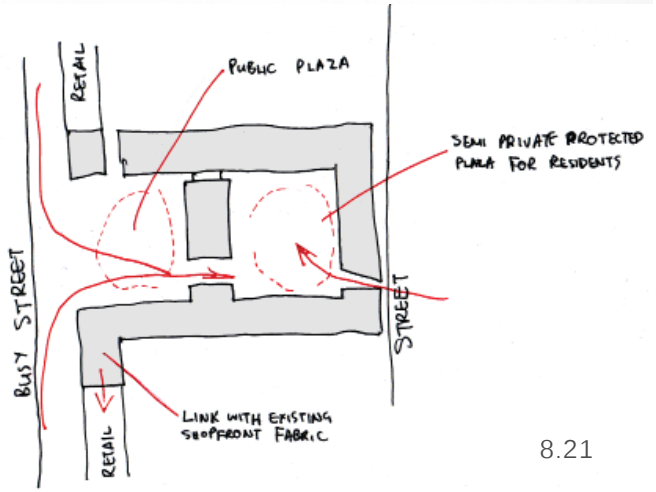


8.21

8.20 Ground floor plan (Schittich 2007:38)
8.21 Analytical plan sketch (author)
8.22 View from internal semi-private plaza (Schittich 2007:37)



8.22

PROGRAMMATIC RESOLUTION

9.1 THE PROPOSAL

It is evident from the research done that the elderly are a non-prioritized and mostly sidelined part of the community. As a means of representing the elderly and allowing their voices to be heard this thesis proposes the creation of a one-stop Senior Citizens' Centre.

The solution for such a service centre will be focused on allowing for interaction with children and the general community while creating a stimulating and therapeutic environment that offers all services for the elderly.

Enhancing Social Interaction

Enhancing social interaction, without forcing it, is a primary issue in design for the elderly. Like all age groups, the elderly need the independence of choice. Nothing is more frightening for an older person than to be forced into a group of strangers. Yet we have already seen the need for the elderly to feel like they belong, to interact, to touch, to express themselves. To solve this dichotomy we must provide the opportunity for the elderly to become socially involved, or to retreat in privacy. One possible solution is to provide visual connections to social activity.

Integenerational Contact

This can be beneficial to the community at large as through programs such an the reminiscence project in Brazil or the Educare programme in Kwamashu by providing opportunities for children to build trust, to develop an understanding of self and others, and to encourage respect for the feelings and rights of others.

Recreational Choice

Recreational choice allows the elderly to select their daily activity. As we ‘have already seen, the elderly are very independent, and don’t like to be forced to do anything. We as humans never like to be told what to do. Even as children, when we should probably do exactly as we are told, humans rebel against authority. In the case of the older person recreation can be closely associated with work activity. The aging individual still requires the challenge of work, and the exhilaration of self-subsistence. One form of recreational activity for the elderly could be upkeep of a community garden, or possibly private gardens. The community garden would address many key issues in design for the elderly: inducing social interaction, providing sustained activity.

There is a possibility of earning an income from selling produce from gardens, child minding, teaching craft; they could even partially feed themselves and the community with the produce from their gardens. Such activity would bring recognition and a sense of fulfilment to the elderly and bring sentiments of self sufficiency and independence.

Intergrating nature into design

Integrating nature in design for the elderly develops a quality of fulfilment that is unmatched, for nature has the capacity to excite all the senses. Plants and flowers ‘are more than beautiful, they also provide a therapeutic work environment. The challenge of maintaining a quality greenhouse or garden is very enriching. Plants are a symbol of life that produce a nurturing environment for the aging, while also reinforcing an abundance of self-esteem and pride.

9.2 PROGRAMATIC RESOLUTION

The proposed service centre will be a social and recreational hub intended as a means for the elderly to interact and communicate with the community

Dual Daycare and storytelling for children. As part of the seniors' interaction with the community, a day care centre would be beneficial and can generate income while giving intergenerational learning for the children

Shelter for elderly. According to Mes-Aksie, there are hundreds of elderly living in the streets of Hillbrow and would benefit from a safehouse or transitional shelter. A possibility would also be purpose built subsidised retirement apartments to generate income in their rental for the facility

Frail Care. A small frail care facility would be included to cater for the much older residents allowing them to interact with the other elderly in the facility

Health facility. The elderly have a number of ailments and as this centre serves them, a small health facility would be useful, offering services like physiotherapy, dentistry, eye care and general healthcare. Such a facility can also be an opportunity for university medical students to practise their community service.

Facilities for Social services. Mes-Aksie and Age-In-Action offer social services to the elderly from inadequate facilities and would thus benefit from dedicated facilities.

Meeting/Interaction and dining space. This space has to be both indoor and outdoor giving the elderly person the option to retreat into privacy. Lunch would be served for the elderly and as such space for eating is necessary, this space can be shared with the interaction space.

Contemporary Orientation. With the advance of times, technologies change and certain skills become redundant leaving the older person at a disadvantage, an educational facility geared towards reorienting the elderly would be appropriate to bridge this gap.

Counselling. According to Age-In-Action, many elderly cannot afford legal advice and end up succumbing to abuse by other members of society. Counselling rooms would be part of the programme. Retirement advice can also be given to younger members of society.

Garden. Caring for plants can benefit seniors by giving a sense of purpose among other reasons and as a means of mini-farming would also be an income generator.

Workshops. Most elderly are equipped with technical skills that can be passed on to younger generations especially destitute youths within the community. A pottery workshop will be part of this as a therapeutic activity for the elderly.

Shop. The shop can help to fund the facility by selling produce from the garden, pottery from the workshop and It can also give the seniors a sense of economic importance in the community

Kitchen. A large kitchen would be needed to cater for residents, day visitors, children at the day-care and a meals on wheels service for the community.

Other space needed to run the facility would be administrative office space, toilets and janitor facilities.

10.3 **PROGRAMME**

Foyer and lobby spaces
Safe house/ Transitional shelter
Apartments
Day-care
Health facility
Social services and Counselling
Contemporary orientation
Leisure spaces- elderly club houses
Garden space (mini-farming)
Multifunctional public – private space
Food preparation
Shop
Chapel
Workshops
Pottery workshop

Schedule of Areas

Elderly apartments	1542 m2	
Space	area m2	quantity
subsidised apartments(no kitchen)	25	37
temporary shelter	18	13
floor parent/ nurse	32	4
laundry	20	1
common room	235	1

Frail Care	208 m2	
Space	area m2	quantity
Equipped frail-care rooms	25	6
Nurse station	12	1
Reception Lobby	30	1
Communual bathroom	20	1
Chapel	41	1
Sun Balconies	40	2
Parking		1

admin	106 m2	
Space	area m2	quantity
directors offices	11	1
open plan office	40	1
reception & waiting	17	1
boardroom/ training	35	1
storage	3	1
parking		4

Medical centre	288 m2	
Space	area m2	quantity
GP consultation room	15	1
Eyecare consultation room	15	1
Dental consultation	15	1
Physiotherapy with small pool	145	1
Multipurpose room	60	1
Female toilet	9	1
Male toilet	9	1
Reception & waiting	20	1
parking		3

Dual Daycare	318 m2	
Space	area m2	quantity
Group area	110	1
classroom	30	2
Play area	100	1
story telling	36	1
male toilets	6	1
female toilets	6	1
Parking		1

Contemporary orientation	107 m2	
Space	area m2	quantity
Library	30	1
computer room	40	1
lecture room	28	1
curator office	9	1
parking		1

Club House	173 m2	
Space	area m2	quantity
Games Room	40	2
Tv Room	45	1
Lounge	40	1
Juice bar	8	1

Dining and Kitchen	649 m2	
Space	area m2	quantity
dining area / multi purpose space	450	1
Kitchen	140	1
Meals on wheels dispensary/ mini-kitchen	24	1
Cold storage	8	1
Dry storage	12	1
Wash up	15	1

Retail & Comercial	143 m2	
Space	area m2	quantity
Hair Saloon & podiatry	45	1
Small shop	28	1
Elderly related retail	35	2

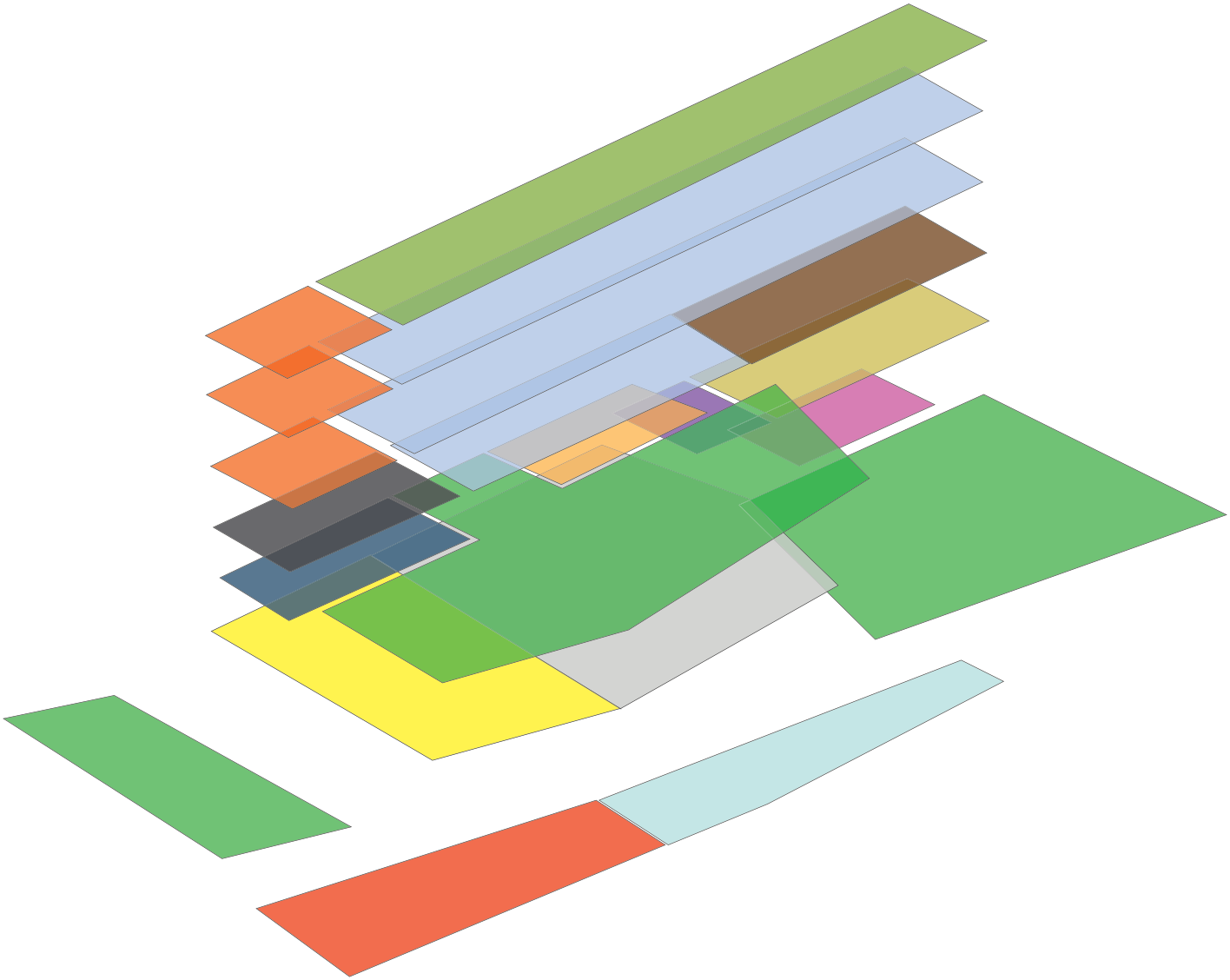
Ancilliarry Rooms	106 m2	
Space	area m2	quantity
Linen Storage	8	4
Cleaners' Stores	4	4
Boiler plant room	26	1
storage	8	4

Additional Parking/ Loading		
Space	area m2	quantity
Bus parking		1
Visitors parking		2
Loading area m2		1

Total Area	3640	

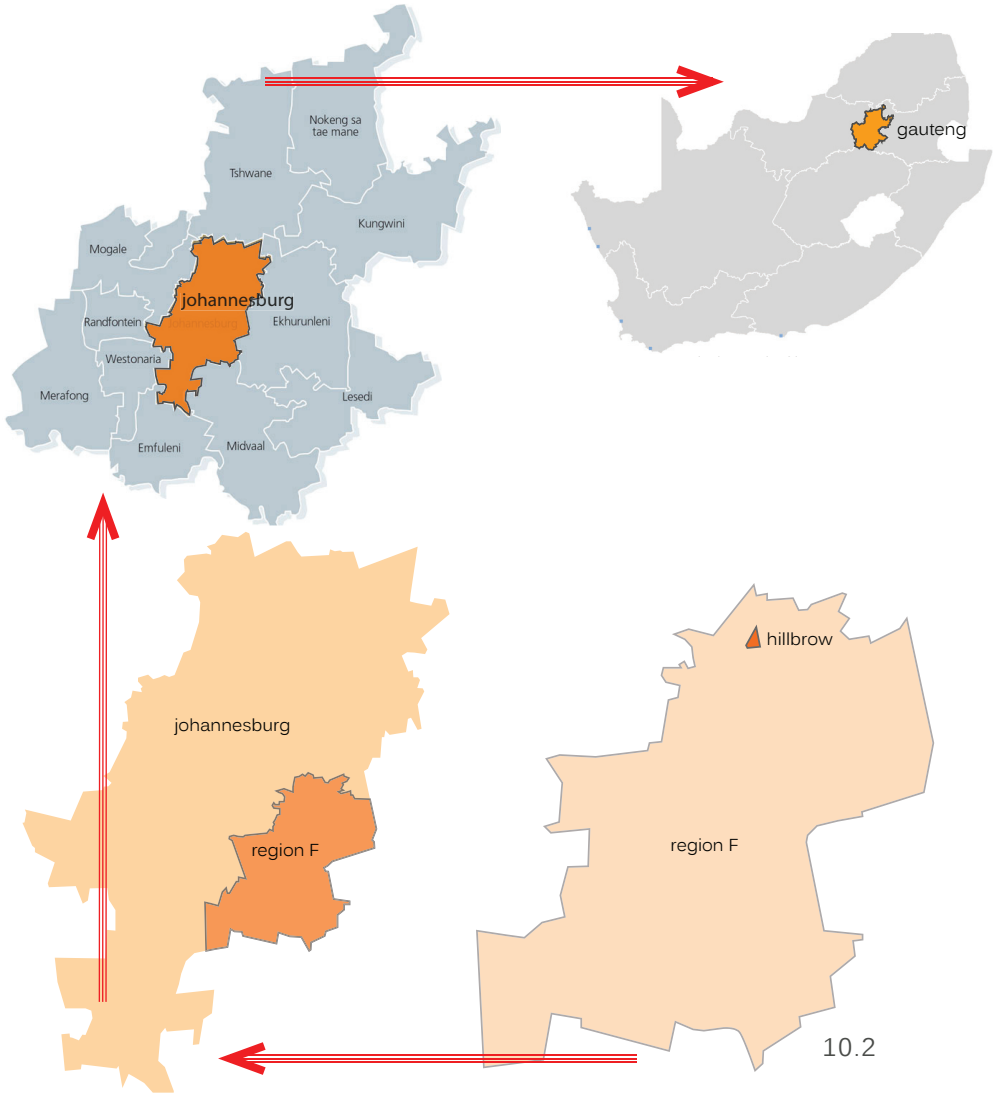
Total Parking		12

Programme and Areas



PARK-SPACES	3698m²
MEDICAL-CENTRE	440m²
FRAIL-CARE	235m²
RETAIL-CENTRE	163m²
MULTIPURPOSE/DINING	497m²
DAY-CARE	1174m²
SOCIAL-SERVICES	120m²
EDUCATIONAL	145m²
CLUB-HOUSE	133m²
CHAPEL	41m²
TEMPORARY-SHELTERS	398m²
ELDERLY-APARTMENTS	1508m²
COMMON-ROOM	225m²
MINI-FARM	540m²
WORKSHOPS	104m²





10.1 Hillbrow in its macro context (derived Google Earth)
10.2 Hillbrow's location within gauteng (author)

Site Selection

The site chosen is an underutilised green space owned by the City of Johannesburg at the border of Hillbrow and Doornfontein as indicated on fig 10.1.

The site is selected primarily because of its quality and central location in the city. It is a longitudinal site that is bound by Nugget Street on the west, on the north by Beit Street and on the south by End street, the eastern side is bound by a school.

The site is a fenced children's park and shares its boundary with JH harris primary school, it is only used by children when under supervision and also partially used by the adjacent primary school.





10.3panorama of the site (author)

Children

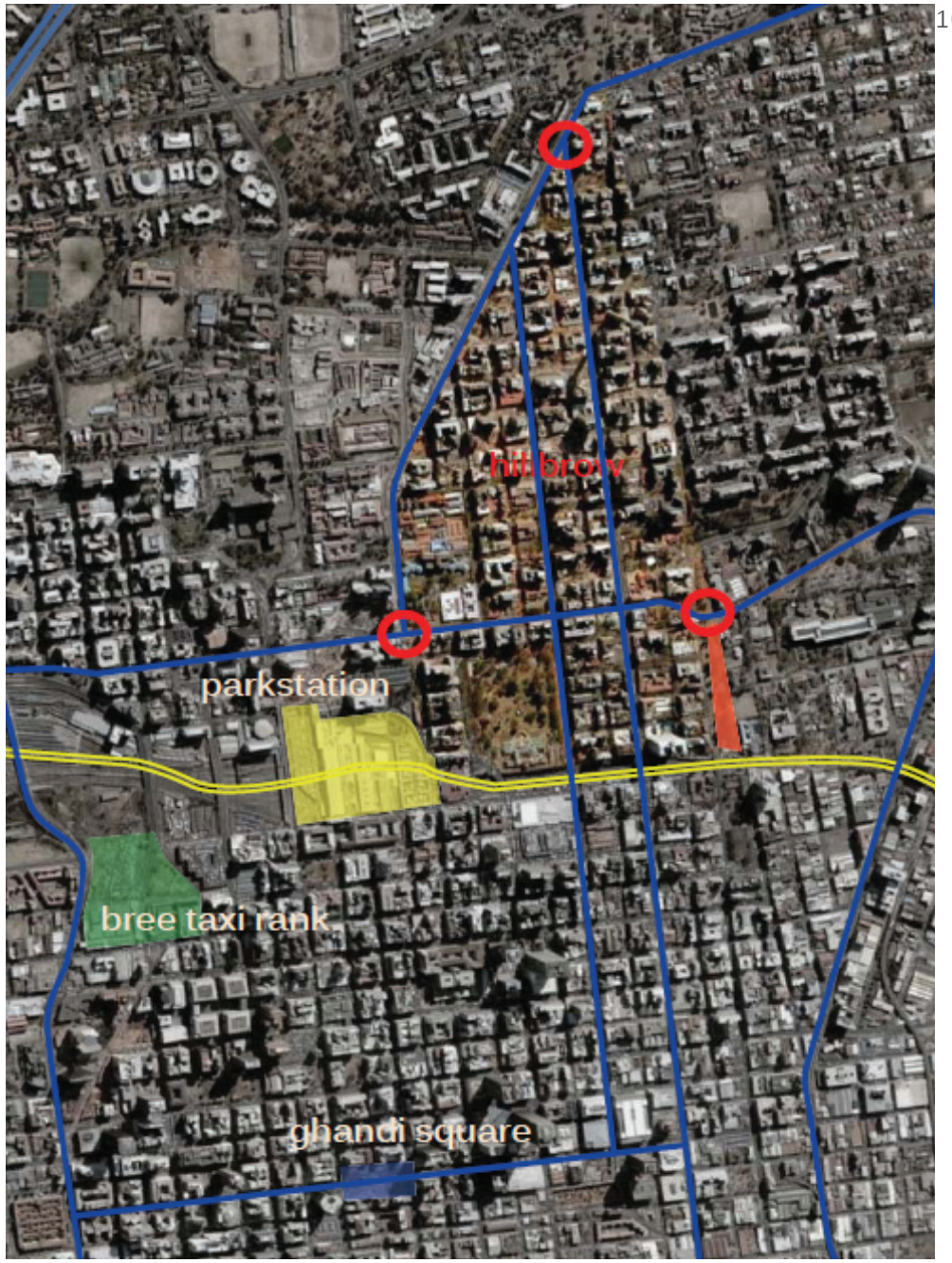
Because of the number of schools and residential nature of the area and mostly because of the lack of dedicated play areas, children playing in the streets of hillbrow are a common sight. Most school children play in the streets after sschool while they wait for their parents to finish work and pick them up leaving them vulnerable and unattended for up to six hours.





Photos of school children playing around the site (author)

Ports of entry



10.2

site

hillbrow main ports of entry

bus station

train/bus terminal

taxi rank

major vehicle routes

highway

railway

The site is in direct proximity to public transport routes including the new BRT routes thus making it accessible for the elderly. It is situated on the flatter end of Hillbrow also making it favourable for the elderly.

10.2 Hillbrow in its macro context

site in immediate context



The site is also located in the quieter part of the busy city fabric bound by residential semi high rise buildings and light industry of Doornfontein while surrounded by a variety of educational institutions and churches.

The site shares a boundary with JH harris primary school which gives an opportunity for school facilities to be shared with the proposed centre and visa-versa. There is also an opportunity for views into the schools field

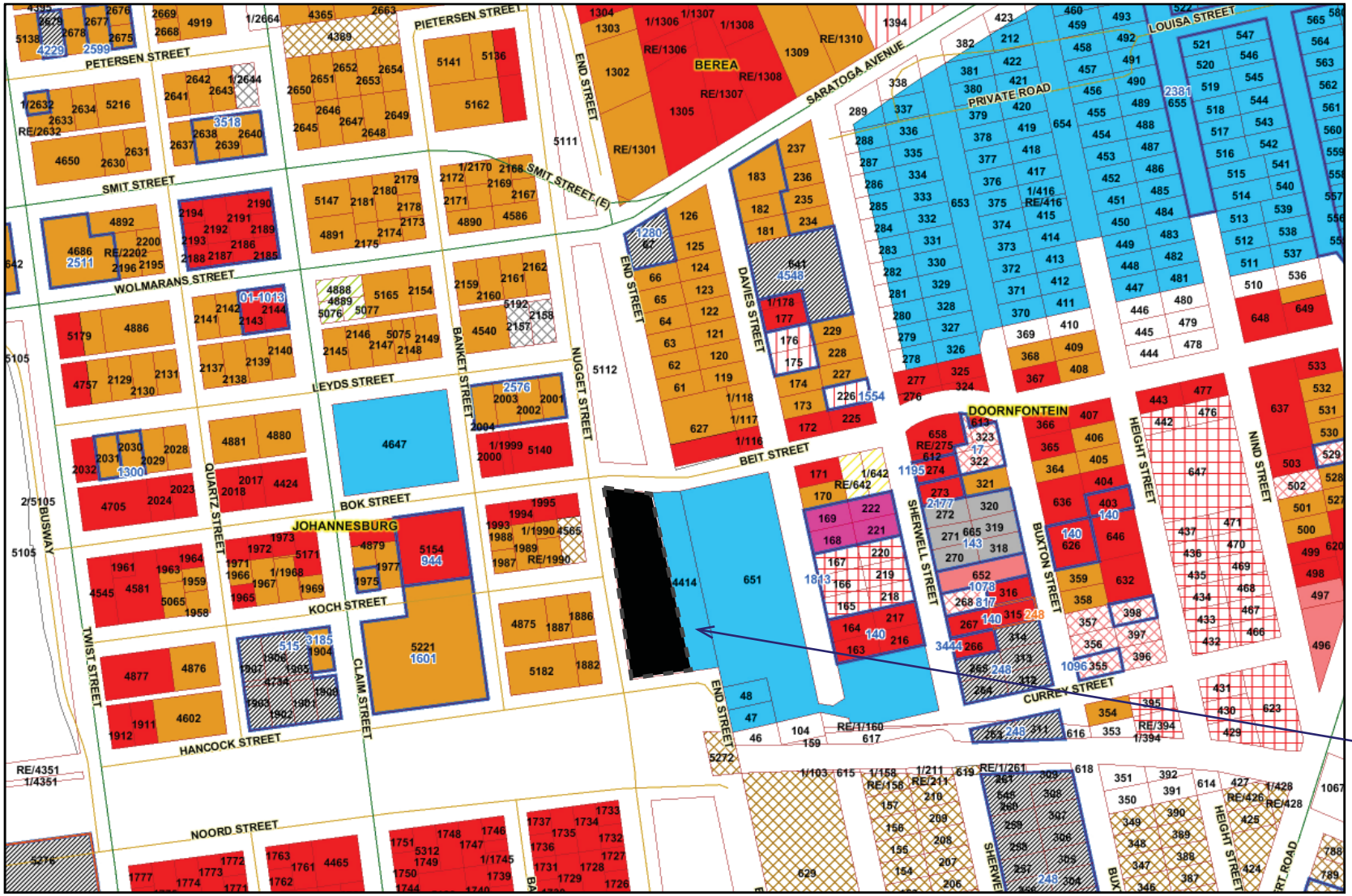
10.3 Proposed site (derived Google earth)

Site street location



10.3 Site street location (author, derived Google earth)

Zoning



- Aerodrome
- Agricultural
- Amusement
- Business 1
- Business 2
- Business 3
- Business 4
- Cemetery
- Commercial
- Commercial 1
- Commercial 2
- Community Facility
- Ecclesiastical
- Educational
- Existing Public Roads
- General
- Government
- Industrial 1
- Industrial 2
- Industrial 3
- Institutional
- Municipal
- No Use
- Parking
- Pedestrian Mall
- Private Open
- Proposed Roads
- Public Garage
- Public Open
- Reservoir
- Residential 1
- Residential 2
- Residential 3
- Residential 4
- Residential 5
- SAR
- Sewer Farm
- Special
- Undetermined
- Zoning Unresolved

Zoning in the site context (CoJ 2009)

General land use



land use and points of interest (derived Google Earth)

Site dimensions

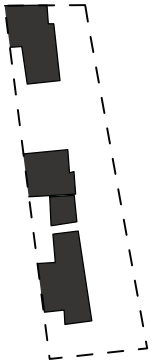


site dimensions and contours (author)

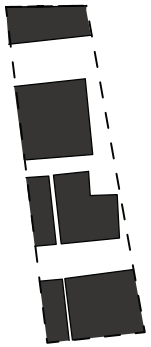
Site scale comparisons



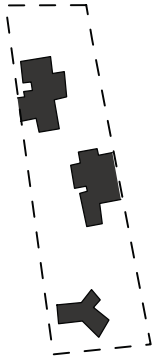
site



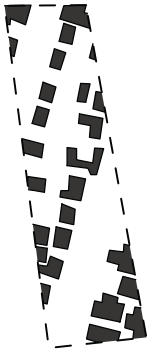
hillbrow



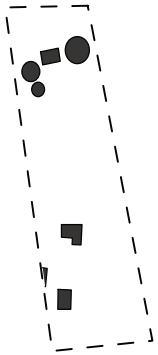
inner city



oaklands



soweto



rural
mpumalanga

site scale comparisons (author)

11.1 DESIGN DEVELOPMENT

Architecture in context is neither a cursory attention nor a radical innovation, it is a strong and eloquent v i s u a l relationship to the surrounding. Individual building is always seen first as a part of the whole. Creating Places and Spaces that enrich the lives of the people who use them is the foundation of Architects work. Every building can and should engage in a dialog with the history, beliefs and needs of a particular place and time. Identification of place lies as a generative core of architecture. Place is to architecture as meaning is to language. Recognition, memory, choice, sharing with others, the acquisition of significance; all these contribute to the process of architecture.

Excerpts from Analysing Architecture, Simon Unwin.

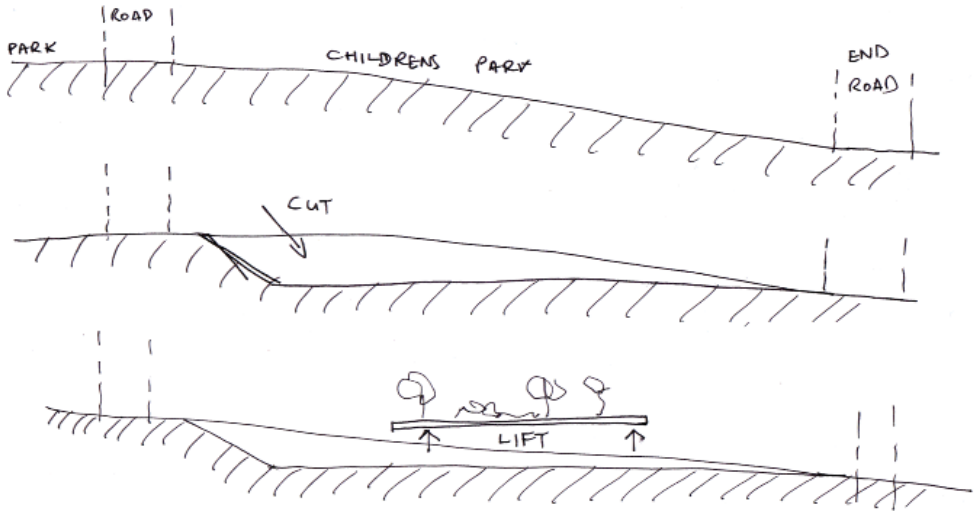
In designing the building the greatest point of consideration has been the site and its context. The site's size, location and current use create a design challenge which had to be dealt with carefully.

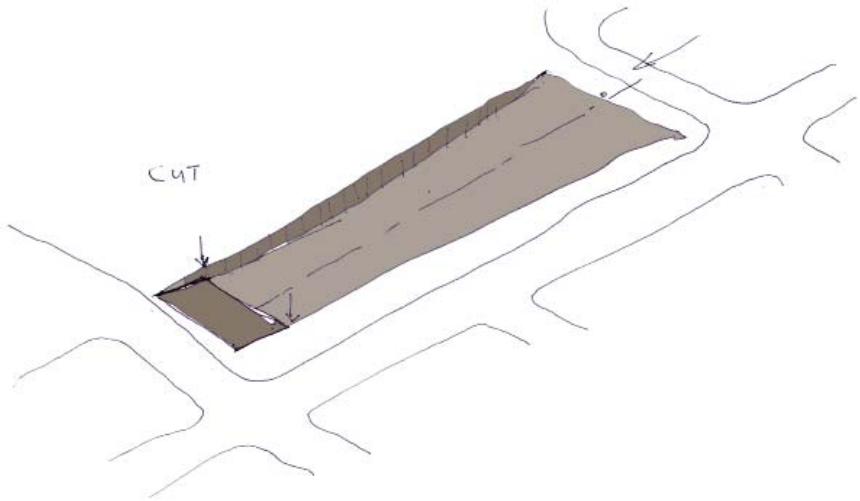
Shaping Factors

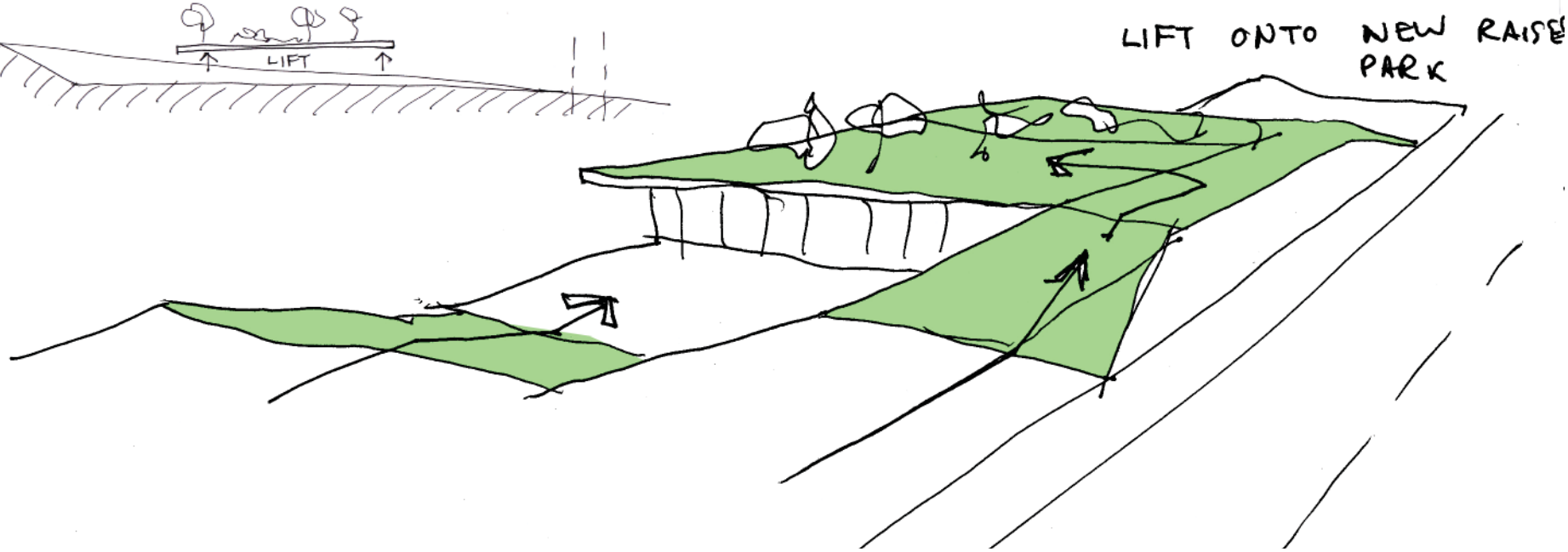
- (a) Existing children's park
- (b) Existing public park
- (c) Fast busy road
- (d) J.H. Haris Primary School
- (e) Mes Aksie Church
- (f) Green school ground
- (g) Residential high rise
- (h) Unfriendly



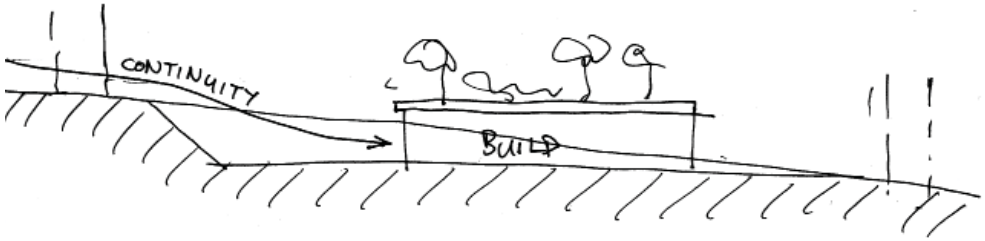
A The children's park while not being fully utilized is still in use and thus building on the park would take away a much needed green space in the city. By lifting the park and allowing the building to happen partially underneath it, this problem is solved.

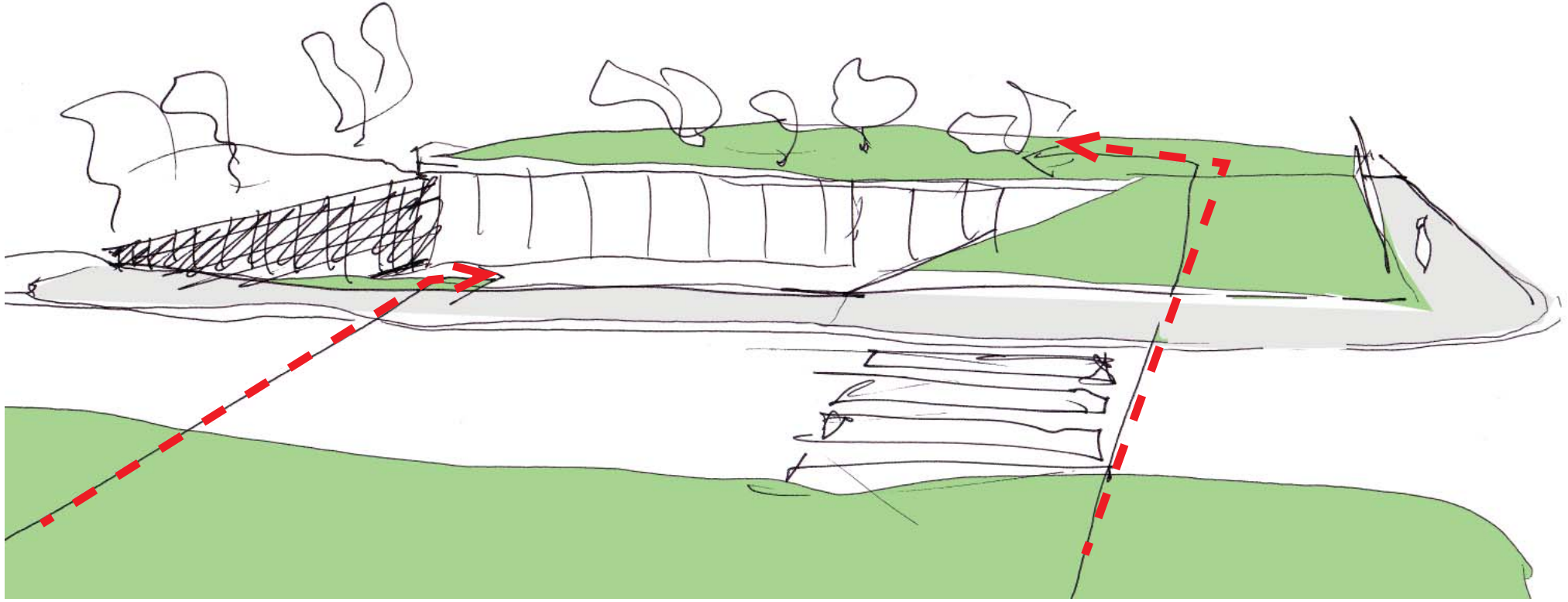




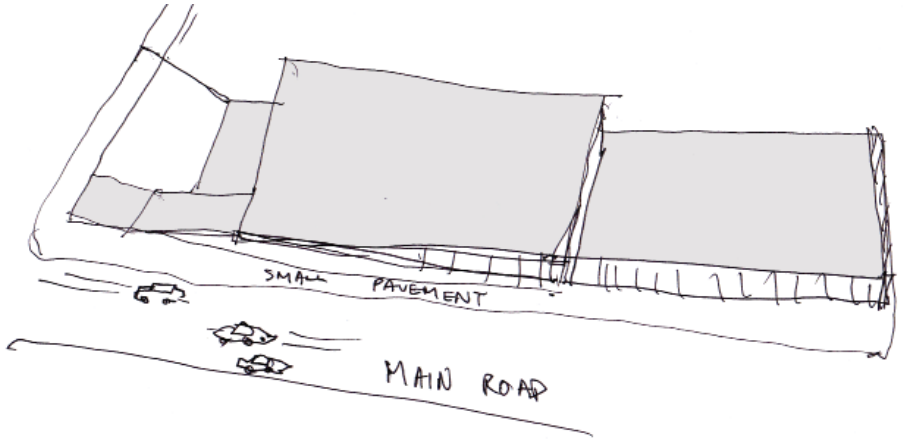


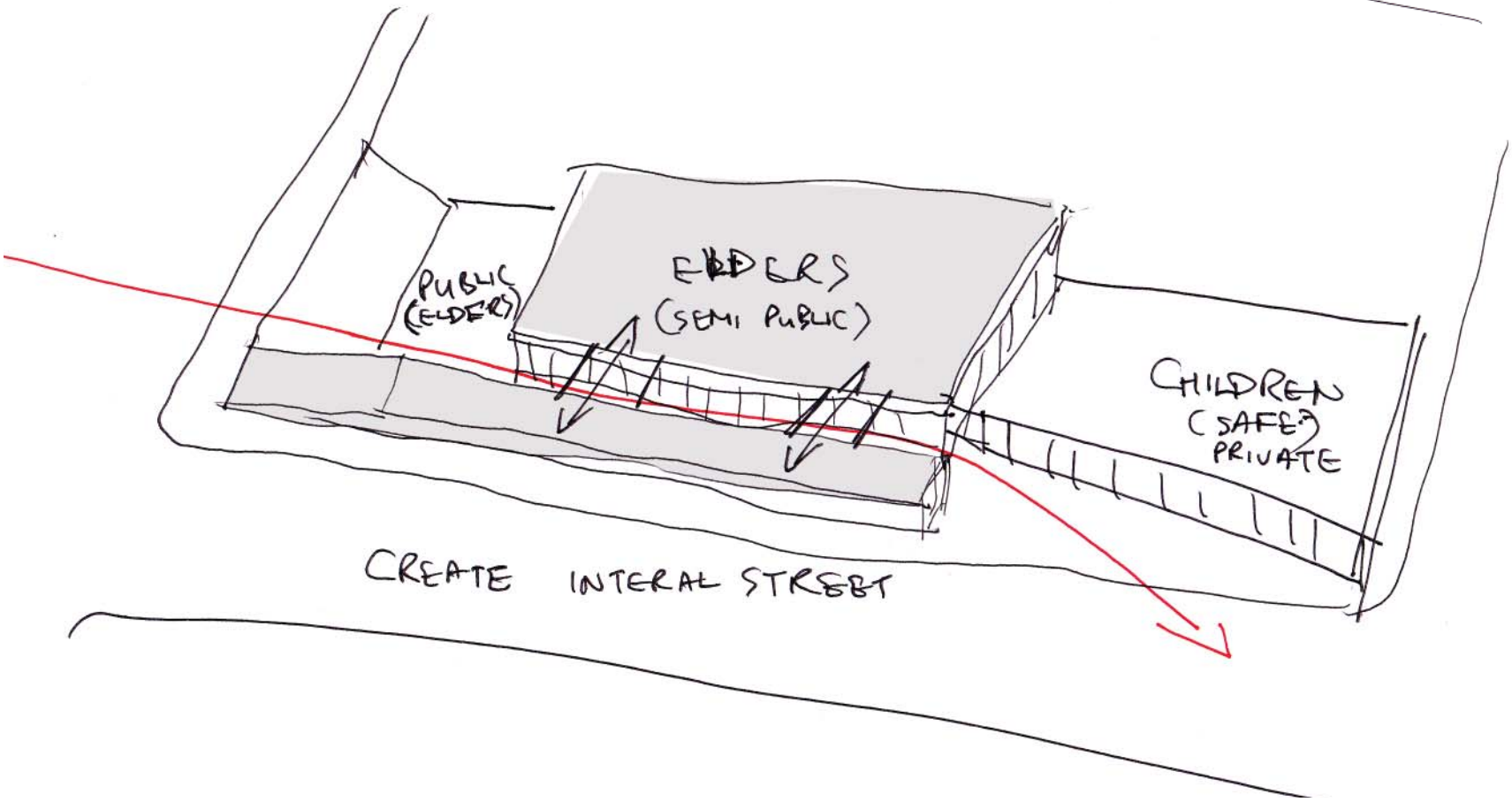
B Beit street divides the park into two with the northern park being a public open space, while the existing children's park is fenced of for security, for this reason there is no continuity between the two parks. Because a building (which offers surveillance) has been added to the children's park, the security fence is no longer necessary allowing for the continuity between the two parks



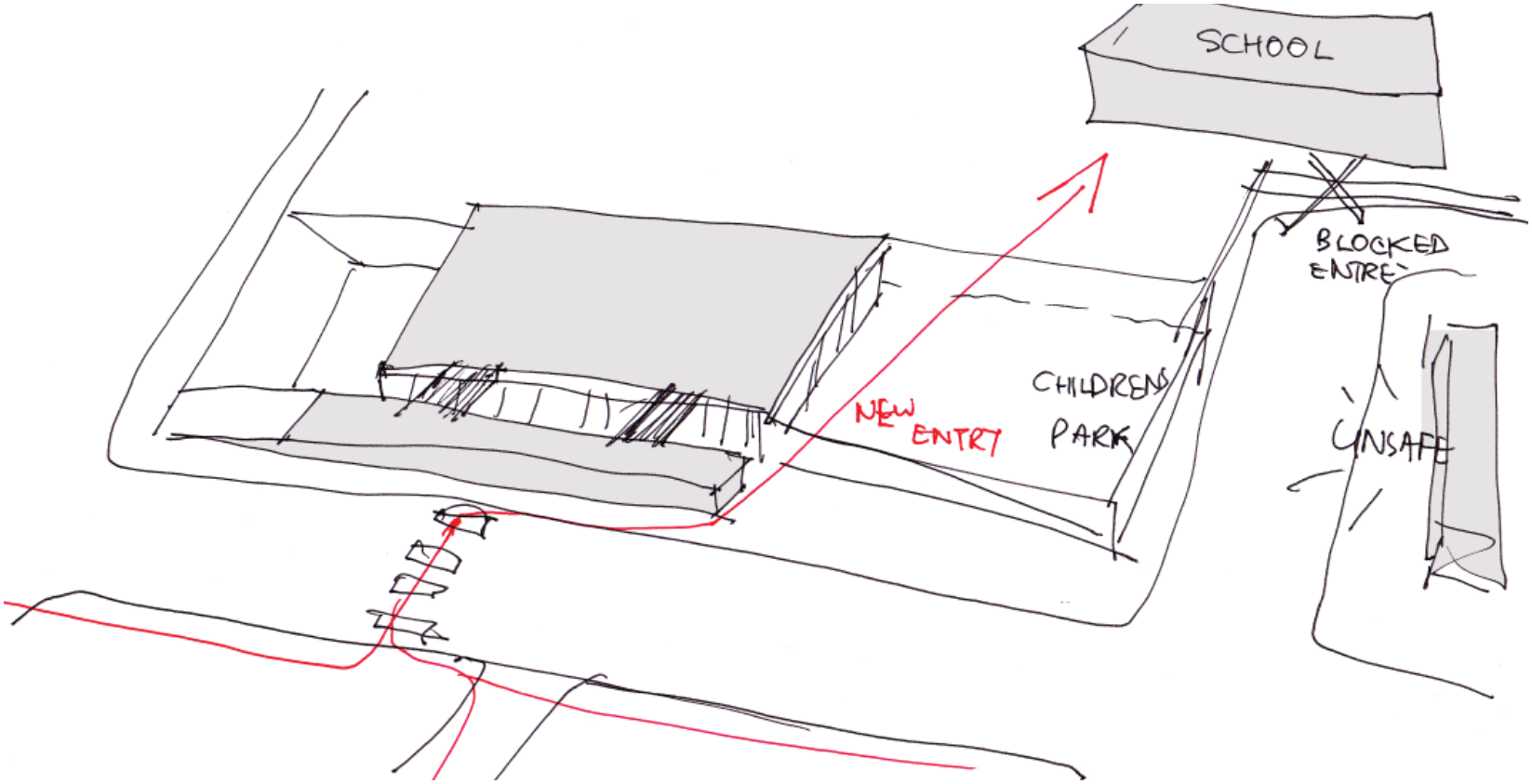


C, G Nugget street is a fast paced mini highway when it passes the site. This fact coupled with the narrow pavements and residential nature of the opposite buildings make it unfavorable for retail, but a protected internal street would offer an option for elderly oriented retail with the building acting as a buffer from the fast road.

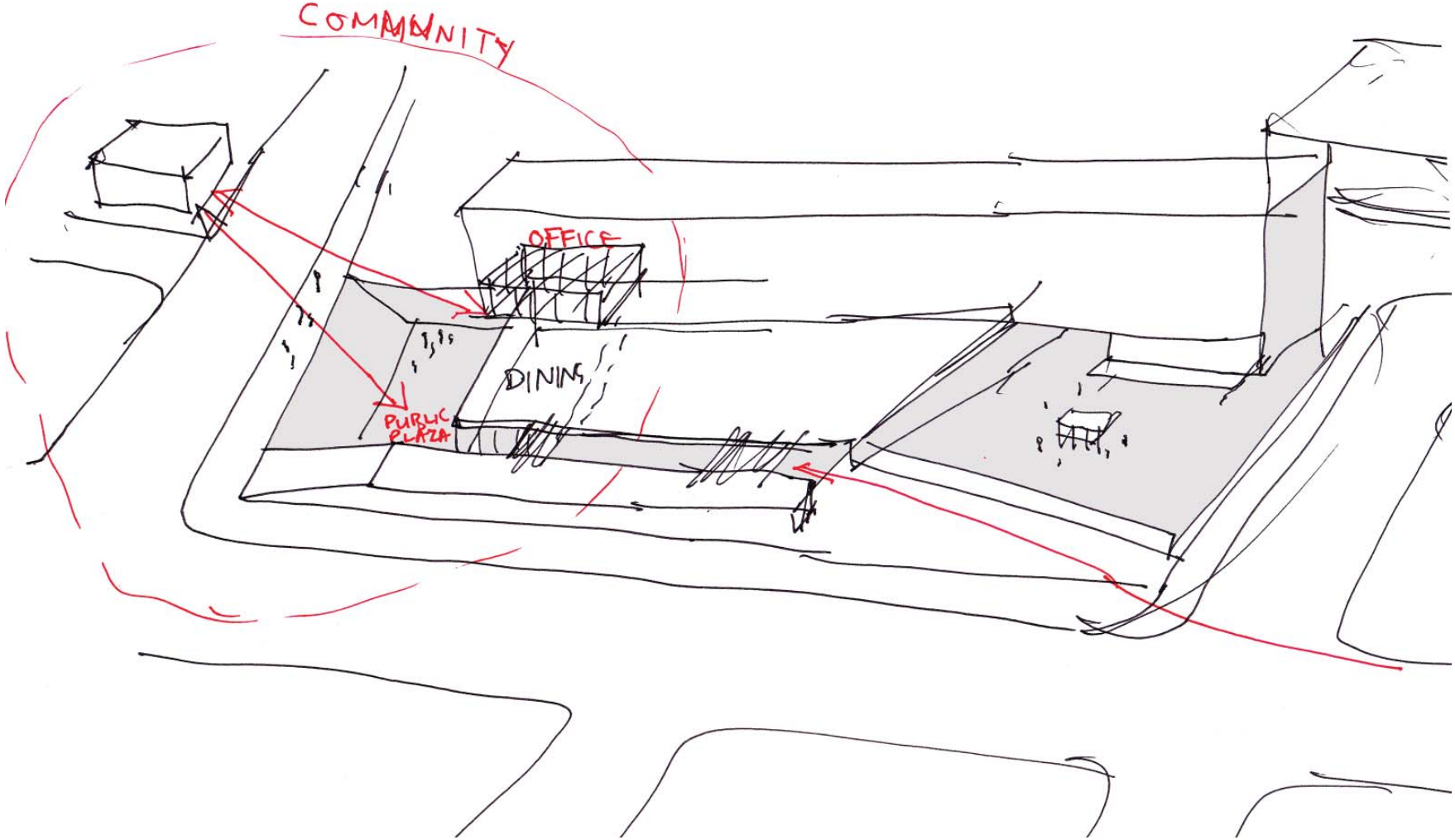




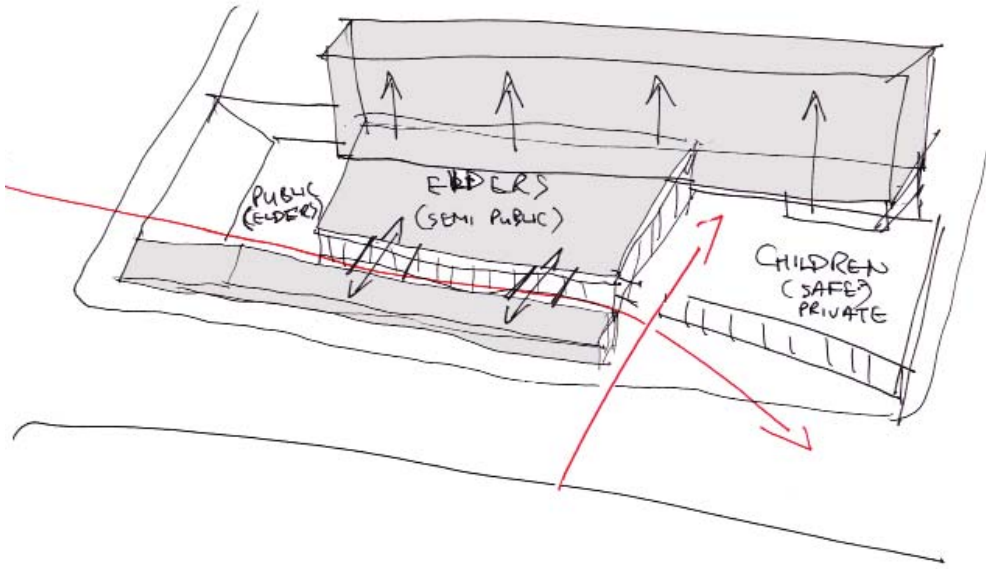
D, H The primary school has blocked an entrance on end street due to the unsafe nature of the street thus school children have to use a further entrance to enter. With the added surveillant nature of the building, an access through the children's park would offer benefit to the elderly on the site and the children at the day-care and also allow for interaction at school break times.

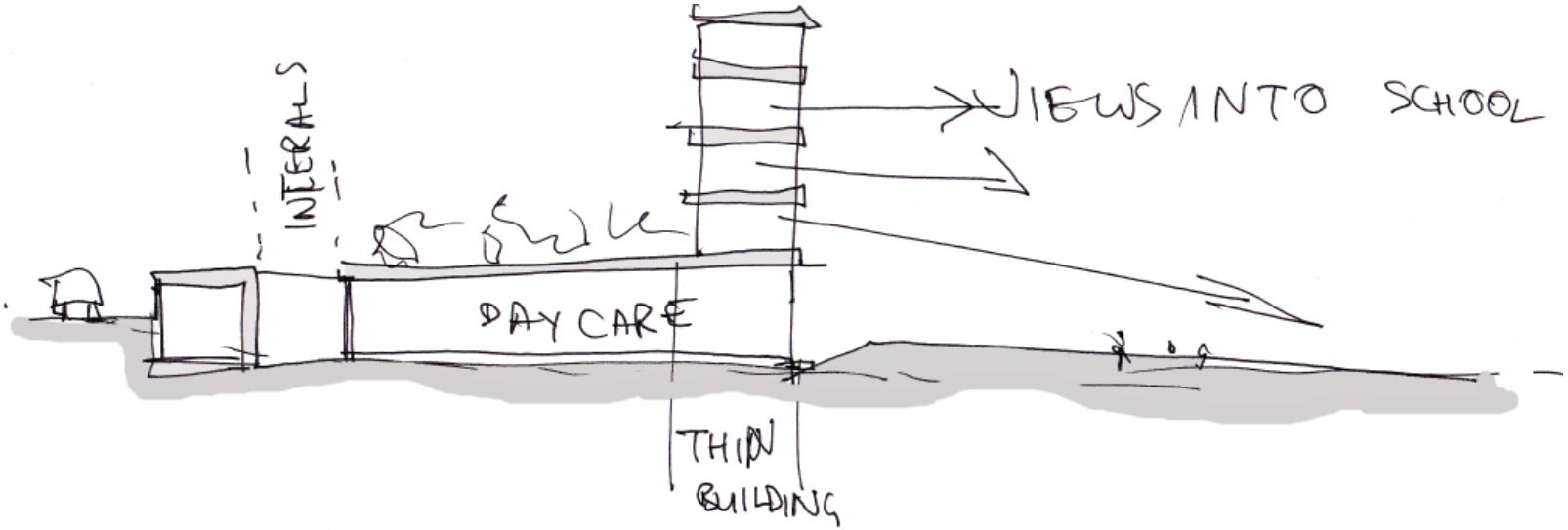


E Mes-Aksie who are custodians of elderly in the inner city have their church next to the site, this has a number of advantages as the two buildings can have operational proximity, for this reason, the office and more public and community related functions are located closest to the church.

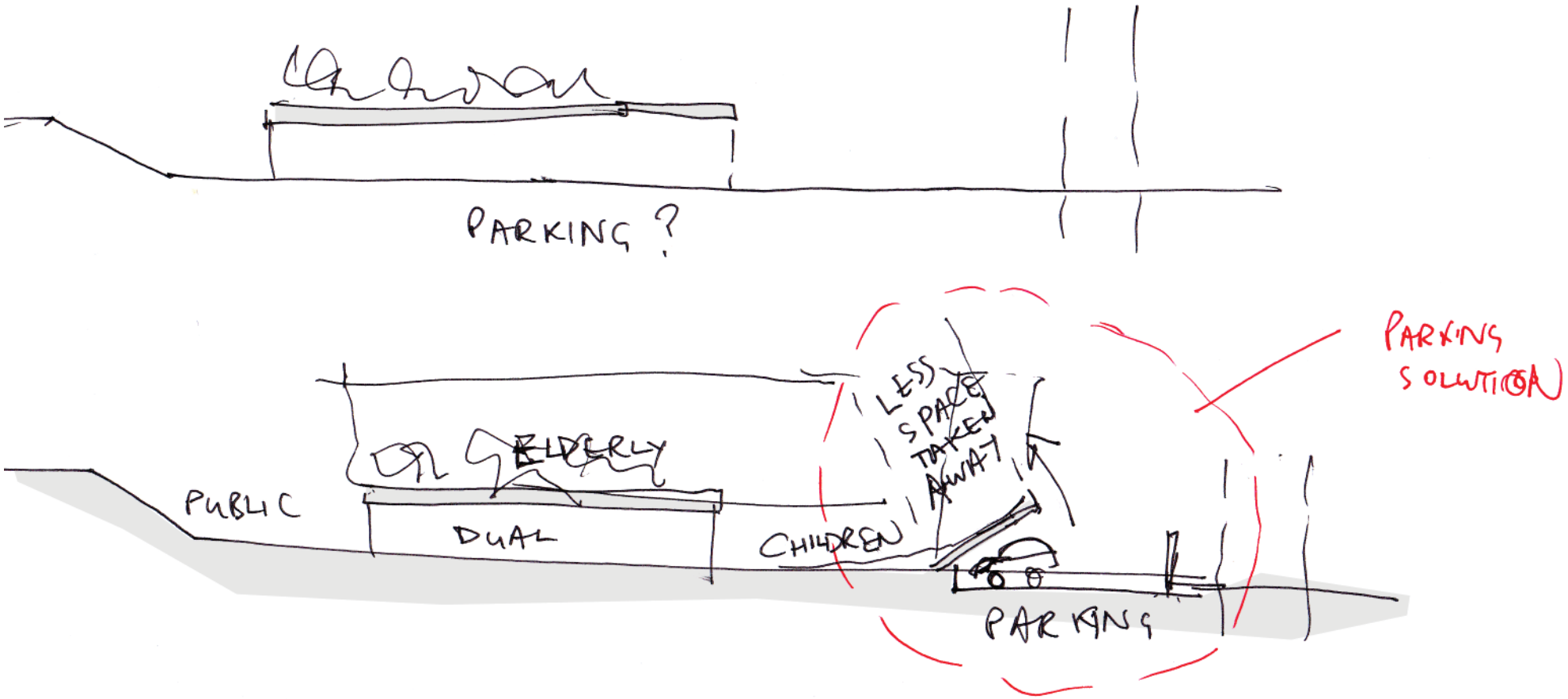


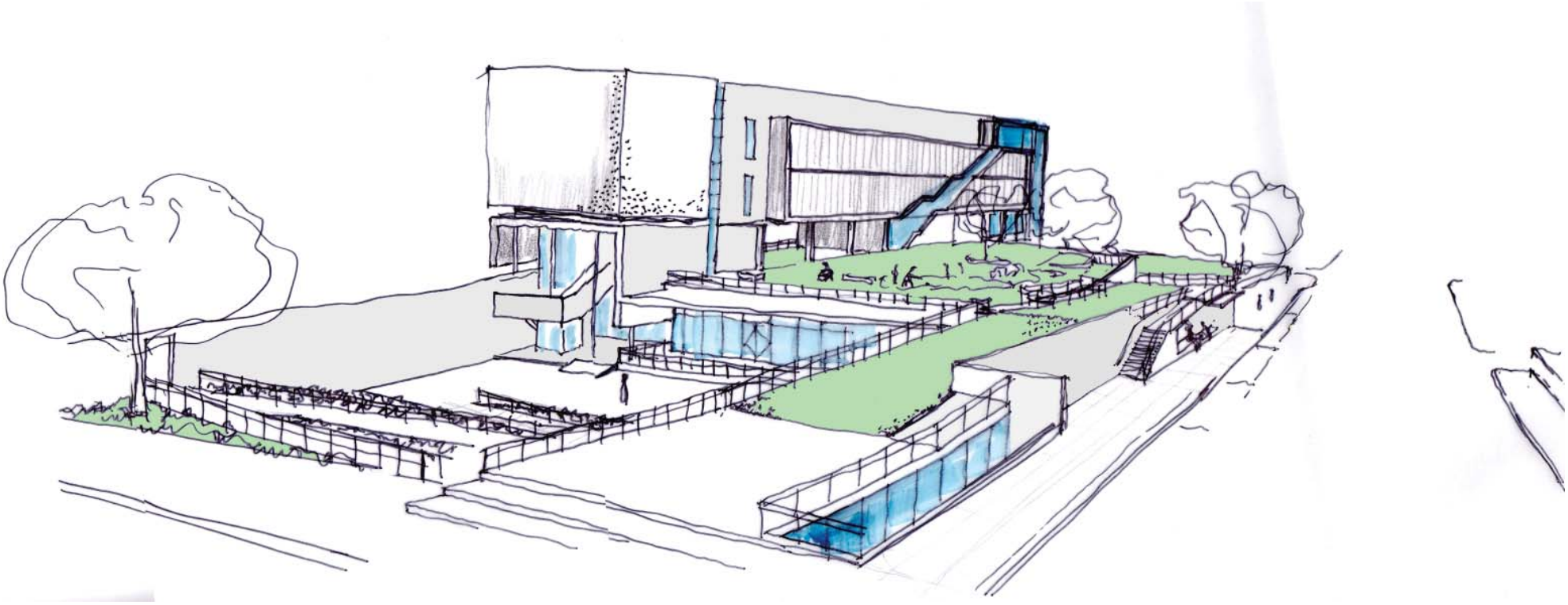
F The school's green field offers visual distance and a get away from the city fabric with apartments facing east to the field and west to the park. The a high-rise building on the eastern edge of the site solves needed residential space, while e responding to the context





H Parking has been located on the unsafe and undesirable edge of the site to act as a buffer between this edge and the children's park, The parking has also been raised allowing the children's park to extend over it while creating a playful landscape for the children



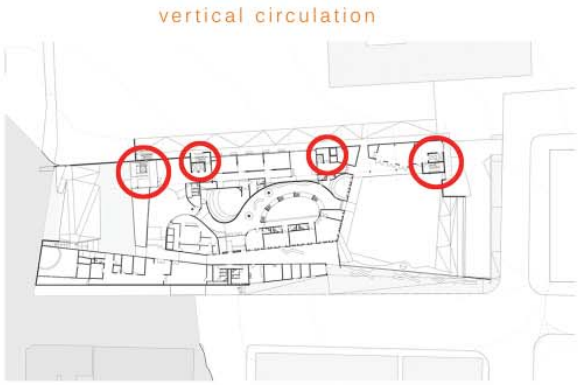


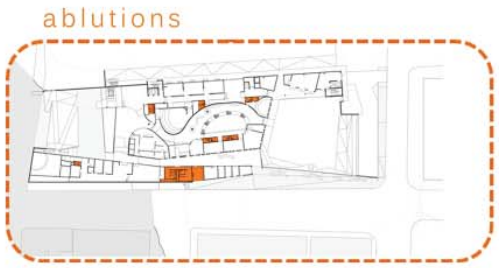


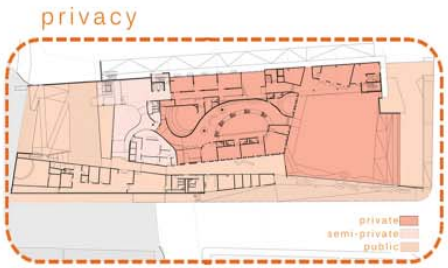
Site plan

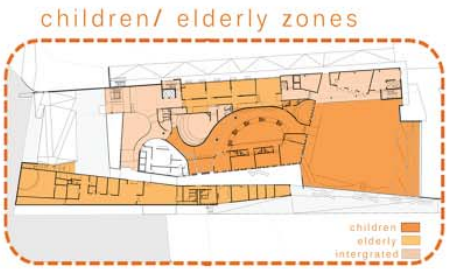




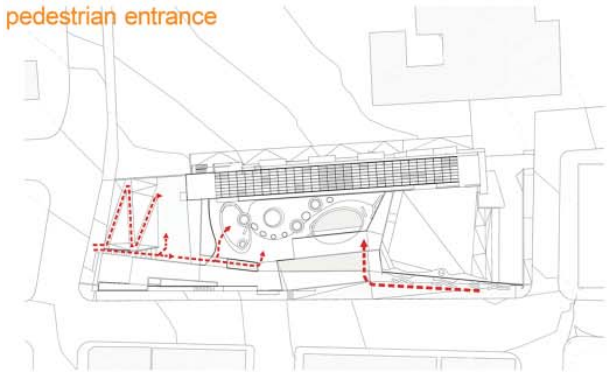


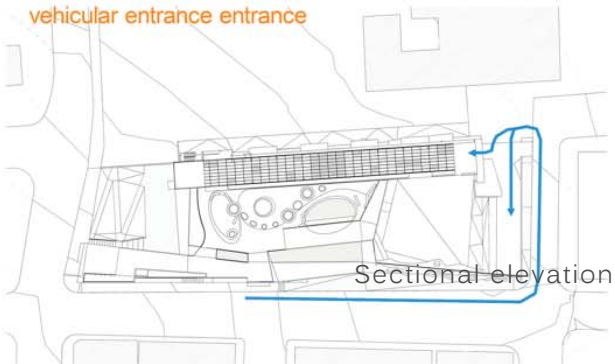












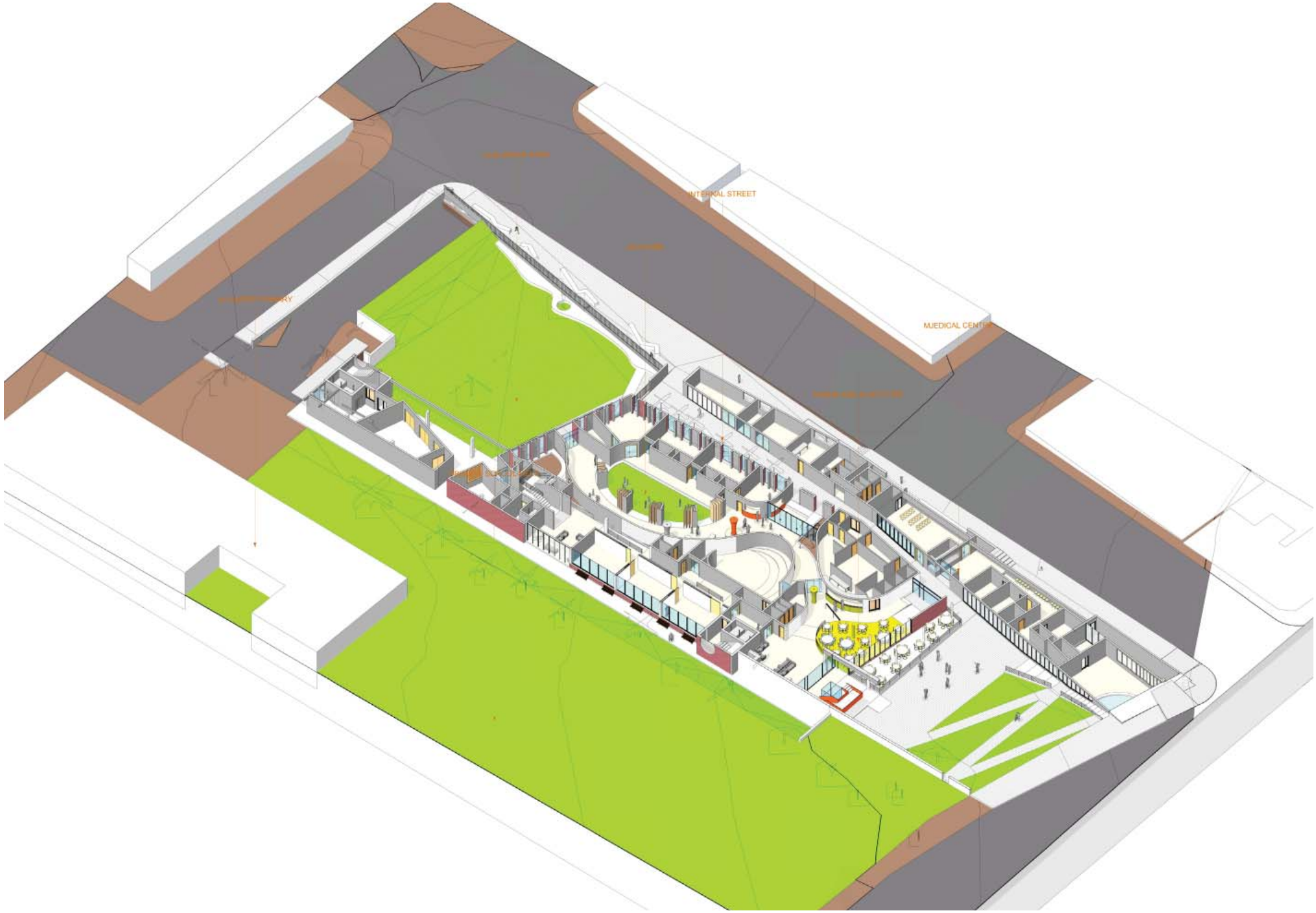


Sectional elevation through public plaza

DIAGRAMS

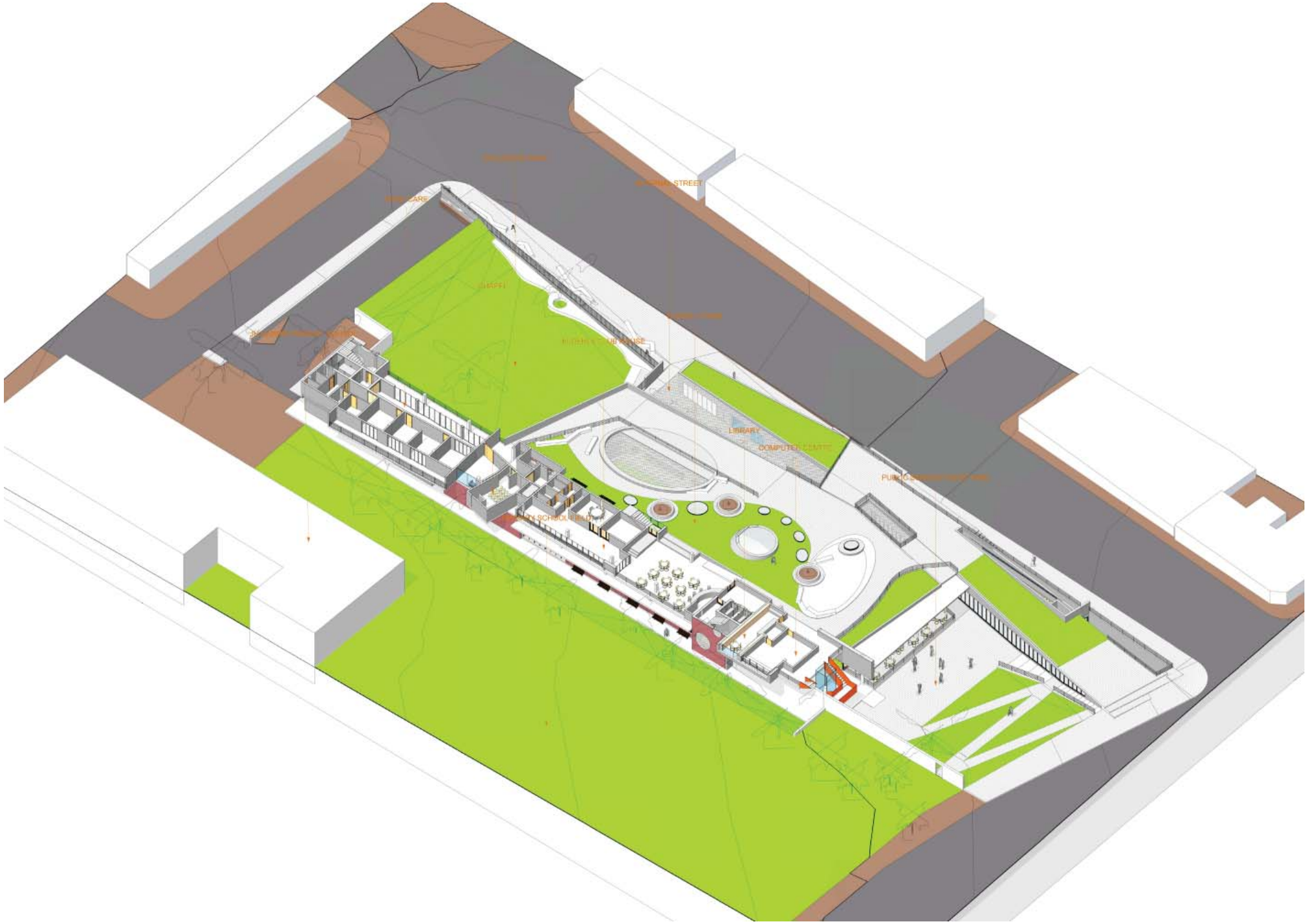


LOWER GROUND FLOOR PLAN


INTERNAL STREET
MUEDICAL CENTRE



Upper Ground Floor Plan


LIBRARY



FLOOR PARENT APARTMENTS

3 one bedroom Apartments @ 32sqm



APARTMENT TYPES

10 Type 1 Dormitories @ 13sqm (double)
10 Type 2 Dormitories @ 11sqm (single)
7 Type 3 Dormitories @ 17sqm (double)
7 Type 4 Dormitories @ 14sqm (single)
51 Total inhabitants



DORMITORY TYPES

2 Type 6 Dormitories @ 29sqm (5 beds each)
2 Type 7 Dormitories @ 40sqm (6 beds each)
22 Total inhabitants



THIRD FLOOR PLAN

15 apartments per floor
8 single apartments
7 double apartments
22 inhabitants



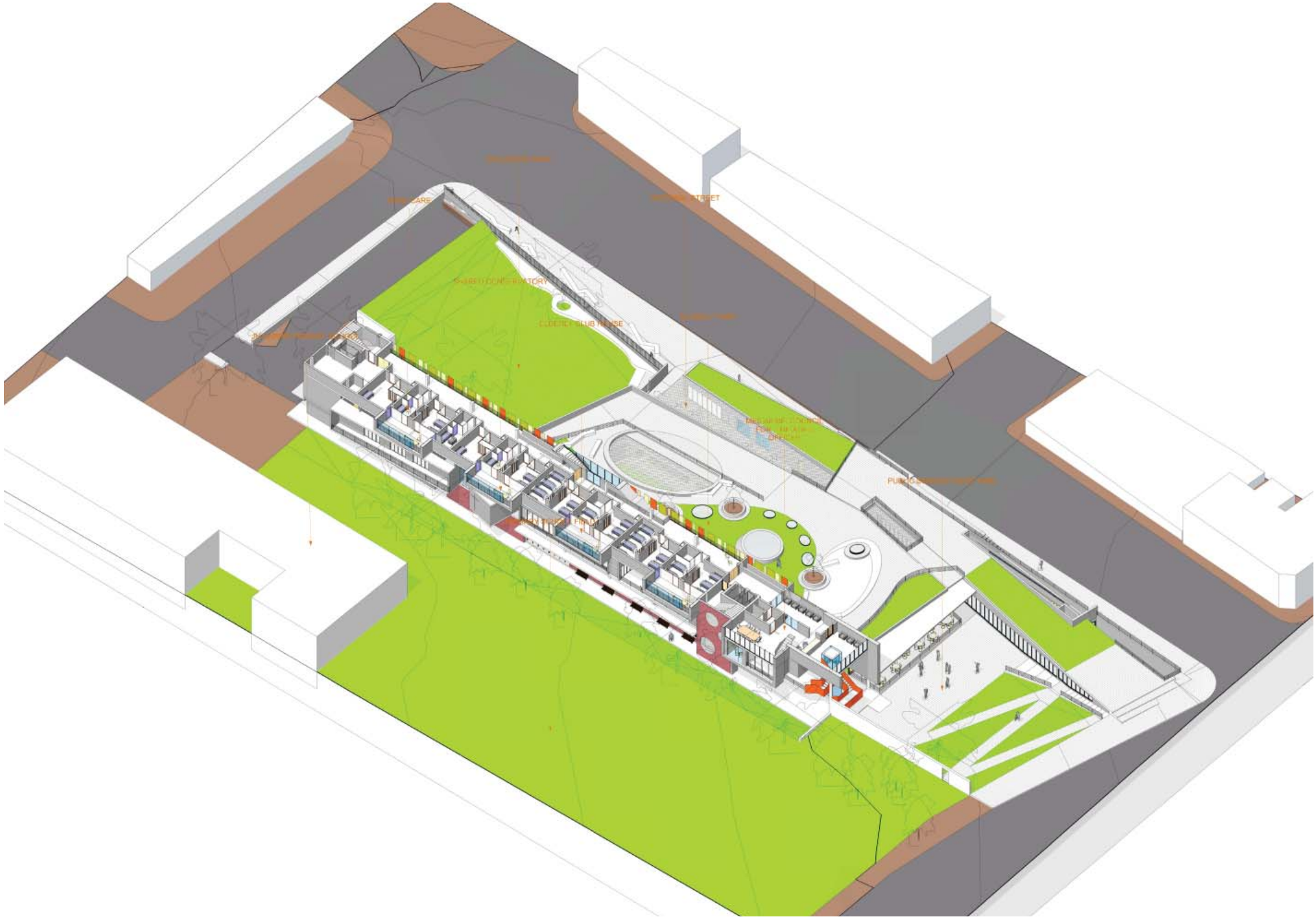
SECOND FLOOR PLAN

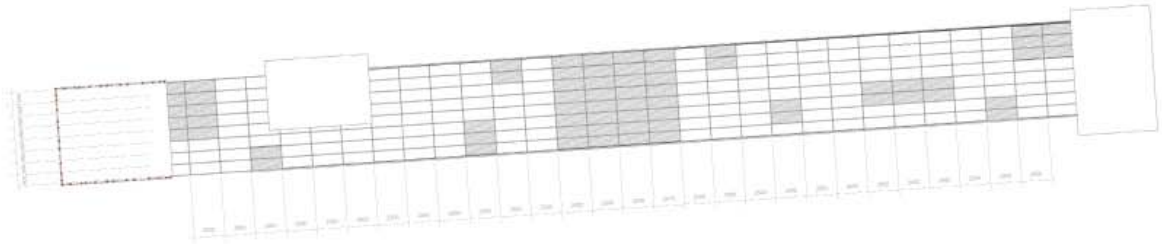
15 apartments per floor
8 single apartments
7 double apartments
22 inhabitants



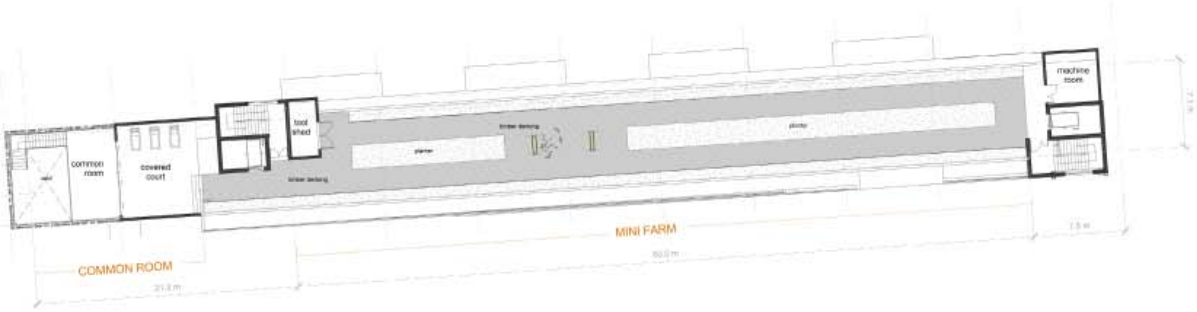
FIRST FLOOR PLAN

15 apartments per floor
4 temporary dormitories (22 beds)
4 single apartments
3 double apartments
32 inhabitants





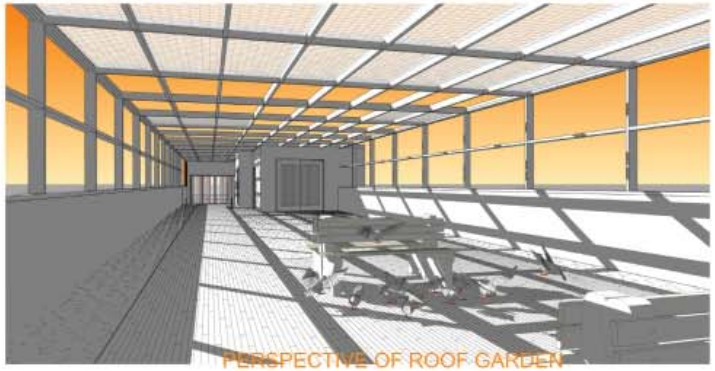
solar panel arrangement



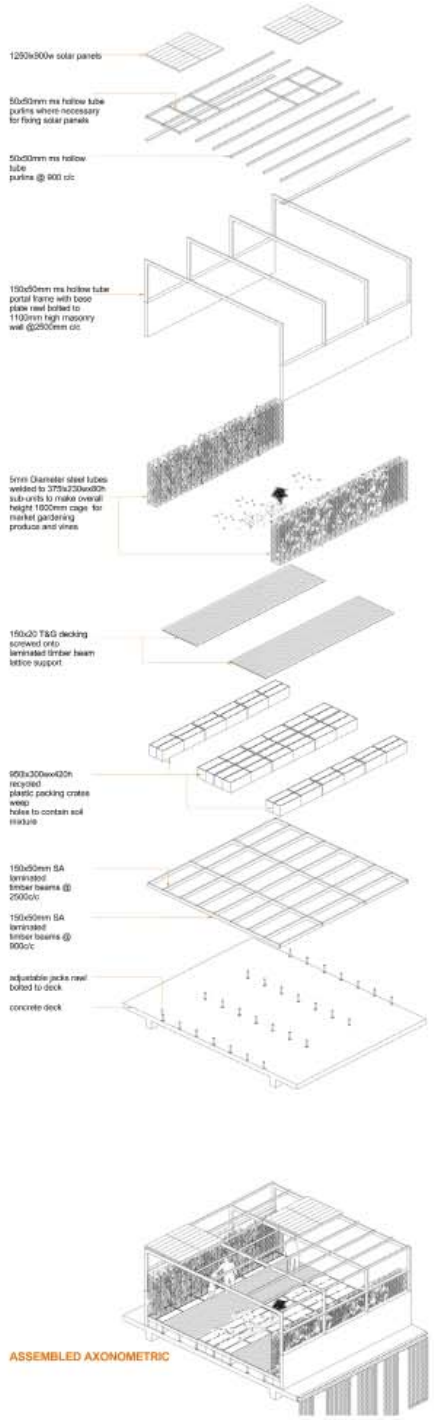
FOURTH FLOOR PLAN



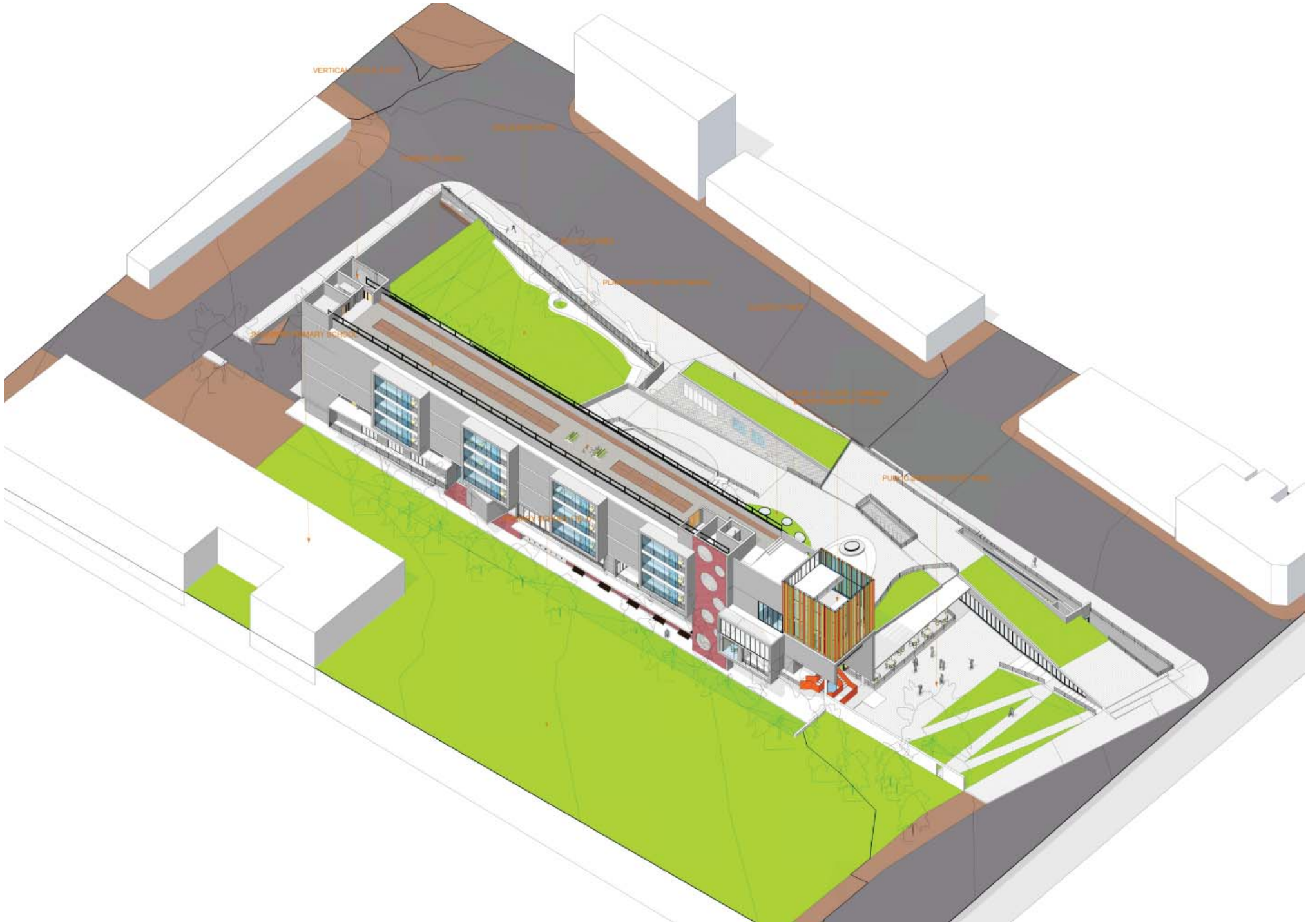
SECTIONAL PERSPECTIVE OF ROOF GARDEN

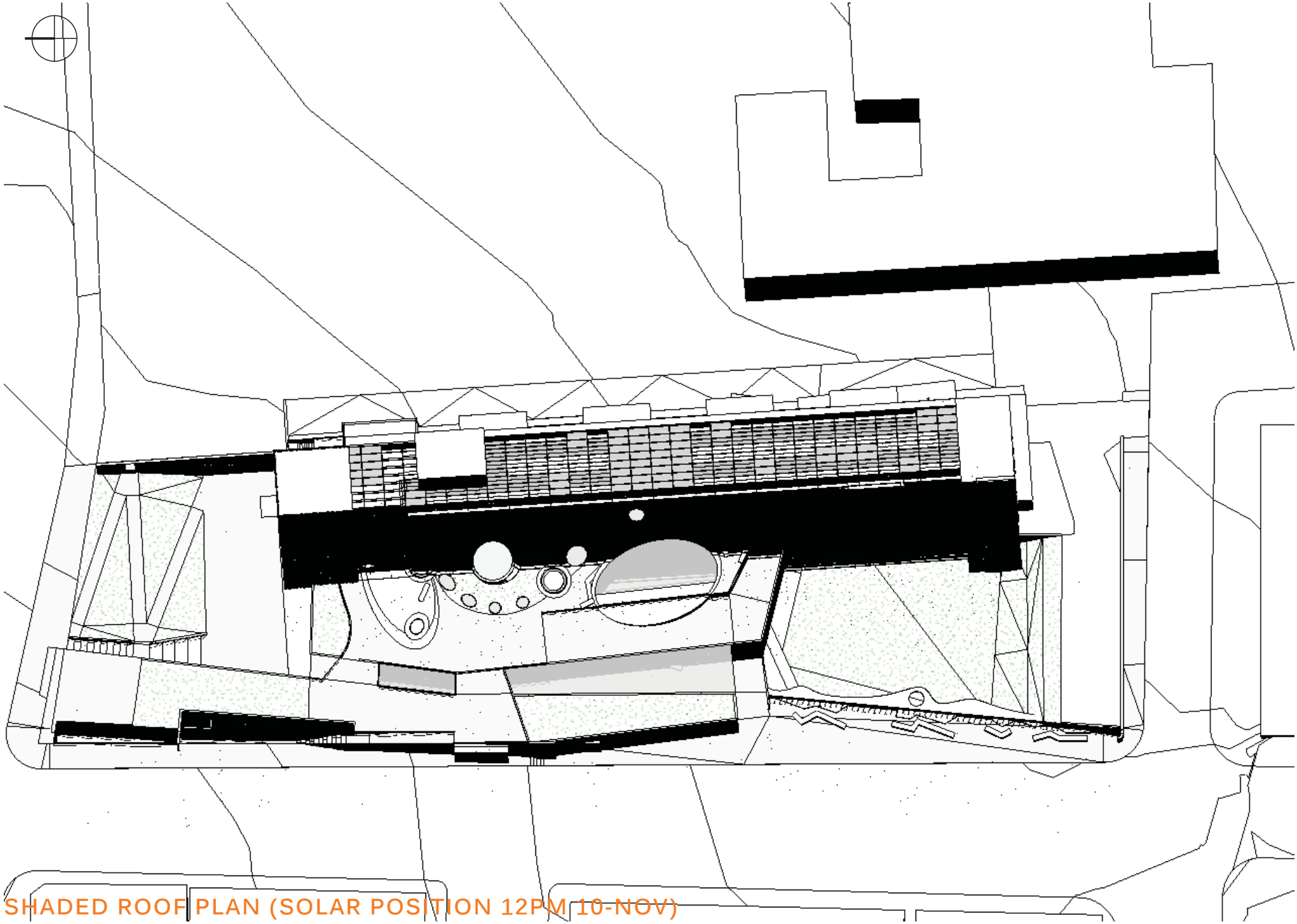


PERSPECTIVE OF ROOF GARDEN



ASSEMBLED AXONOMETRIC

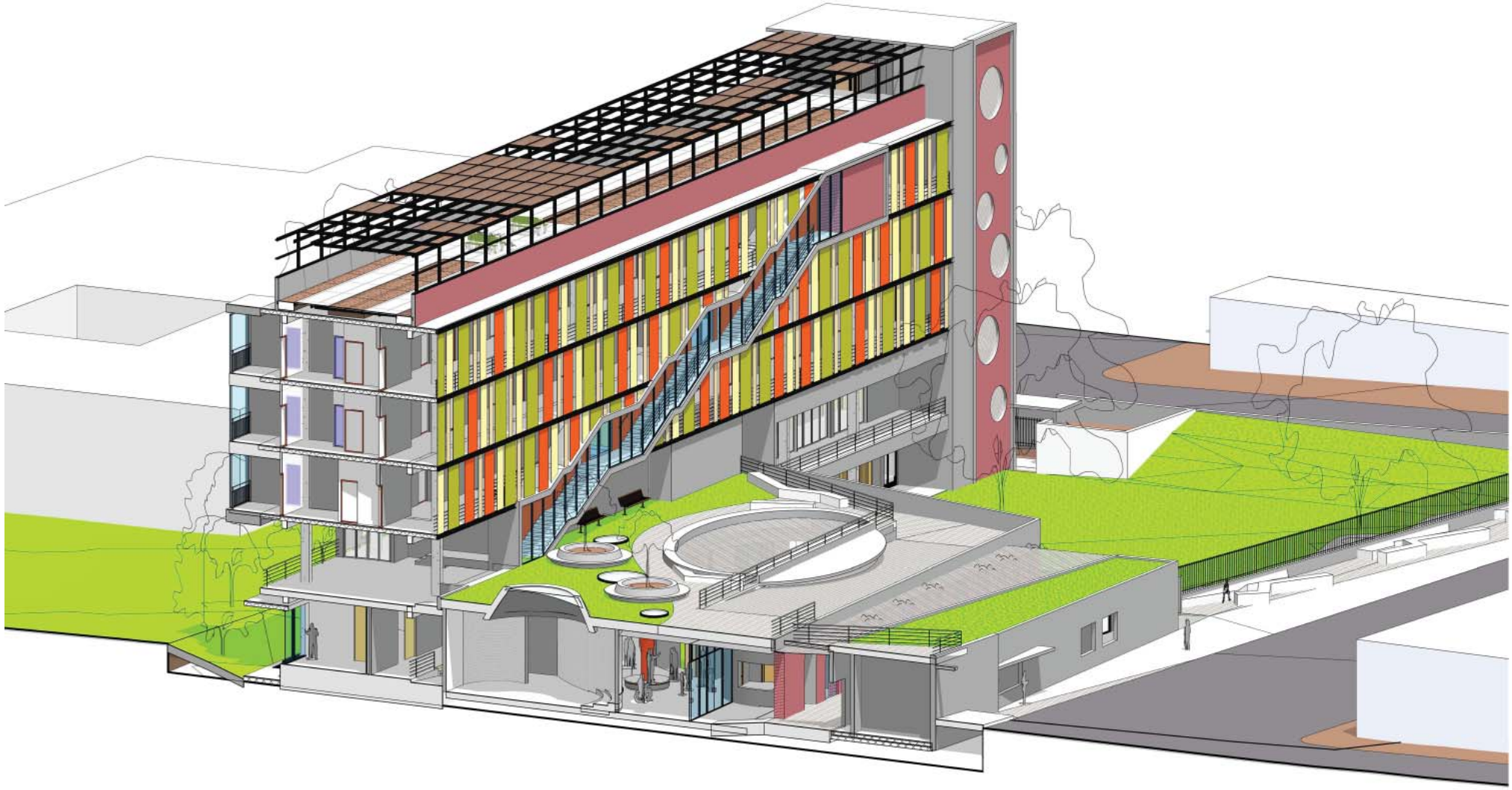




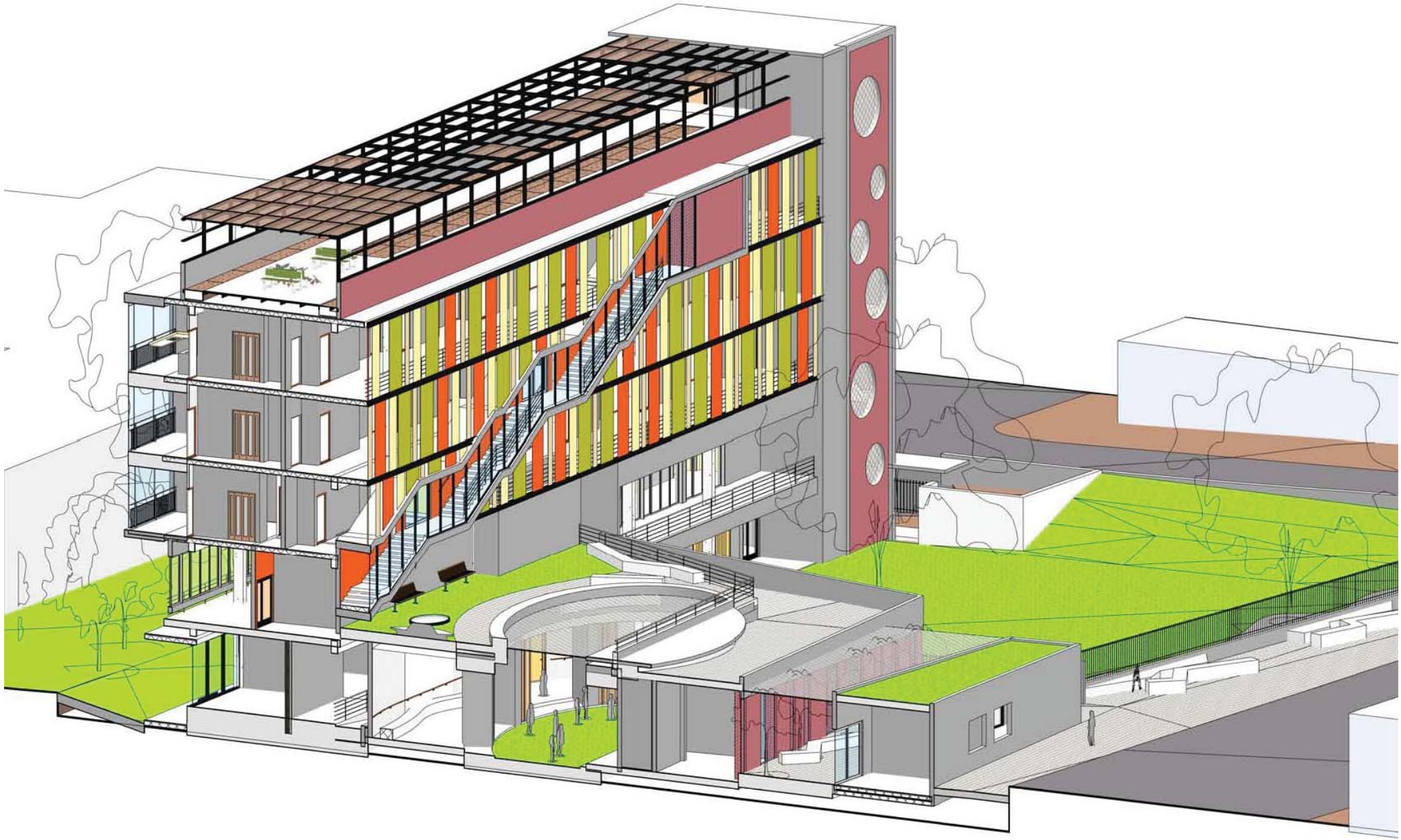
SHADED ROOF PLAN (SOLAR POSITION 12PM 10-NOV)



SECTIONAL ELEVATION



SECTIONAL PERSPECTIVE



SECTIONAL PERSPECTIVE



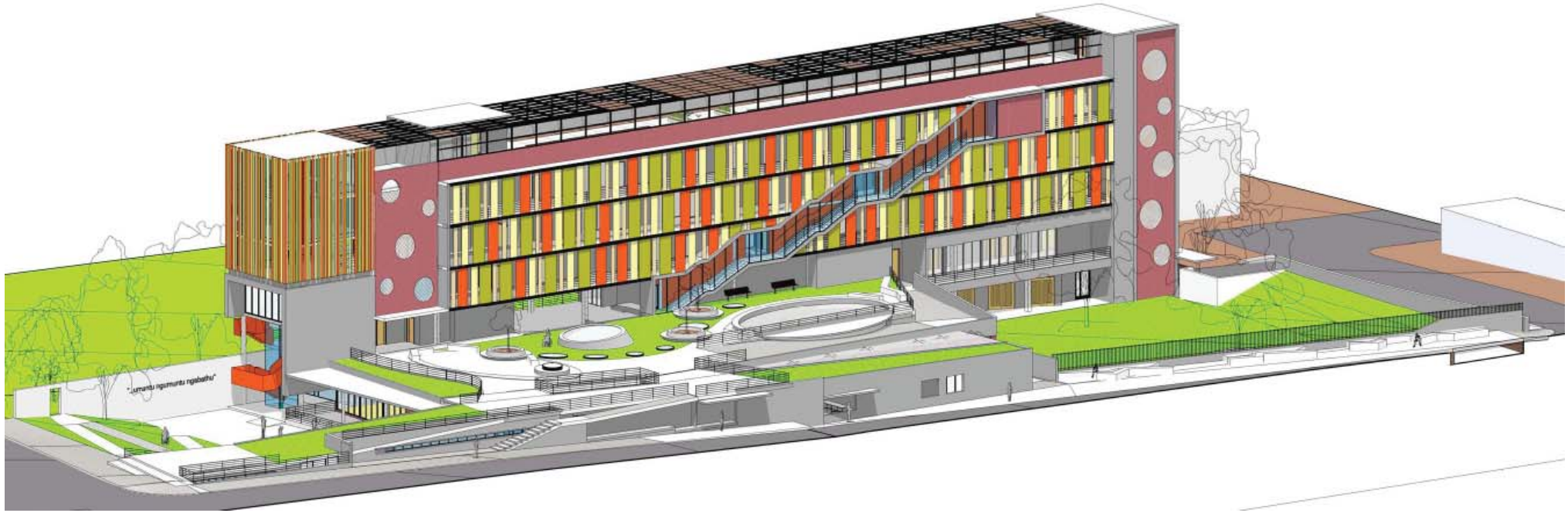
SECTIONAL PERSPECTIVE



SECTIONAL PERSPECTIVE



SECTIONAL PERSPECTIVE



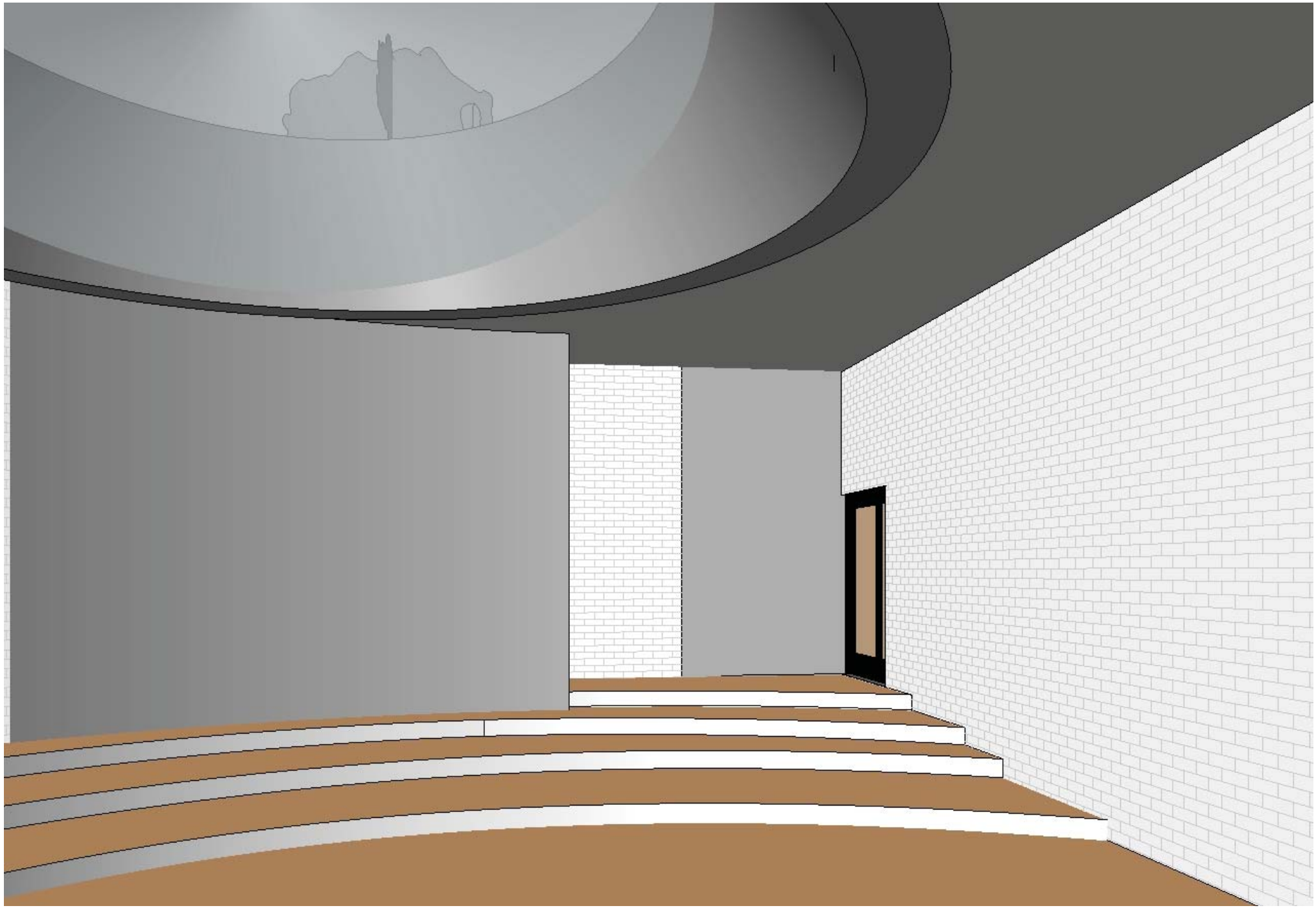
PERSPECTIVE



INTERIOR - OCCUPATIONAL THERAPY



INTERIOR - O.T. ON THE LEFT, STORYTELLING ON THE RIGHT



INTERIOR - STORYTELLING



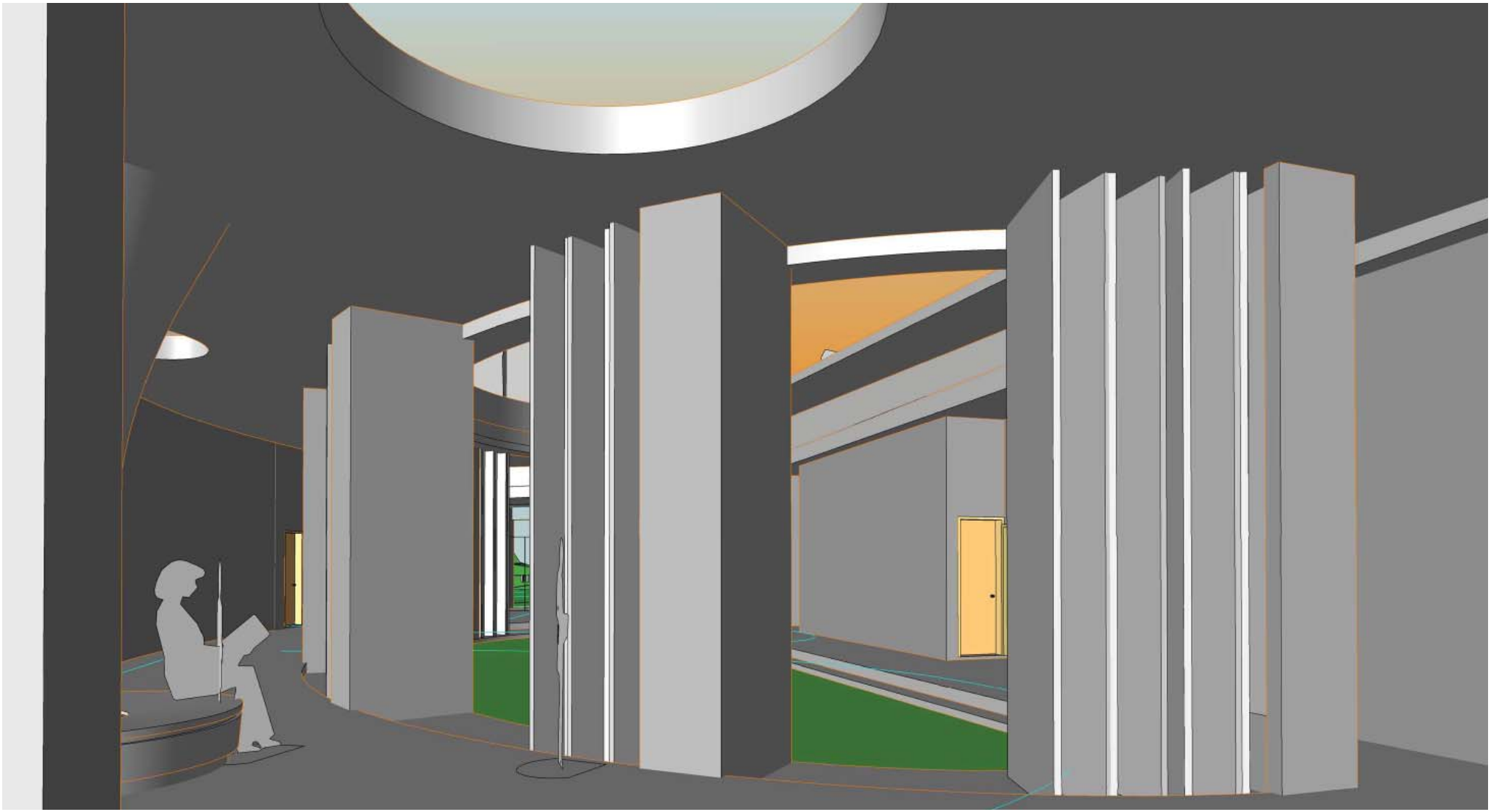
INTERIOR - DINING/ MULTIPURPOSE



INTERIOR - DAYCARE ENTRANCE



INTERIOR - DAYCARE RECEPTION



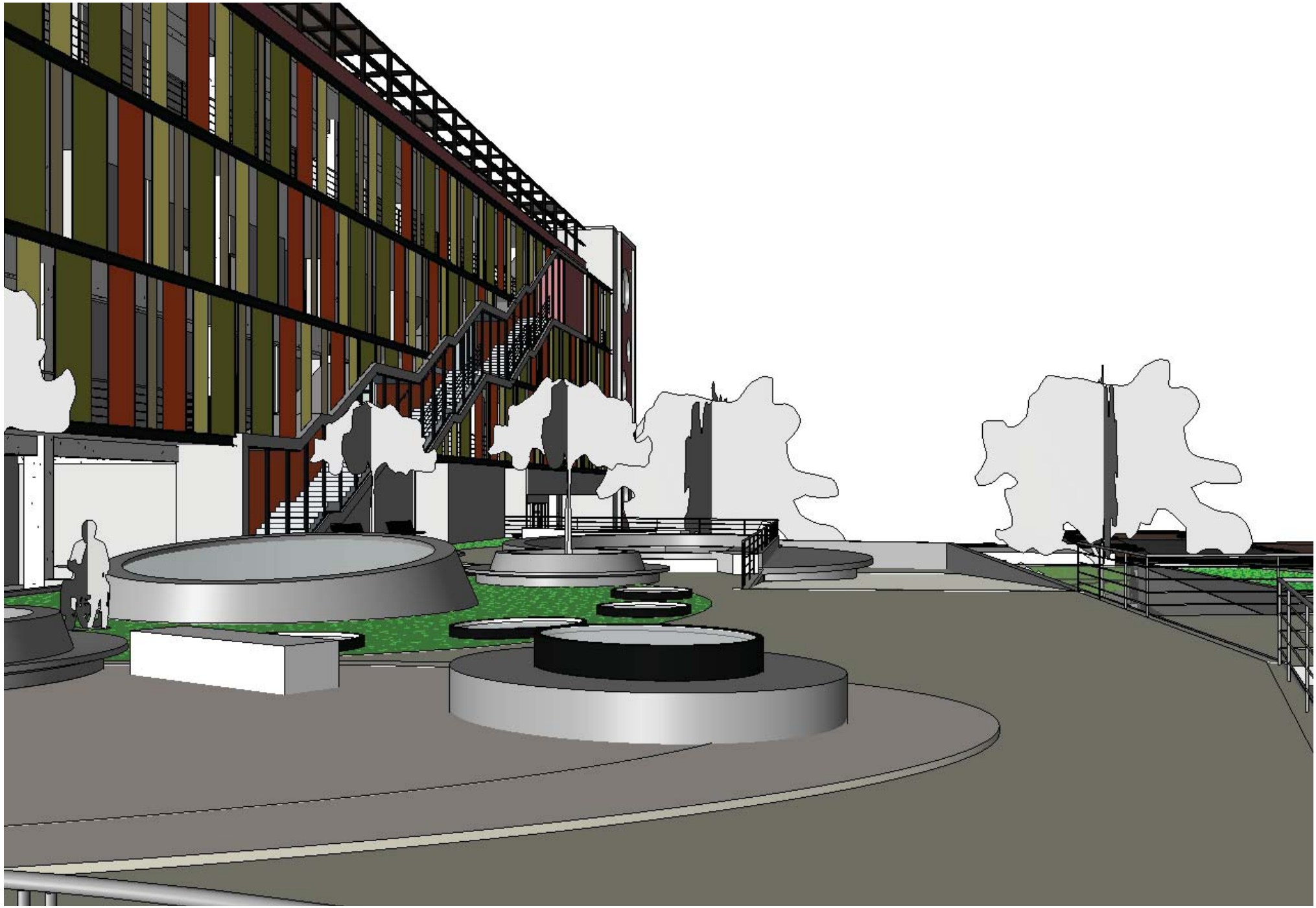
INTERIOR - DAYCARE INTERNAL PLAY COURTYARD



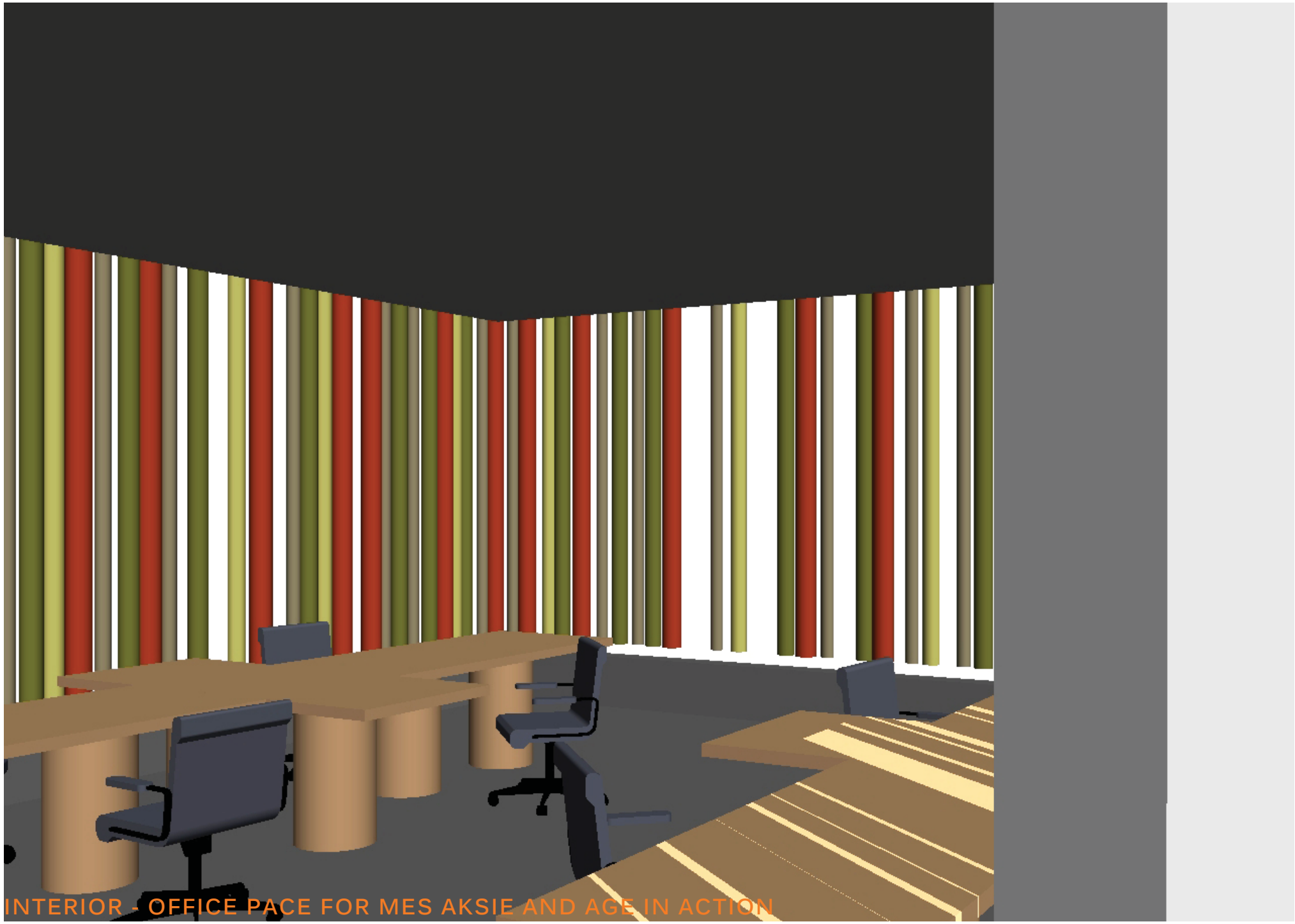
INTERIOR - DAYCARE INTERNAL PLAY COURTYARD



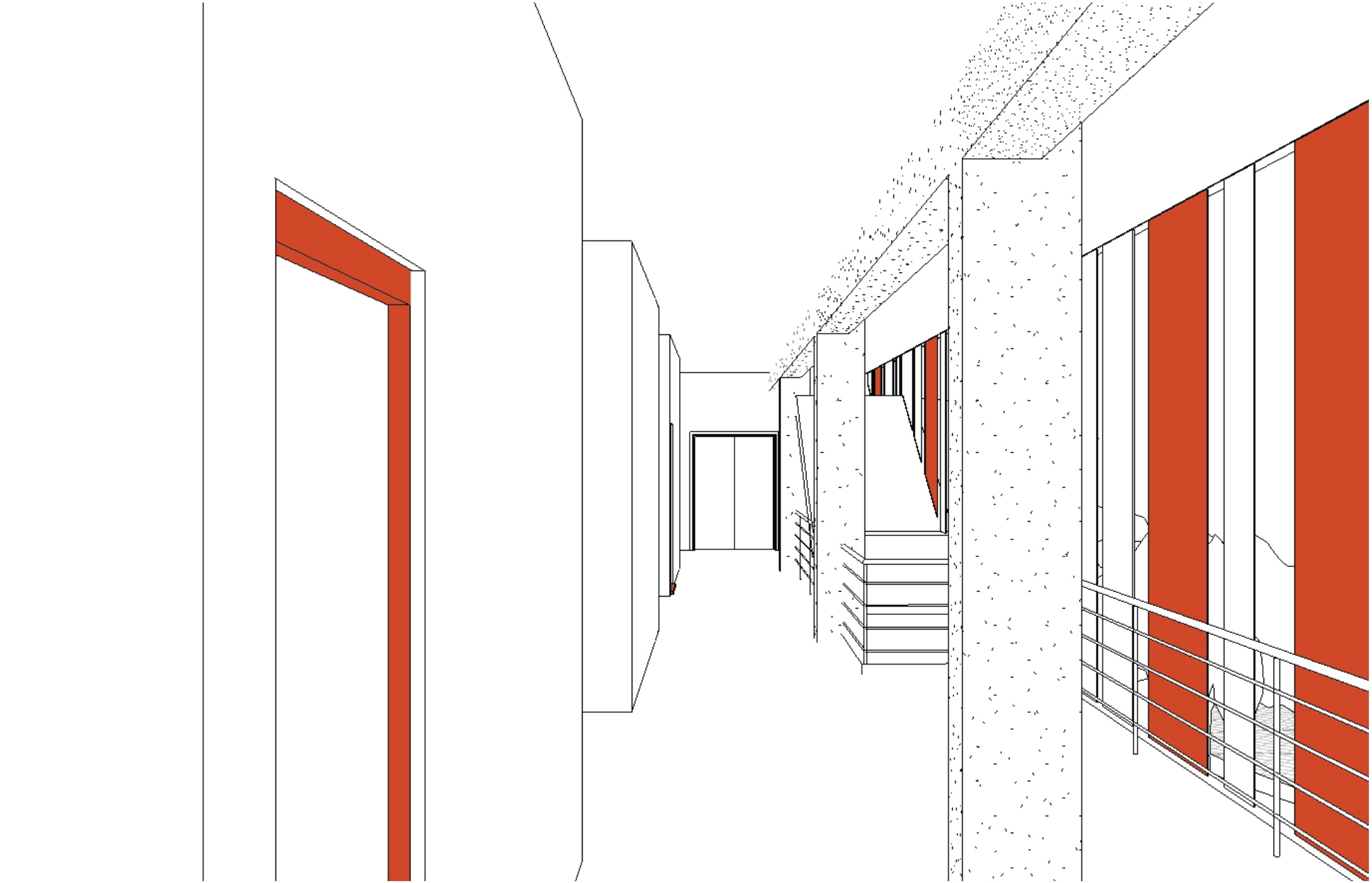
EXTERIOR - ELDERLY PARK



EXTERIOR - ELDERLY PARK



INTERIOR - OFFICE PACE FOR MES AKSIE AND AGE IN ACTION



INTERIOR - CIRCULATION FOR ELDERLY ACCOMMODATION



VIEW FROM EXISTING PUBLIC PARK ACROSS BEIT STREET



PUBLIC PARK AND INTERNAL STREET



PUBLIC PARK AND INTERNAL STREET



INTERNAL STREET



CHILDRENS PARK (ELDERLY EXCERCISE)



VIEW FROM FRAILCARE INTO CHILDRENS PARK



VIEW PRIMARY SCHOOL FIELD

APPENDICES

Lighting can make a critical difference to elderly people with deteriorating vision. Engineers, architects and designers trying to design spaces that can be fully utilized by both old and young must consider how to meet the visual needs of the increasingly large elderly population. The challenge is to create a visual environment to compensate for the most typical kinds of vision loss by enhancing remaining vision with lighting and clever use of contrast.



More Light Is Required

Less light reaches the retina in an aging eye than it does in a younger eye. First, pupil size reduces with age so less light enters the eye. Second, the lens, which is normally clear in a young person, yellows and thickens with age, also impeding the transmission of light. The result is that a 60-year-old receives only about 40% of the same amount of available light as a 20-year-old. An older person, therefore, may see poorly under dim conditions, and lose both acuity and contrast sensitivity. It is also difficult for an aging visual system to adapt quickly to dramatic changes in brightness. Even within a single space, it may be hard to see darker areas if other surfaces are much brighter. A general, or "ambient," light should therefore assure that there are no dark areas in a space. The space should also be bright enough to allow for good visibility so people can move around. In addition, light needs to be available for tasks requiring the ability to see and distinguish detail. The finer the detail of the task, such as counting money at a cashier's counter, cooking on the stove or reading, the more light is needed.

Glare Reduction Is Important

The solution may appear simple: Just provide more light overall, and extra light in task areas. However, many older people become increasingly sensitive to glare, and higher levels of light can be uncomfortable, even disabling. Typically, older people experience glare because their lenses thicken and develop cloudy patches, so light is absorbed and scattered across the retina, making the image less clear. Glare is felt most acutely when a bright object is seen against a dark background, such as headlights at night. A bright light source, such as a bulb or lamp that is well shielded from view, may provide good lighting in a room and minimize the chances for glare. Examples include indirect lighting located in architectural features such as soffit and lighting fixtures or coves; and fixtures, or "luminaires," which have shielding features such as baffles or louvers. Highly reflectant surfaces such as white walls and ceilings maximize and balance the light in space, washing out severe shadows.

Contrast

Because contrast sensitivity often declines with age, enhancing the contrast on relevant objects allows a person to recognize and distinguish edges. A stair tread with a contrasting-color stripe, for instance, may provide a measure of safety for someone who may not see the edge of the stair. Bold signs with a contrasting color background are easier to read.

Color

Since many elderly lose some color sensitivity, good color-rendering lamps may enhance the color discrimination that remains. Incandescent lamps, including halogen, render colors very well. Many types of fluorescent lamps render colors nearly as well as incandescent lamps, and have much longer lives.

Environments where seeing is easy and comfortable help to promote an elderly person's sense of competence and independence, and add to quality of life. Furthermore, when improving lighting to meet the visual needs of the elderly, everyone's visual environment is likely to improve.

Linda Sanford is a lighting consultant based in Palo Alto, CA.
Source: Lighthouse International's Aging & Vision newsletter (Spring 1999 issue)

12.2 DESIGN FOR DEMENTIA

Dementia is one of the most difficult impairments of elderly people. Designwise, it is an area that is both easy and difficult and as such, quite challenging. Easy because so much is almost over-explicit. Difficult because much of what is worth striving for in dementia is quite different from that which designers have experience of. Great demands are placed on the ability for interaction design and an interaction that often includes the person with dementia and her surroundings in relationship to the designer. Challenging because so much of what has not been done obviously could be, for the benefit of the person with dementia, those in her surroundings and the related social and health care services. Some rules and approaches to follow:

• Everything should be done simply for a person with dementia.

• The present is the only thing that exits, not a minute ago or then. A designer needs to bear in mind the consequences of this.

• Sensory impressions are of far more importance that ever before. Smell, vision, hearing, touching – all play an important role as does music and rhythm. But it has to be the elderly person's rhythms and music, not that of younger staff members.

• The older person becomes like the child she once was – rather than like a child in general. Personality has not disappeared, though, even if many memories have.

• Contact can be established with long-term memory, but for that to happen often requires that you blaze a new trail. Clear odors and pictures can be effective.

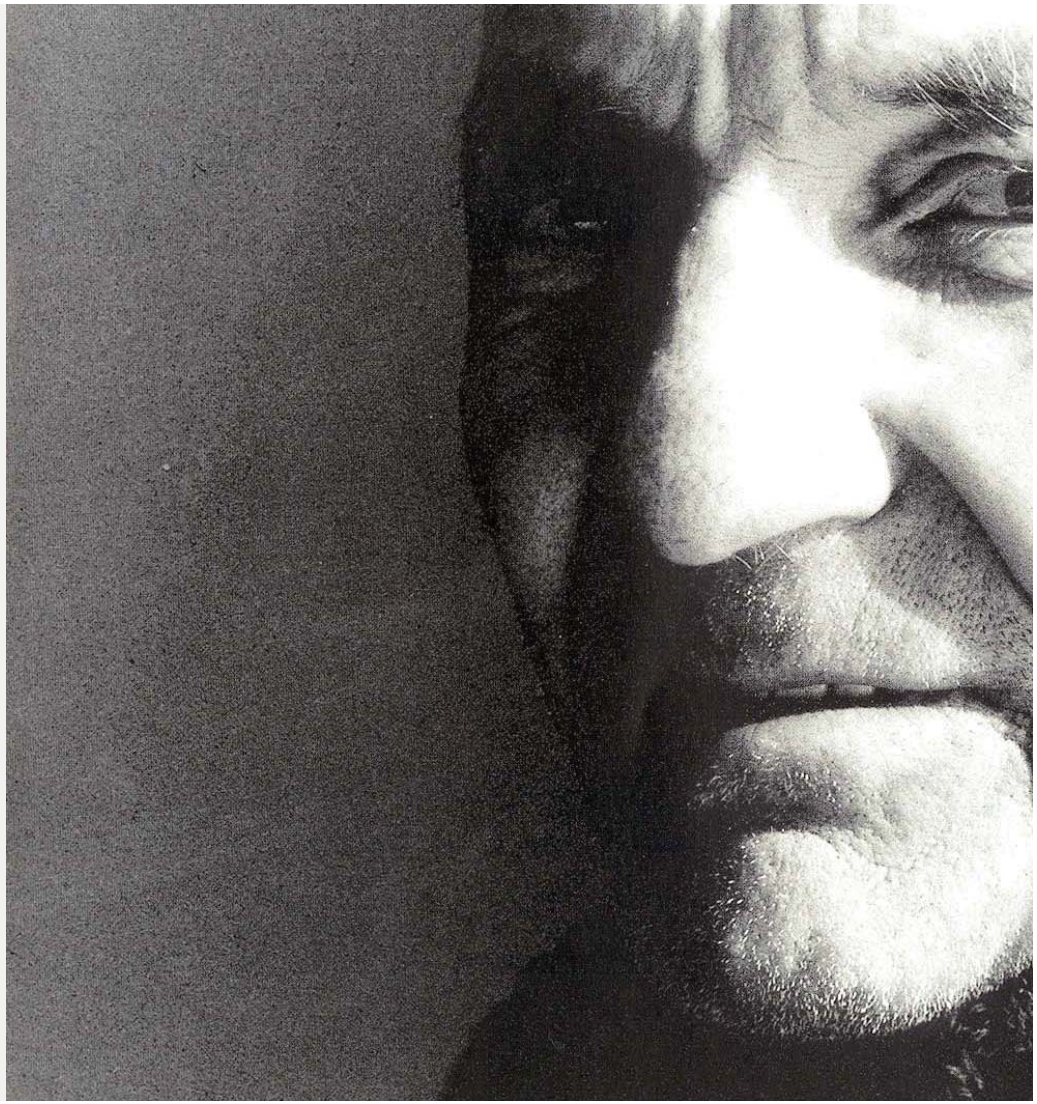
• Enable the establishment of attachment whenever possible. But not with fragile china figurines and other cherished items from the past that the person is simply unable to handle.

• Utilize colors much more that they are now. (Example: Use a bright red for attention getting.)

• Avoid all choices: A person with dementia is unable to choose.

• Make use of imitation: In eating situations, for example, have someone else eating at the same time. And, of course, one dish at a time, no questions about which dish the person with dementia wants. Keep things clear and simple.

• Make use of conditioning. It is easier to understand that it is time forlunch if you can smell the food from the kitchen than to understand thatlunch is served at 12.30.



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