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I, Kirstin Cavanagh (student number 0401697k) am a student registered for the course of Master of Architecture (Professional) in the year 2009. I hereby declare the following:

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This document is submitted in partial fulfilment for the degree of Master of Architecture (Professional) at the University of the Witwatersrand, Johannesburg, South Africa, in the year 2009.

Signature.....

.....day of.....year.....

DECLARATION



This thesis is an exploration of suburbia, its past, present and future. It presents an overview of the evolution of this distinct form of human settlement, as well as the opinions and proposals of various international stakeholders and role players with regards to suburban development.

A major focus is placed on the public and communal features within this context, which if carefully considered and improved, have the ability to act as a catalyst for the enhancement of community life and the inclusion of a wider range of people within this daily activity.

An understanding of the subtle and delicate fabric of suburbia and the attitudes and values of its inhabitants is crucial to interpreting the future possibilities of these areas as a positive contributor to humanity.

The suburb of Craighall Park in Johannesburg was chosen as the specific area of consideration and investigation for this thesis. As an older established suburb with large extents of public space, it possesses attributes with the possibility of being integrated to form a successful multi-use hub of activity.

ABSTRACT



Thanks must go to the following people for making this thesis possible and the process bearable:

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The staff at Wits, who gave of your time and knowledge.

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Dylan for your infinite patience, encouragement, inspiration, optimism and energy. For keeping everything in perspective, putting up with it all and never letting me give up. Thank you.



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All unlabelled images are the author's own and depict the residential character of the suburb of Craighall Park in 2009

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PART ONE : RESEARCH AND WRITING

Subverting Suburbia : re-imagining older suburban areas and their communal places

1. Introduction

"...we may consider the amenity-limited traditional housing tract, the formula mall and even strip centres as a stage in suburban development from which we are now-slowly but inexorably-passing..."
(Kotkin, 2005: 2)

Suburbia continues to transform in reality and within the individual and collective psyche, but it remains a desirable living environment for many people globally. Some of these changes, both positive and negative, are occurring independently of planners and architects, while others are the implementation of theories and research. Many questions with regards to optimal development of different aspects of suburbia are raised. The focus of this paper is on the public spaces in suburbia, specifically older areas, and what they should become in order to accommodate present change and future possibility. A range of international theories and opinions are raised and analysed throughout this paper, and their relevance within the Johannesburg, South Africa context is examined.

Defined by the Oxford English Dictionary as "The country lying immediately outside a town or city; more particularly, those residential parts belonging to a town or city that lie immediately outside and adjacent to its walls or boundaries", the term 'suburb' was "originally coined to describe a condition of sub-standardness, of physical and social isolation; in essence, a state of sub-urbanism. In contemporary times, the 'sub-urb' is still one of the most abused and maligned terms in the nomenclature of planning, architecture and urban studies." (Bourne, 1996: 163) Perhaps historically this description was correct as city centres contained most employment and cultural functions, but today suburbs have evolved into something very different, growing into centres themselves and resulting in regions becoming polycentric. Bourne in fact argues that the very term 'suburb' should be rethought and corrected to something such as 'new social spaces on the urban fringe'.

For years academic attention and thought was concentrated on decaying inner cities, however within the last decade, suburbs have become a focus of consideration regarding reinvention and retrofitting, in particular in North America and to a lesser degree, Australia. And rightly so, as suburbs cover large expanses of land and play an important role within cities. The exploration of suburbia and the design challenges and opportunities presented by this conflicted environment, have yet to be explored at university level architectural education in South Africa, contradicting the fact that it is the landscape in which much work will be done by graduates of these institutions once they become professionals within the industry.

Suburbs can have a positive new life ahead of them through continuous thought and redesign in order to adapt to changing needs and lifestyles. This paper attempts to replace existing unconstructive impressions of suburban areas with fresh ideas of what they could be. A deduction will be made regarding the optimal intervention for a particular site within the suburb of Craighall Park, Johannesburg, using current theories and proposals as well as site-specific restrictions. This site was presented by its owner as a chance to rethink it as an economically feasible development, while giving something back to the residents of Craighall Park. The suburb is what will be referred to as an 'older' or 'established' suburb, meaning that it grew slowly and over a period of time and it has been occupied for many years and is home to residents some of whom have lived there for the greater part of their lives, as opposed to new suburban developments which have been emerging on the outer limits of Johannesburg's periphery.

The paper begins by addressing the history of suburbia, internationally and within Johannesburg, situating the ultimate area of intervention within Craighall Park. The concepts of recycling and retrofitting older suburban areas are then dealt with, and how these ideas have been put into practice in other countries, particularly America and Australia. The flaws of suburbia, both real and imagined, are then examined in order to determine the key issues which need to be addressed to ensure positive change through development. An overview of the mostly 'unplanned' transformations which are already occurring in suburbia is then presented, followed by a discussion of the proposals and beliefs of several design and planning movements. The topic of public space, particularly within suburban areas is subsequently dealt with. A review of the city of Johannesburg's plan for the suburbs, specifically those within the region in which Craighall Park is situated, is then given and finally the potential opportunities for positive development existing within this suburb are investigated.

2. The origins of suburbia

2.1 International

The development of suburbs occurred differently in Europe and North America. European suburbs were designed as extensions or replications of urban centres and followed a larger overall plan aimed to achieve certain social objectives. In the United States on the other hand, suburbanization was consumer and profit driven and did not adhere to a broader plan. One of the early suburbs to be developed in America which fits the typology of the 'modern suburb' as we know it today, was Levittown located on Long Island in Nassau County, New York (figure 1). It came about after World War Two in order to meet the demand for housing for returning military veterans. (Lambert, 2005) Built between 1947 and 1951 by William Levitt, it epitomised the American dream of the nuclear family living behind a white picket fence in a home complete with radiant heating, roofed carport, Bendix washer and General Electric stove, and became a prototype on which many suburban communities were subsequently based. (Blackwell) This dream, however, was not to be shared by all and as declared by Levitt himself in 1954: "As a Jew, I have no room in my mind or heart for racial prejudice, but, by various means, I have come to know that if we sell one house to a Negro family, then 90 to 95 percent of our white customers will not buy into the community. That is their attitude, not ours." (Blackwell) These racially prejudiced limitations, to be illustrated later, are a feature in early South African suburbs as well, and are a major cause for past and present suburban criticisms.

The historical foundations of suburbia can be traced back to many years before this first 'model' suburban development of Levittown. Even before the nineteenth century, there existed places beyond the city limits which depended on the central area both physically and economically. These places were very different to modern perceptions of suburbia as they were "composed of the ramshackle and squalid abodes of the poorest and most wretched of the town's hangers-on and its most noxious trades." (Thompson, 1982: 2) In London from the middle of the eighteenth century changes started to occur as these areas were upgraded, thus becoming desirable living quarters for wealthier residents. But it was not until after 1815 that the development of suburbia accelerated to a significant scale. (Thompson, 1982) In Britain, the industrial revolution was a major factor in the escalation of suburban development, as crowding in the city centre lead to an increase in crime and a lack of sanitation facilities, resulting in the migration of wealthy residents to the surrounding countryside. Americans, as well as Australians and Canadians, all of whom boasted plentiful land, in turn welcomed this idea of expanding outward and acquiring more land and privacy. (Kotkin, 2005) The effect of the private motor car sin ce the period between the wars and the subsequent establishment of the interstate system in the United States played major roles in the increase of low density, large lot size suburbs and by the year 2000 more Americans lived in suburbs than in central cities and rural areas combined. (Hayden, 2004)

Garden cities were a solution to urban problems, conceived by Ebenezer Howard and documented in his book 'To-morrow: A Peaceful Path to Real Reform' which was first published in 1898 and led to the creation of the profession of town and country planning in Britain and other countries. (Thomas, 1985) The main problem which Howard's writings addressed was that of the constant stream of people moving into already over-crowded cities, which was occurring not only in England, but all over Europe and America too, resulting in the depletion of country districts. (Howard, 1985) For



figure 1. Levittown family in front of their Cape Cod, 1948
Source: http://tigger.uic.edu~pbhales/fasi/visuals.htm

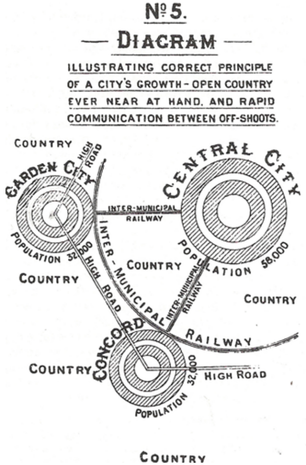


figure 2. Correct Principles of a City's Growth
Source: Howard, 1985: 106

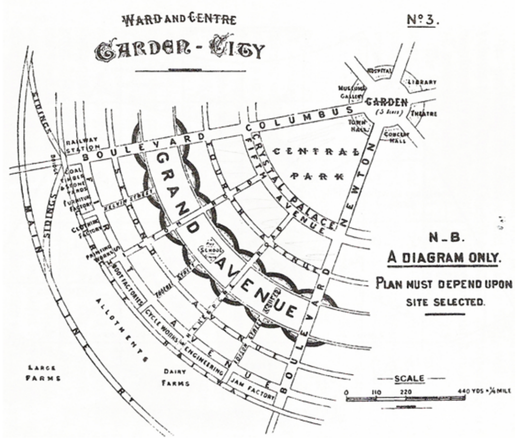


figure 3. Garden City Diagram
Source: Howard, 1985: 16

Howard, the solution to this was to create attractions outside of the city centre. He argued that the existing idea that there were only two options, namely town life and country life, was untrue and that "a third alternative, in which all the advantages of the most energetic and active town life, with all the beauty and delight of the country, may be secured in perfect combination." (Howard, 1985: 8) For Howard this construction of a third option could be applied several times over and form a group of smaller garden cities on the outskirts of a central city (figure 2). The design of Garden City was circular and centred around a beautiful garden traversed by six boulevards which run from the centre to the circumference of the town. Surrounding the central garden are public buildings such as libraries, town halls and hospitals, followed by a public park surrounded by a glass arcade which opens out onto the park and functions as a retail space as well as a winter garden. Moving outward from the arcade a band of residential dwellings begins and is made up of tree-lined streets and houses each on their own stand, bound by a 'Grand Avenue' which is made up of more park land, schools and churches. Factories, warehouses, dairies, markets and the like are positioned on the outer ring of the town, bordering on the railway for easy loading of goods (figure 3). (Howard, 1985) These ideas from the late nineteenth century were critical to subsequent opinions and development of suburbia as a solution to global urban problems, even filtering down to the Southern tip of Africa.

2.2 Johannesburg

"Johannesburg was called into existence by the all powerful and attractive presence of the precious ore for which men, and women, too, are willing to suffer hardships and privations, living meanwhile on the hope of ultimate success." (Unknown, 1898)

Growing rapidly and with little planning or coordination, Johannesburg produced extensive urban sprawl in the form of suburbs, thus suburban development, specifically to the north of the Central Business District, resembles that of America. A few years after the discovery of gold in Johannesburg in 1886, the newly rich white mine owners began to separate themselves from the dusty, noisy mining camps. They initially moved to the south-eastern boundaries of the town centre to an area known as Doornfontein, which in effect can be seen as the earliest suburb of Johannesburg (figure 4). The township of old Doornfontein was laid out in 1887 and large, fashionable mansions were subsequently built by successful mine owners. (Norwich, 1986) Later, from about 1892, the very wealthy families moved to a new area to the north of the city centre and after the First World War, Doornfontein became a mixed-race working-class suburb. To the east Lorentzville and Judith's Paarl, in Bezuidenhout's



figure 4. Johannesburg from Doornfontein Source: Norwich, 1986: 83



figure 5. Lorentzville and Judith's Paarl Source: Kallaway, 1986: 37
figure 6. A View in Parktown Source: Norwich, 1986: 117



Valley, were developing as middle-class white suburbs (figure 5). (Kallaway, 1986) The new area for the wealthy was the Parktown ridge (figure 6) which turned its back to the industrialisation and faced north. (Chipkin, 1993) "Parktown was intended to be a superior part of Johannesburg and the first attempt at more logical town planning with wider roads following the contour of the natural land. Only residential houses were allowed...a ban on poultry yards or any other objectionable features that might lower the high tone of the suburb." (Norwich, 1986: 114)

This exclusionary attitude present in suburbia extended to blatant racism long before apartheid became formalised, and contributed to a segregated society which was concretised in South Africa throughout the apartheid years. Prohibited from living in areas demarcated for white residents unless they worked there, black servants were accommodated in suburbia in back-yard quarters "built with fire walls on the site boundaries to create as much separation as possible from the main residence on the same plot and screened with six foot cill height windows so that the presence of black servants was discreetly disguised as part of an architecture of invisibility." (Chipkin, 2008: 250) At this point it must be noted that the term 'suburb' in a South African context refers to 'townships' which is the term under law for urban subdivisions, whereas the term 'township' is used to refer to those rural and urban areas demarcated for black settlement under colonial rule. (Mabin, 2005) The Natives Land Act of 1923 and the Housing Act of 1920 divided land between black and white people; thereby moving black people away from white suburbia and into public housing estates, or townships (figure 7). Not only was the city divided by race but also, and often correlating with race divisions, were divisions between different income groups (figure 8) which are still visible in present-day Johannesburg.

As was the case in America, new transportation developments had a major influence on the outward growth of Johannesburg. Between 1891 and 1906 the limit of development was controlled by the horse-

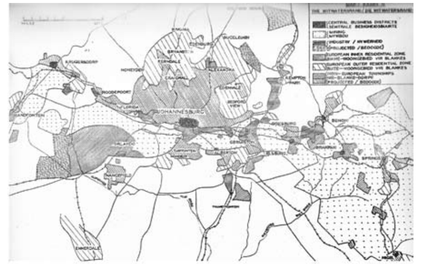
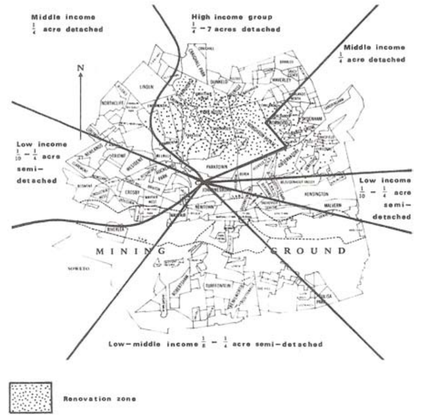


figure 7. A Map of Johannesburg in 1957 showing separate zones for whites and non-whites in the city
Source: Green, 1957: 6

figure 8. The Socio-Economic Sectors of Johannesburg
Source: Hart. 1972: 6



drawn tram, the electric tram then enabled further development until 1939 and was a major factor in the development of the Rosebank Shopping centre. Between 1940 and 1972, the use of automotive transport facilitated extensive urban sprawl (figure 9). (Hart, 1972) Other factors contributing to the growth of suburbia were the need for housing for returning service people from the South African forces who had entered the war in 1939 and the introduction of state subsidisation of suburbs. From the fifties onwards, many 'whites only' schools were built in the suburbs, thereby increasing the appeal of such areas. (Mabin, 2005)

"In the later decades of the twentieth century, the suburbs also developed in entirely new ways, with an explosion of commercial activity, accelerating variation in types of residential building and relocation of all kinds of work." (Mabin, 2005: 5) The northern suburbs of Johannesburg, most importantly Rosebank and Sandton, have been the recipients of most of the flight from the city centre as it fell into decline, and form a large and exclusive area which currently receives the majority of commercial investment and houses South Africa's privileged residents. Craighall Park is one such suburb and is situated slightly to the west of Sandton, between Jan Smuts Avenue and Beyers Naude Drive (figure 10).

2.3 Craighall Park

According to a brief history by the Craighall Park Resident's Association, a large estate known as Klipfontein No. 479 District Pretoria, was purchased by William Rattray in 1891 and renamed 'Craighall'. At the time it was made up of scattered farms and small holdings which supplied fresh produce to the residents of Johannesburg and provided them with a weekend escape from busy city life. In 1902 Rattray developed a portion of his property into a residential township, although this was not a success as it was located too far from the town and work places. An advert from an estate agent at the time described the area: "Within an hour's drive of the city, through the beautiful suburb of Parktown and the undulating country beyond, the journey out is an initial enjoyment which is only a foretaste of pleasure to come. Bowling over a road which is for the most part a good one, the city dust and bustle is soon left behind, and a more genial climate exercises its exhilarating influence on the spirits. Whether passing through the large plantation of eucalyptus, fir and pine, or traversing the more open country, the way is equally pleasant ... a gleaming lake lies placidly in the lap of a little valley, guarded by a light fringe of foliage, beyond which the veldt swells softly upwards in gentle undulations to where the Magaliesberg Mountains melt in the horizon." Rattray developed the rest of his property into a leisure area complete with a series of lakes (figure 11) for fishing, bathing and boating, a hotel, a pagoda, a beer and tea garden and sports fields. The Craighall Park Hotel (figure 12) was situated where the Colony Centre is today. The first residential stands, each half an acre in size, went on sale in 1911. The Craighall Primary School was founded in 1918 as an Afrikaans medium school, housed in a three-roomed hired cottage (figure 13), and provided education to the children of farmers, zookeepers and miners. According to the school's website, "The majority of the pupils walked to school while the few "privileged" ones arrived in horse-drawn carts or on horseback!" In 1924 the school moved to its present location (figure 14), but it was not until the 1930's, when Craighall Park was incorporated into the Johannesburg City area, that a substantial amount of pupils attended the school. In the mid 1940's as Parkhurst, a neighbouring suburb, was being developed for returning World War Two servicemen, the roads of Craighall Park were tarred and street lights and water borne sewerage installed. By the 1960's a small group of shops including a butchery, green grocer and a café existed on Grafton Avenue. Rattray was Scottish and as such named the streets in the suburb after noble Scottish families.

Regional modernist architecture came to Craighall Park in the 1940's courtesy of Liverpool architect, Douglass Cowin. In 1944 he designed a house for himself in Hamilton Avenue on a sloping site above the Braamfonteinspruit flood plane: "he exploited the use of outdoor living-space as an apt response to the Traansvaal's temperate climate and the easy-going, informal-weekend life that had arisen in the suburbs" (Chipkin, 1993: 187) He followed this house with a small house in Portland Avenue and in 1947 he designed the Craighall mews flats on Jan Smuts Avenue as two parallel blocks of low-cost duplex apartments

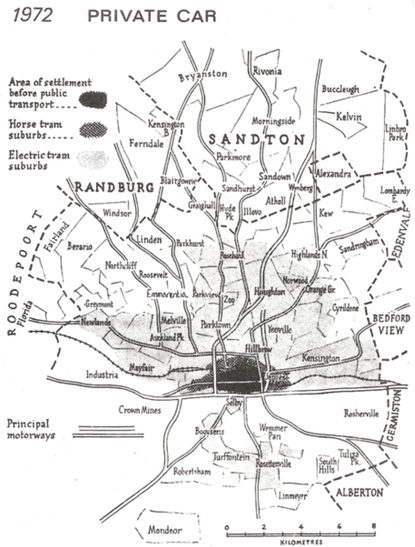


figure 9. The limit of development controlled by automotive transport, 1939-1972
Source: Hart, 1972: 11



figure 10. The location of Craighall Park within the Johannesburg metropolitan area
Source: Author's own, 2009



figure 11. Rattray's Dam, Craighall Park 1982
Source: http://www.cra.org.za



figure 12. Craighall Park Hotel 1906
Source: Brodie, 2008: 229





figure 13 & 14. Craighall Primary School in 1918 and 1924
Source: http://www.craighall.gp.school.za/

"providing congenial urban accommodation beautifully in scale with the residential street." (figure 15) (Chipkin, 1993: 185) In the late 1960's Michael Sutton continued this trend of densification in the suburb of Craighall Park with two projects: The Courtyards and Walkways (figure 16). According to architect Henry Paine, these were among the first new sectional title units in South Africa. (Chipkin, 2008)

Today the suburb of Craighall Park is still divided into large properties with mostly single dwellings and massive gardens, with a few blocks of flats, complexes and row-houses. This is the context in which an architectural intervention will be situated, an older established suburb which could act as an example of revitalisation.



figure 15. Craighall mews flats (1947-8), by Cowin and Ellis
Source: Chipkin, 1993: 185

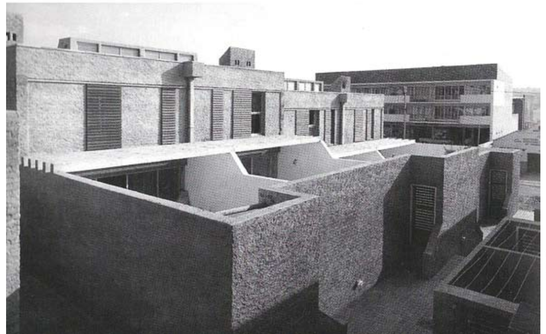


figure 16. walkways, Craighall Park, at completion in the mid 70s
Source: Chipkin, 2008: 204

3. Recycling, Reinventing, Retrofitting, Revitalising

The concept of recycling and working within existing suburbs proposes ideas of their evolution into more urbanised environments which are also more sustainable. A sustainable suburb, as defined by Buntin (2000), is a suburb that works towards the preservation of built and natural environments, cultural heritages and economic opportunities for citizens. "... physical change may be vital to older suburbs, where aging, outmoded buildings no longer accommodate contemporary tastes and needs." (Dunham-Jones, 2005: 8) Citizen participation is vital in planning the reinvention of a suburb, even more so than in new developments, as residents feel a sense of ownership and attachment to older areas, and they appreciate certain qualities even if planners and designers feel that these are not in their best interests.

In the United States retrofitting in suburbia has primarily been focussed on the sites of shopping malls which have fallen into neglect and abandonment. Created to promote the act of consumption as a private one, within the past few years terms such as 'mall fatigue' have been used to describe the diminished use of shopping malls in America. (Mattson, 1999) It seems that these environments, which developers have created, do not fulfil the needs of the citizens. In response to this, they have begun to include civic functions in these buildings. From public libraries, chapels and community health centres to auditoriums and meeting rooms, the functions accommodated are diversifying and becoming more than just shopping centres. (Mattson, 1999) In other examples, older buildings are being demolished to make way for even more varied and mixed-use projects which include residential, commercial, retail and civic functions. A fascinating project recorded in a book titled 'Big Box Reuse' by artist Julia Christensen documents superstores across the United States which have been abandoned by their original owners and courtesy of creative and resourceful communities are being transformed into new spaces. Unique and varying functions from the RPM Indoor Raceway in a renovated Wal-Mart building in Round Rock, Texas to the Spam Museum in a refurbished K-Mart in Austin are appearing in these buildings which would otherwise stand vacant as monuments to unsustainable consumer-driven sprawl.

In Australia, the varyingly sized and characterized 'internal reserves' have been reviewed and chances for the reinvention of these spaces considered. These reserves were planned into the suburbs in many countries in the first three decades of the twentieth century. (Freestone and Nichols, 2004) The proponents of this change uphold the idea that even small spaces can improve the quality of life in suburbia, and that different types of spaces present diverse opportunities for this to occur. These parks which are surrounded on all edges by residential stands are exclusive, 'left over' spaces and are largely unnamed and unnoticed by passersby. Four strategies are identified by Freestone and Nichols (2004): Excision, redevelopment, expansion and revitalisation. Excision has begun to occur as surrounding homeowners incorporate parts of the land into their own back yards, thereby privatising it. Redevelopment of the sites through housing, retirement homes and public facilities once again subtracts communal space from the public realm. Expansion involves the acquisition of residential stands and creating a street front for the parks - a costly solution. The final option is revitalisation, encompassing a range of different results: It is suggested that those which are fully degenerated could become internal community car parks, thereby de-motorising the streetscapes. Others which contain rich natural vegetation could become green corridors or walkways through a conservation zone. Agriculture and community food gardens could be incorporated. (Freestone and Nichols, 2004) It is not only the obsolete that needs reinvention, but also new and contemporary ideas of building and planning that need challenging. In order to do so, both positive and negative aspects of suburbia must be analysed.

4. The real and imagined flaws and positives of suburbia

"Many of us still live with the suburban stereotypes laid down by the first wave of suburban critics -- that the suburbs are dull, white-bread kind of places where Ozzie and Harriet families go to raise their kids. But there are no people so conformist as those who fault the supposed conformity of the suburbs. They regurgitate the same critiques decade after decade, regardless of the suburban reality flowering around them." (Brooks, 2004)



figure 17. Craighall Primary School, 2009
Source: Author's own, 2009



figure 18. Saint Theresa's Mercy School, 2009
Source: Author's own, 2009

As previously mentioned, suburbia is encumbered with many negative connotations and criticisms, yet it is the preferred choice of living environment for many residents world-wide. It is perhaps the notion of living surrounded by some degree of space, yet still being able to access urban amenities that attracts people to such circumstances. A distinction must be made between the real problems faced in suburbia and those illusory dilemmas noted in anti-suburban arguments if progress is to be made in these areas and development is to be constructive rather than harmful.

Suburbanites have been criticized for being racist, alienated and less responsible citizens than city dwellers, with antisocial tendencies and civic disengagement. These opinions are reiterated by authors such as Mumford (1968) and Blakely and Snyder (1997). Categorising people's personalities and social responsibility according to where they live is to generalise to a point of arrogance and inaccuracy. Furthermore, traditional cities supposedly have entrenched community values which suburbia lacks, a view expressed by Duany (2000) as he describes sprawling American cities: "civic life has almost ceased to exist". What exactly is meant by this and what are these community values? The term community fundamentally implies a group of people interacting within a shared environment, although sociologists have yet to agree on a single definition. Perhaps this is because it has different implications in different circumstances and may not even be visible to outsiders. In suburbia, which can be said to be a 'collective effort to live a private life' (Mumford, cited by Marshall, 2006: 278), it can be an invisible network which connects residents. Endeavours such as an annual street party or a newsletter mainly addressing security concerns form the visible interactions. Everyday interactions between members of a suburb are few and far between and are in need of strengthening in order to avoid a feeling of isolation, especially for children and elderly residents, who lack mobility and rely on immediate surroundings for a sense of belonging. However, values such as safety and recreational needs are often shared and so endeavours to promote these ideals have the ability to be successful. The subject of safety and security must be expanded on and addressed, as an undeniable paranoia seems present within suburbia. This fear manifests itself in the form of high walls, electric fencing, intercoms and security guards surrounding residential properties. In Johannesburg this paranoia is somewhat validated by high crime statistics and everyone's personal horror story, making it difficult to dismiss this anxiety, yet questioning whether the means resorted to for protection, do in fact improve the situation or just enhance these areas as targets for criminals.

Suburban areas are also accused of being ugly, wasteful and boring, with sterile and uninteresting architecture, characteristics which can be applied to city centres just as easily as to suburbia. However, it must be said that in newer suburbs on the edges of development in Johannesburg, houses seem to be churned out of the same mould, often emulating foreign styles with little regard for regional climate and culture. This is not a definitive feature of suburbia, but a reflection of current confusion and misunderstanding, which takes form mainly in suburbia as this is where new development is currently occurring. The impression that suburbia is placeless as it lacks cultural and religious facilities is again mostly relevant to newer suburbs in Johannesburg as many examples of such facilities are present in older areas, including Craighall Park. Craighall Primary School (figure 17), whose historical origins have been discussed previously, occupies a large site in the heart of the suburb, in close proximity to two other educational facilities: St Theresa's Mercy School (figure 18), which educates foundation phase learners, and Rutland Playschool (figure 19) for children from two to six years of age. There are two religious facilities present in the suburb, the Saint Martin de Porres Catholic Church (figure 20) and the Wesleyan Community Church (figure 21).

A lack of linkages between home, park, local services and natural areas has emerged in suburban environments, with a disproportionate importance placed on private gardens. (Girling and Helphand, 1997) This is a very important issue which requires addressing, through improving connections to encourage public interaction instead of targeting private yards as the problem, as many residents see this feature of personal outdoor space as a positive one. The two types of landscaped areas need to work together to form a network of spaces comprising different degrees of privacy and public interaction. This problem is one that requires the deliberate intervention of planners and architects, but some changes are taking place naturally, to either positive or negative effect.



figure 19. Rutland Playschool, 2009
Source: Author's own, 2009



figure 20. Saint Martin de Porres Catholic Church
Source: Author's own, 2009



figure 21. Wesleyan Community Church
Source: Author's own, 2009

5. Changes in traditional suburbs

"They (suburbs) are widely characterized as socially homogeneous, predominantly of one social class and household type, relatively deficient in jobs, economically dependent on the central core, and as symbols of more or less closed societies."
(Bourne, 1996: 165)

These traditional views of suburbia have been widely refuted as changes have occurred internationally:

5.1 Densification

An increase in density within suburbia is seen as a positive step by planners and designers, as it allows for accommodation of a growing population without increasing sprawl. With sprawl comes an increase in the use of cars and distances travelled daily, causing environmental damage and a loss of time, as well as major expense to the city through the additional infrastructure needs. Developers are also in favour of maximising land to increase profit. Residents within older, established areas, however, often become outraged at the prospect of new developments being implemented which threaten to change the structure and character of their suburb. Some of their concerns, such as increased traffic congestion, need to be addressed, but more than anything false perceptions and ideas need to be eradicated through information and discussion. The Groupe interdisciplinaire de recherche sur les banlieues (Interdisciplinary Research Group on Suburbs) set up a revival program including densification, but in order to maintain a suburb's quiet, green character of low density, soft and strategic densification is implemented. (Després et al., 2004) Small-lot, single-family detached housing could be more appropriate than multi-storey apartment buildings. In Craighall Park the residents association has blocked the development of new cluster homes in the area, but even here small pockets of residential densification have managed to occur (figure 22).

5.2 The 'gated' community

In the case of Craighall Park and other suburbs within Johannesburg, densification invariably also means the creation of small exclusive developments physically separated from the rest of the suburb by high walls and a singular access point protected by security gates, cameras, intercoms and guards. In an attempt at providing security to the inhabitants, these developments create their own internal communities, privatizing parts of the suburb, such as streets and pavements, which would otherwise become a part of the collective public space. The residents who protest against these developments do so on the basis of anti-densification and do not necessarily consider their exclusive nature to be a problem. While in actual fact, ideally, densification should occur without the implications of restriction of access to other residents in the area. The idea of the 'gated' community is not a new one and definitely not exclusively South African: "…gated communities can be seen as the horizontal equivalent of the high-security apartment block...the antithesis of the traditional image of what is urban; they are also antithetic to finding collective and regional solutions to urban problems." (Bourne, 1996: 175) One of the principal reasons for the demand for gated communities in Johannesburg is perhaps the high crime rates and a constant search for personal safety. A gated community can also be in the form of 'boomed' off areas, basically providing access restricted to residents and their guests and violating the rights of anybody else who wishes to pass through. Instituted in various cities globally, including USA, Puerto Rico, Ireland and Saudi Arabia, this phenomenon is also present to some degree in Craighall Park in parts where streets are dead-ends, as it is thought that there is no need for anyone except residents of that street to enter the area. Some argue that this just shifts the crime to surrounding areas and increases the perceived riskiness of these unprotected zones. In Johannesburg, an attempt, through policy frameworks, has been made with regards to controlling the creation of these road closures which are often done by residents associations without consulting city planners. Unsubstantiated claims suggest that the implementation of booms increases property values as prospective buyers perceive these areas to be safer.

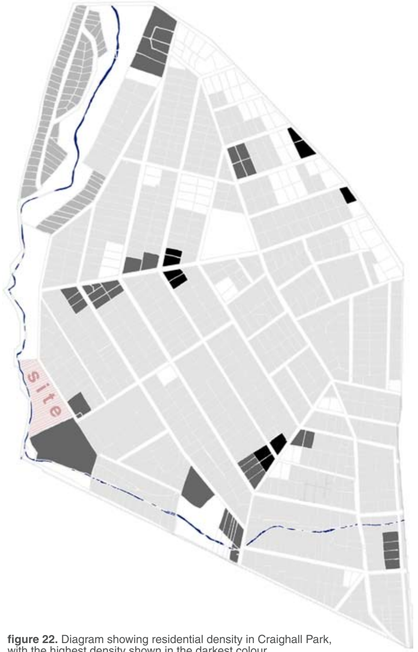


figure 22. Diagram showing residential density in Craighall Park, with the highest density shown in the darkest colour
Source: Author's own, 2009

5.3 Demographic changes

Various demographic changes are occurring globally in suburbia. While a change in ethnic composition is taking place in Johannesburg's suburbs, a change in class can only take place in older suburbs when a diversity of housing options is available and as such is slow in taking place. An increase in elderly residents remaining in suburbs that they have occupied for many years requires facilitation for a group of people who lack mobility and have no desire to relocate to areas closer to amenities as they are unaccustomed to the higher density, congestion and noise of such areas. A change in the generation of new residents who live or want to live in suburbs signals a change in expectations and aspirations to be accommodated. With this new generation comes a shift in traditional family structures and once again a wider range of housing types is necessary if diversity is to be encouraged.

5.4 Growth of employment in suburbs

A growth in employment in suburbs, in the form of houses converted into offices, as well as work-from-home situations (figure 23), signifies new needs in terms of both residential alterations and surrounding amenities needed to facilitate such endeavours. This change to the traditional role of suburbia as a dedicated housing environment is an attempt at a closer

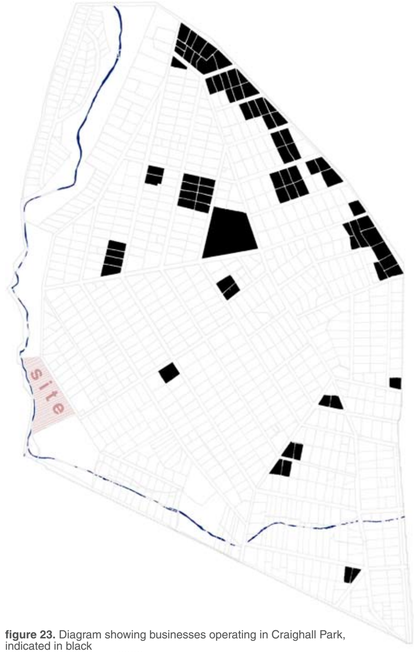


figure 23. Diagram showing businesses operating in Craighall Park, indicated in black
Source: Author's own, 2009

relationship between workplace and home life, made possible by technological advancement and new communication technologies.

5.5 Decline of older suburbs

Many older suburbs are falling into a state of decline and degeneration as development focuses on areas further and further away from the city and its surrounds. Attributed to “the lack of proper urban planning and inspection” (Visser, 2008), although this deterioration is occurring in areas not far from Craighall Park, the suburb itself is not a victim and remains a sought after neighbourhood in which to live. In America, due to the current recession, many suburban areas and old-line manufacturing cities have plunged into a state of desperation as houses are abandoned and neighbourhoods are thereby deteriorating. Writers such as Streitfeld (2009) have revealed how certain local authorities are contemplating “demolishing entire blocks and even whole neighbourhoods” in an effort to reduce cities to a usable size without having large areas turning into slums. The Australian firm Andrew Maynard Architects have come up with a conceptual solution to decaying suburban areas. The project titled ‘CV08: the suburb eating robot’ is designed to consume abandoned suburbs once oil supplies are depleted and they fall into disuse (figure 24). The robot then processes the materials, sends them to recycling plants and restores natural flora and fauna to the newly revealed earth.

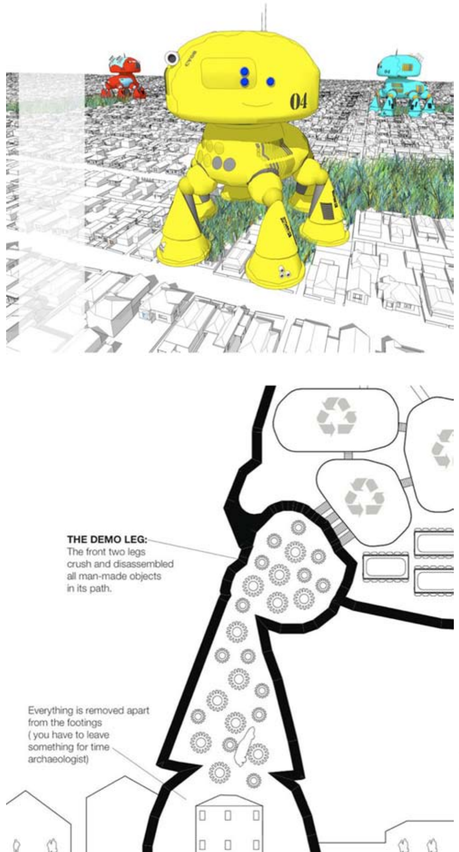


figure 24. CV08 the suburb eating robot by Andrew Maynard Architects, 2008
Source: http://www.maynardarchitects.com/Site/houses/Pages/CV08.html

6. Accommodating changes and planning for the future : New Urbanism, Smart Growth and New Suburbanism

Contemporary thought encourages changes to the traditional view of the suburb. As outlined by Buntin (2000), there are certain considerations to be made in ensuring the optimal functioning of new and existing suburbs: Pedestrian movement is at the forefront of improvement, yet automobiles must still be accommodated. With this change, the idea of experiencing the suburb, its buildings, walkways, public spaces and landscaping at eye level should influence the design of these elements. A major neighbourhood centre and other secondary nodes of activity are required in order to provide focal points of retail, offices and public space which are used throughout the week at all hours of the day. A variety of housing that accommodates the changing demographics of suburbia is essential in ensuring diversity. The design of buildings, residential and other, should consider regional traditions and climate. Safe and enjoyable transportation networks including buses, pedestrian and bicycle paths should connect all parts of a suburb and integrate with nature trails and green spaces. Open space should be preserved through protecting natural areas and integrating them with infrastructure and buildings. The efficient use of renewable and non-renewable resources, through land use and building design, as well as the reduction and recycling of waste is important. Summed up, “Every suburb is a living body. Based on human scale, diversity, mutual respect, and a sense of place, the good suburb thrives as its own entity within the context of the metropolitan region.” (Buntin, 2000: 332) The impact that developments make on their surrounds is therefore also of utmost importance.

Several design movements advocate these changes in new and existing urban and suburban areas. The first being ‘new urbanism’ which arose in the United States in the 1980’s as



figure 25. Melrose Arch, Johannesburg
Source: Chipkin, 2008: 454



figure 26. 44 Stanley Ave, Johannesburg
Source: Author’s own, 2005

a reaction to sprawl and the inefficient planning of suburban growth and development. Extremist New Urbanism supporters have gone so far as to suggest that suburbs will eventually "dry up and blow away". (Kotkin, 2005: 6) But for the most part their goals are more realistic and restrained. The promotion of diversity in housing and jobs, pedestrianism and common green space is advocated through the design of these developments. The idea of incorporating local history and vernacular into the architectural style, too often turns these developments into themed neighbourhoods, recalling bygone eras. In Johannesburg, examples of new urbanism put into practice are Melrose Arch (figure 25) and 44 Stanley Avenue (figure 26). While criticism abounds as to their exclusivity and privatisation as sealed off environments where pedestrianism is safe within their walls, yet initial access is highly controlled, they are in fact functional according to their intentions and perhaps in time and further thought and development stages, connections to their surrounds will be increased and improved.

Smart growth is another theory, encouraging growth in the centre of a city and older suburbs, once again avoiding the development of sprawl. A set of principles, many overlapping with those of new urbanism, are laid out by advocates of the smart growth movement. A range of housing opportunities and choices, pedestrianism and open space are of vital importance. Smart growth encourages community collaboration, promotes a strong sense of place, cost effective development decisions, mixed land uses, a variety of transport choices and compact building design. It also aims to strengthen and direct development towards existing communities. (Smart Growth Online, 2009)

New suburbanism is a planning theory introduced by Joel Kotkin, an internationally-recognized authority on global, economic, political and social trends, and colleagues at The Planning Centre. The ideas of new suburbanism originated from the ideas of the 'garden city' in the early twentieth century, as described under 'The origins of suburbia', but have evolved and altered to accommodate contemporary trends. The belief that in America, suburbs will continue to grow demographically and economically within the next few decades, and that developers and planners should recognize the desires of citizens to inhabit these areas, is the major motivating factor in new suburbanism. It is an attempt to work within sprawl instead of fighting it, to create better suburban communities, acknowledging that different communities and situations require different strategies and rejecting the superiority and dominance of the city centre. It does not endeavour to discredit the principles of new urbanism or smart growth, and supports many beliefs set out by both of these movements. The importance of public space, walking paths and the cultivation of community are the most prominent shared beliefs. With the statement "...it takes a village to make suburbia work." (Kotkin, 2005: 22), new suburbanists advocate the retrofit of older buildings into social and cultural centres for residents and nearby communities, accepting the dispersed reality of the future of cities and allowing for single-family residences to coexist with these suburban villages. The development of a sense of purpose and identity, through the inclusion of sacred spaces as well as cultural institutions, unattached to the traditional urban core is another goal presented by new suburbanists. (Kotkin, 2005) Challenges faced by the movement include the intelligent selection of amenities which are desired and will be well utilized by end users, and designing buildings in which rental prices are not too high, so as to accommodate smaller retailers and tenants. Another challenge is the attacks by critics who either believe that new suburbanism is not an adequate departure from sprawl development, or that their principles encourage an 'artificial urbanity'. (Kotkin, 2005) Some argue that new suburbanism fails to rectify the socio-economic disparity in suburban areas; however it does attempt to do so through the provision of different types of housing and the option of either buying or renting property.

7. Communal place in suburbia

The connection between public space and a democratic civilization, such as is present in South Africa, is significant. Throughout time, public gathering areas have allowed for the discussion and reflection of problems and protests. This idea which recalls visions of ordinary citizens randomly taking to the stand and drawing a crowd of eager listeners is somewhat utopian in the context of suburbia. Certainly on a smaller scale, perhaps debates and deliberations among smaller groups of people, or on an organised basis of community meetings, need to be accommodated. Monuments and ornaments were included in historical designs for public space, as they were to evoke a collective pride among citizens. This begs the question of whether these symbols were applicable to all the people, or whether they in fact revoked the idea of the spaces being inclusionary for everyone. Today it is understood that a diversity of people, with different backgrounds and traditions should be accommodated for, and these differences should be acknowledged through public space. Public space is also unanimously considered important as a factor in community-building and interaction, but it can assume many different forms. Different types of public space are needed in different situations in order to facilitate this. New lifestyles, values and attitudes towards nature and sustainability result in new social and spatial implications which need to be considered in the design of 'open space'. (Thompson, 2002) This section attempts to define the needs of suburbanites in terms of public space, respecting their specific social patterns.

Although public space often suggests the ability to interact with strangers, today, living in media-dominated homes, privacy is something which people may need to achieve through the use of public areas. Another contradiction in contemporary living, is that although there is a need and desire for parks and other naturally landscaped areas, such zones are often feared for their lack of control and security, thus necessitating the design of public areas with 'hard surfaces'. Information technology allows for flexibility and perpetual virtual human contact and the option of distancing oneself from public space, but the need for face-to-face communication is still present, and as such the need for actual public space is not negated. In fact, the internet allows for the efficient organisation of events and meetings, whether large or small, within public areas, thus increasing their usability. (Thompson, 2002) Another use to be considered for inclusion into the public realm is community gardens which supply organic produce to residents. As Thompson (2002) points out, this function could engage groups of people who would otherwise not use the space, as well as children whose development would benefit from the process. Although perhaps at first appearing to be an implausible suggestion, many modern households are recognising the benefits of organic goods for health and environmental reasons, and it is becoming fashionable to buy such foods. Further, Kunstler, an advocate of new urbanism, believes that in the future oil and gas shortages will cause food production to become a problem and food will need to be grown locally. (Dubner, 2007)

Many observers are concerned that the public domain is shrinking within today's society. Both because public space is perhaps not receiving as much attention or use as it has in the past, and because public spaces are becoming 'privatized', as in the development of shopping malls. The question that is then raised is whether a place needs to be publicly owned in order for it to function as a successful 'public space' within suburbia. For this reason the term 'communal place' is favoured over 'public space', as the distinction between public and private is blurred. Banerjee (2001) points out possibilities for planning public space in the future, including the concept that public life, rather than public space, should be the

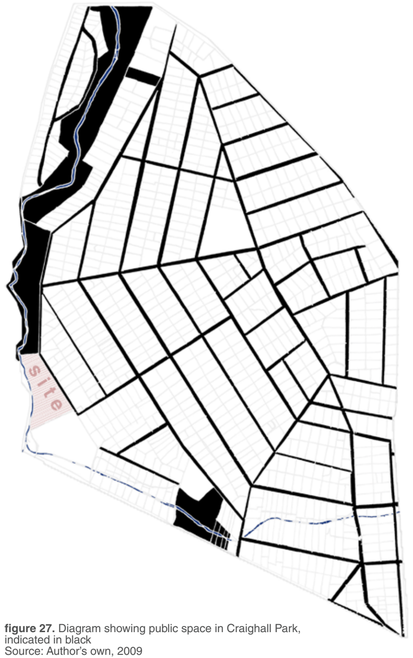


figure 27. Diagram showing public space in Craighall Park, indicated in black
Source: Author's own, 2009

focus of such thought. He also suggests supporting small businesses that contribute to public life, as in France where the government subsidizes cafes that provide entertainment to communities. Furthermore, he proposes a focus on streets as public spaces, and the inclusion of conviviality, meaning autonomous and creative human interaction, into public spaces and streets. Reiterating previous points mentioned, Banerjee (2001) also recommends a response to changing demands of a diversified population, supported by Freestone and Nichols (2004: 118): "...urban parks and open spaces face challenges imposed by changing lifestyles, recreational trends, the restructuring of urban communities, urban fiscal crisis, poor management and maintenance, fear of crime, and vandalism."

'Public space' in Craighall Park, Johannesburg exists in diverse situations. It comes in the form of, at best, a well maintained park with children's play equipment, and at worst, an overgrown ribbon of land on the banks of the Braamfontein spruit which appears too dangerous to walk on alone. If one looks at the amount of public space, it is actually considerable, if streets and pavements are included (figure 27).

Then there are restaurants and pavement cafes, huddled together in small nodes, emulating cultures across Europe (figure 28). These, together with the various organized sports clubs in the area (figure 29), become a component of the modern suburban resident's play place and leisure area, but exclude those wishing to enjoy public life without having to pay for food, drink or other commodities.

As previously mentioned, the degree to which the space is owned by a private body becomes less important in a suburban context. It is more about thresholds and boundaries, to what degree the residents are invited to use the space and whether the space provides for their needs. Commercial and



figure 28. An example of a small cafe in Craighall Park
Source: Author's own, 2009



figure 29. One of the sports clubs in Craighall Park
Source: Author's own, 2009

retail functions, accommodating those who do want formalised activities, need to feed off areas of unregulated, un-designed activity, socializing and recreation, in a symbiotic relationship which increases urban interaction. This relationship and close proximity of different functions provides passive surveillance for both, especially the open, free spaces, thus increasing the safety of such areas. Safety in public space is especially important for children who need places to play without the constant supervision of a parent, and who would benefit from shared play areas supplementing private gardens and promoting the notion of belonging to something larger than their own home and family.

8. The City of Johannesburg's plan for the suburbs

Craighall Park falls within region B of the seven regions that Johannesburg is divided into (figure 30). Primarily composed of older established suburbs, this region includes the larger commercial centres of Rosebank and Randburg, and both high and low income residential areas. Some parts of the region have begun to decline, while others are thriving and growing. The City of Johannesburg's official website states that region B houses about six percent of the population of greater Johannesburg, that is about one hundred and ninety eight thousand people, but that this figure is expected to decline as a result of ageing, Aids-related deaths, an increase of migration out of the area and a decrease of migration into the area. However, the region is drawing young adults, with children of a school-going age characterizing much of the population. High levels of education and disposable income are present, but the southern parts show high unemployment and low income levels. (City of Johannesburg, 2009)

Densification is occurring in the Rosebank area, as a Gautrain station is being constructed in the suburb. Residential densification, in the form of townhouses and subdivisions is also occurring in other, mostly northern, parts of the region. Economic development is occurring around Cresta, along the Sunnyside-University of Johannesburg belt and the arterial routes of these areas; Beyers Naude Drive and Ontdekkers Road. Government and private schools, municipal recreation centres and hospitals as well as community health clinics supply the region with sufficient social facilities, however social development programmes and projects are lacking in the southern parts which require a focus on poverty alleviation and community capacity building. (City of Johannesburg, 2009)

A key issue, as stated in the Regional Spatial Development Framework 2009/2010, is that the capacity of social facilities needs to be improved in order to cater for the increased densification and intensification of non-residential developments in the Region to ensure that citizens have access to a safe and healthy urban environment. The Region is recognised as having a unique open space system, which need to be developed and capitalised upon for the benefit of the local and metropolitan communities in facilitating environmental justice. The Nodal Strategy as prescribed in the Framework, also sets out a hierarchy of 'nodes' which are clusters of various activities, ranging from the Central Business District to Neighbourhood Nodes which serve a specific neighbourhood and provide for daily needs of residents.

Craighall Park falls within sub areas 14, 15 and 17 within region B. The specific development frameworks for these sub areas have two main objectives: The first being to protect and enhance the neighbourhood character and amenities and promote residential densification in strategic locations. However, the opportunities for densification are quite contained and opportunities for new nodal development are limited within the policy. The second objective is to ensure the integration and optimal use of Delta Park as an open space of regional significance. The plan suggests improved access to the park, the co-use of different activities in order to activate the area and the upgrading of security and lighting.

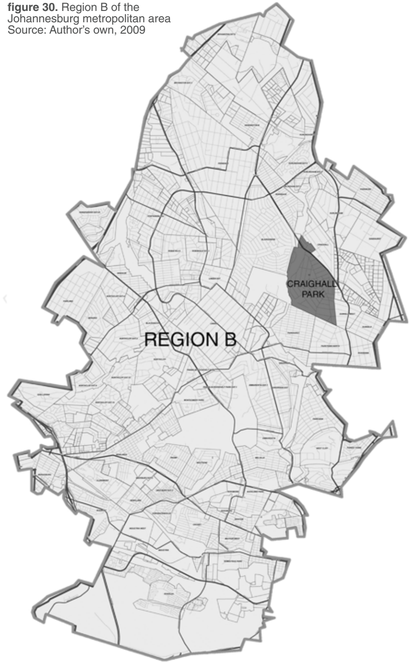


figure 30. Region B of the Johannesburg metropolitan area
Source: Author's own, 2009

9. Looking toward the future of Craighall Park

While many of the issues that have been discussed and international retrofitting precedents are implied to be widespread and require intervention at a large urban planning scale, Craighall Park is a relatively small suburb to concentrate on and intervene in. But there are many existing points to work with and connect to (figure 31); making it an ideal site for introducing new ideas around place making in suburbia, and a micro-scale urban retrofit could therefore act as a catalyst for larger reinvention. These existing aspects include the large extents of underutilized green space, the Braamfontein spruit, which runs along the western boundary of the suburb, with its pedestrian and cyclist route, the environmental education facilities nearby in Delta Park, as well as facilities such as schools, churches and health facilities.

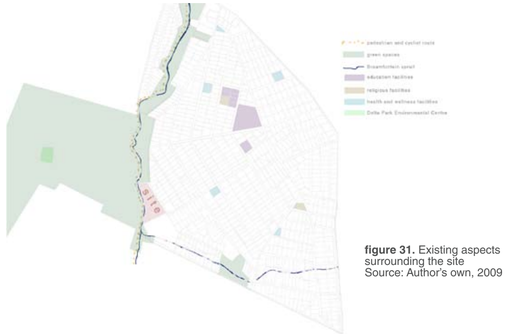


figure 31. Existing aspects surrounding the site
Source: Author's own, 2009

While the suburb lacks the need for 're-greening', a factor included in other retrofits, there is a need for examination of existing 'green space', and the implementation of ideas raised in the previous discussion around communal places in suburbia. In order to create successful change beyond the immediate property lines of private homes, a shift of existing mindsets of residents needs to occur, and ideas around what development through retrofitting can do to improve the area must be discussed. The flawed notion that, "In a suburban location, every addition only tends to increase traffic, stress the social infrastructure, and reduce prized open space." (Dunham Jones, 2005: 8), must be dealt with. Also, key characteristics, the fundamental reasons that cause inhabitants to live in that specific suburb, need to be preserved. As established through a 2008 survey by the CraigPark Residents Association, the top five best features according to its inhabitants are its location, the trees, beauty of the suburb and the fact that it is an established suburb, the large stands, the river area and friendly neighbours, in that order. Improvements desired by the residents, ascertained via the same survey, include security and crime issues, cleaner pavements and litter eradication and traffic management through speed humps and calming circles.

The specific site in Craighall Park chosen for intervention is a 2.8 hectare area of land, owned by a section 21 company (figure 32). Although privately owned, it presently accommodates tenants and functions intended for the use of the public. The land, bordered by the Braamfontein spruit on one side and a street on the other, is inefficiently utilised and holds much potential to be recycled as a hub of activity and focus within the area. The options available to the Australian 'internal reserves', as previously mentioned, are presented to this site: excision, redevelopment, expansion and revitalisation. Although expansion to provide a street frontage could be redefined as an alteration to the already street fronted site, in order to increase accessibility, and excision would denote a complete closure of the site to the public. Once again the option of revitalisation presents the most appropriate decision. Revitalisation would ideally produce linkages to other parts of the suburb, most significantly the public space of Delta Park across the narrow spruit, becoming a waterfront development and providing a node of safer communal place which links into the existing pedestrian and cyclist path along the spruit bank. Other connections for consideration include integration into existing streets and pavements and facilities in the suburb.

Other issues to be considered are feasibility, security, architectural 'style' and inclusivity. The viability of specific tenants and commercial activities relate to the needs of the residents. Security, being a major concern for suburbanites, needs to be addressed through the use of different amenities at different times of day in order to provide passive surveillance. The architecture of buildings constructed must reflect and acknowledge local climate in order to ensure environmental and social sustainability. Diverse options of recreational and other activities, including the option for privacy, must be incorporated in order to ensure the inclusivity of different people within the site.

A community garden, as mentioned earlier, is a function which could be situated on the site. This is further reinforced by the fact that a vegetable garden already exists on the site, but has fallen into disuse, and that historically the area was used for an agricultural function. Current tenants on the site include a plant nursery and horse stables. These tenants must be included in the new plans for the site as residents from surrounding areas utilise the nursery and the horses perform the function of a mounted unit which patrols the spruit as well as providing stables for privately owned horses. A waste recycling point on the site would help breed a healthy culture of economical use of resources and address issues of litter in the suburb which is a concern for residents.

The changes which are already occurring within Craighall Park, specifically densification and the growth of employment within the suburb, will help feed the intervention as more users will be within walking distance of the site. Residents who work and live in the area require amenities and would use the site throughout different times of day. The 'community' for which a new intervention should cater for consists of people of all ages and abilities who live in the suburb on a permanent basis and those who work at different locations within it, including domestic workers, some of whom live in Craighall Park on a temporary basis.



figure 32. The site in Craighall Park where the intervention will take place
Source: Author's own, 2009

10. Conclusion and Project Brief

This paper has endeavoured to provide an overview of suburban development both internationally and within a local Johannesburg context. In so doing, many transformations in the actual fabric and the perceptions of suburbia have been revealed. As development continues in the twenty first century, it is unlikely that people will cease to aspire to suburban lifestyles, but their expectations of this lifestyle will alter and as such, so will suburbia. There are however considerations to be made as sprawl cannot continue forever. Existing suburbs need to be re-shaped in order to accommodate changes and increases in population effectively and efficiently. From their origins, suburbs have already undergone many modifications with or without the input of planners. Much work is currently being done with regards to their retrofitting in order to address problems and future concerns. Formalised movements such as new urbanism, smart growth and most importantly new suburbanism, have been discussed as methods of rethinking traditional forms. A major constituent of suburban life which needs consideration is public space or as this paper has illustrated, communal place, and should be part of all new development. The city of Johannesburg makes allowance for changes, such as densification, to a certain degree, but it is the general attitudes of the suburban population which need challenging in order for these advancements to be made. People need to realise that as the world becomes a globalised community, individual action is not in isolation but reverberates across large areas and as such consideration of civilization as a whole must be made.

Change and development is necessary in order to create suburban environments which contribute positively to society. As previously mentioned, the site within Craighall Park was presented by the owner as an opportunity to rethink its future as an economically viable development which gives back to the community which uses it. This provides a chance to implement principles and ideas which have been discussed. In order to establish what exactly it should become, it was necessary to examine suburbs in general as well as the particular suburb and circumstances in which it is situated.
The design opportunities for the site are as follows: Densification, done subtly and sensitively so as to maintain the character of the suburb. An increase and strengthening of everyday interactions between both residents and those who work in the suburb could be addressed. The insertion of linkages and pedestrian pathways within the suburb which connect existing elements and converge on a mixed-use node of activity which in turn acts as a small scale ‘waterfront’ development and a gateway to the large ‘green lung’ of Delta Park across the Braamfonteinspruit, could facilitate interaction and provide a place for the people of Craighall Park.

A major factor to be considered is safety and security of pathways, the node and Delta Park with its nature trail and cycle path. Strategies for solving these problems include lighting, demarcation of different zones, including hard surface areas, and passive surveillance through constant use throughout the day and night. The problem of traffic congestion must be addressed through the encouragement of pedestrian movement, as the proposal should be intended predominantly for the use of people already in the area, with importance placed on the experience at eye-level. The implementation of this proposal must not destroy the aspects of the suburb which residents consider its best features, which include its location, trees, beauty, large stands, river area and friendly neighbours. It should in fact enhance these, specifically the river area and the idea of community. It must attempt to facilitate and marginally increase employment which is already occurring in Craighall Park.

A means of optimizing the opportunities as well as addressing the problems is a mixed-use node, comprising small commercial and retail functions, including the existing plant nursery and some type of restaurant. The horse stables should also be reinstituted on the site, serving both private and community interests. Other community facilities such as spaces for social clubs and gatherings, as well as a space for capturing and displaying history and heritage of the suburb could address the issue of identity and belonging. A residential component of several different sized unit options, contrasting in size with the massive houses in the area could begin to introduce diversity. Community gardens producing organic food to be sold and a waste recycling point could feature as an educational tool for children and an awareness effort for the whole community. An important aspect to be dealt with is un-regulated, landscaped areas which could feed off the formalised activities.

Ultimately the project should give Craighall Park and all of its users a space for interaction as well as privacy, a place to identify with and connect to. Thresholds and boundaries must be such that the intervention is inviting and inclusive. There should be a sense of place through an architecture which considers regional traditions, history and climate. A place where shared values and desires can be celebrated in this privatised environment, because as Kelbaugh states:

> ***“A community must simultaneously nurture both a respect for group values and a tolerance for individuality, even eccentricity. This is the paradox of community that will forever require readjustments.”***



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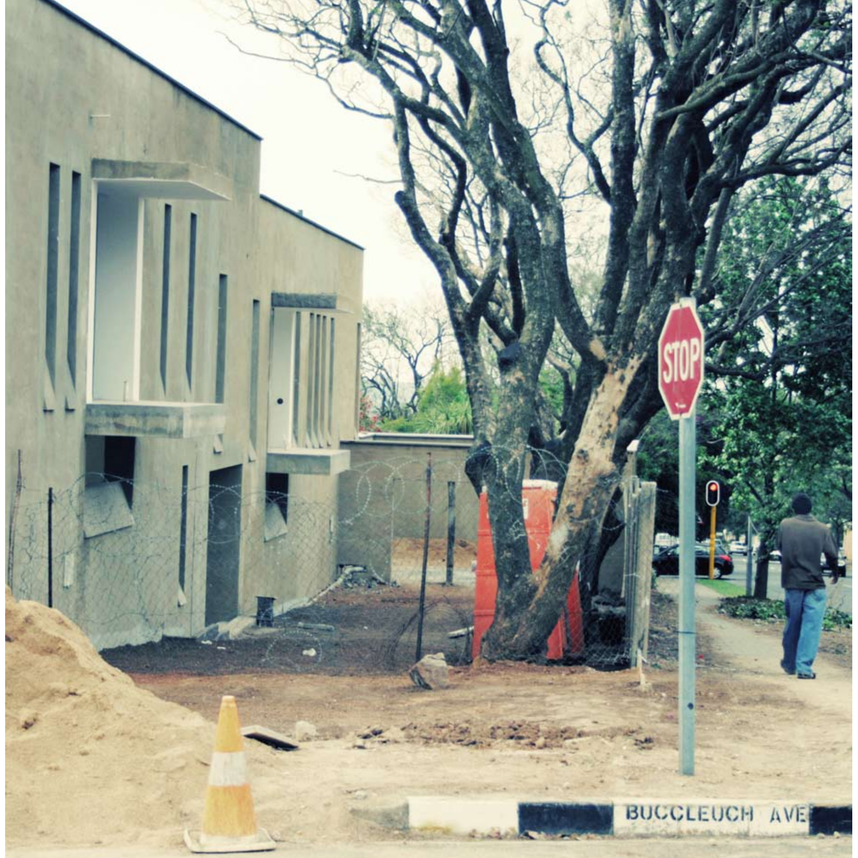

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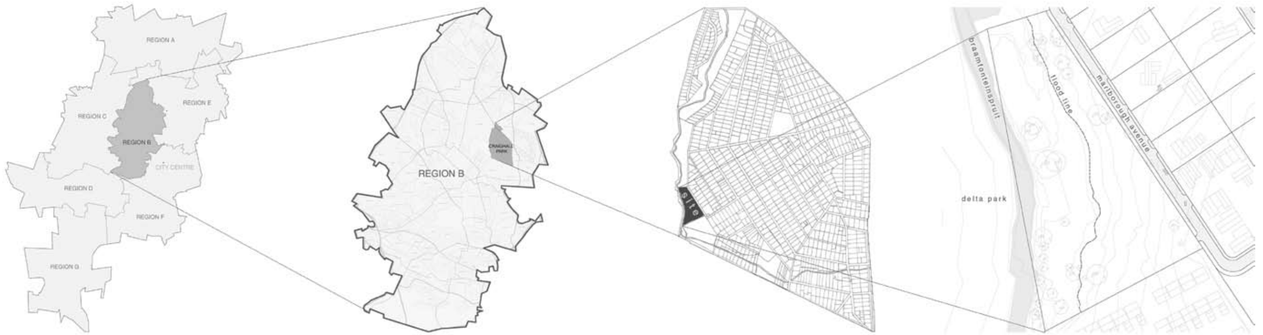
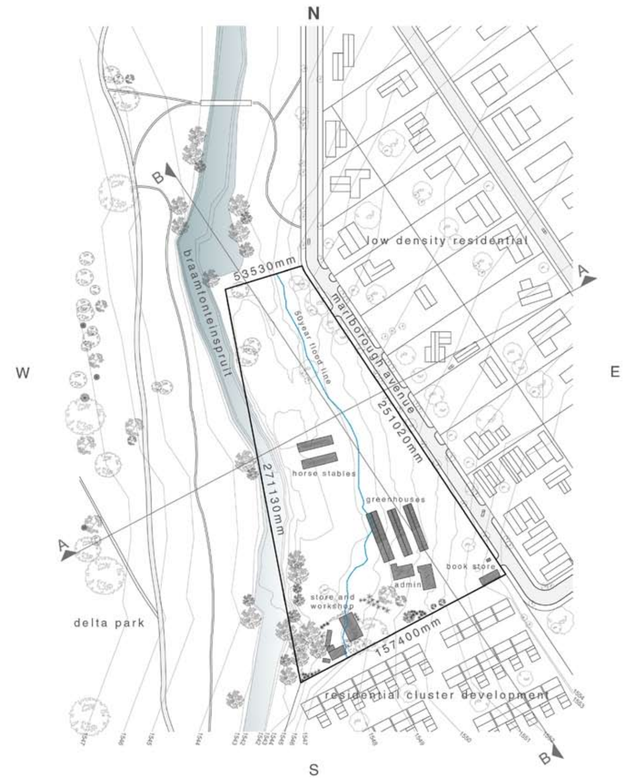
PART TWO : SITE BRIEF PROGRAMME



Johannesburg | Region B | Craighall Park | Site



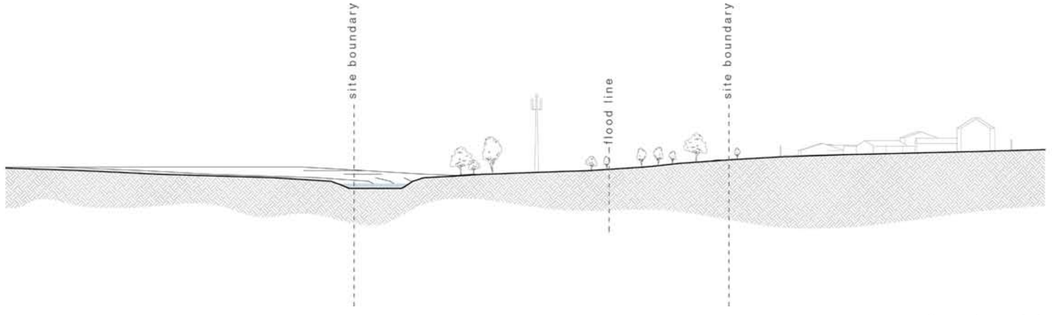




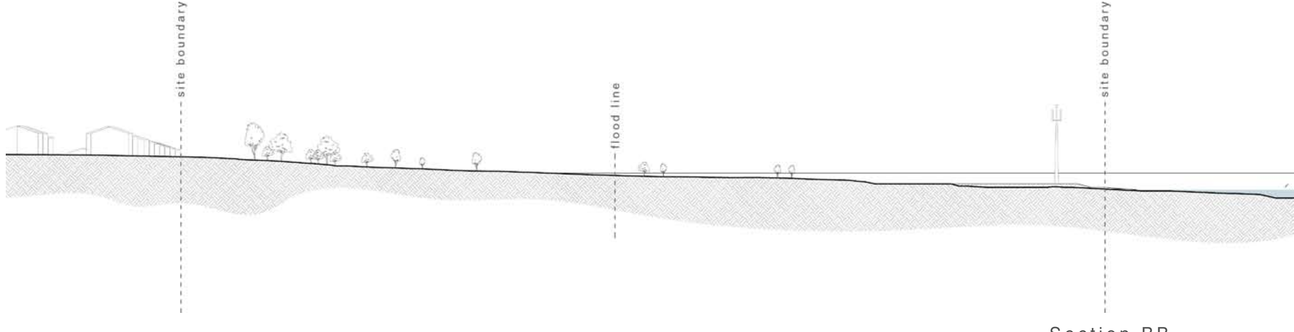








Section AA



Section BB

SECTIONS THROUGH THE SITE

0 10 20 30 40 50 60 70 80 90 100 meters



vehicular movement

pedestrian movement















vehicular access

pedestrian access


widening spruit
and willow trees
view to site
view from site
important views
dense
vegetation area and
history and heritage



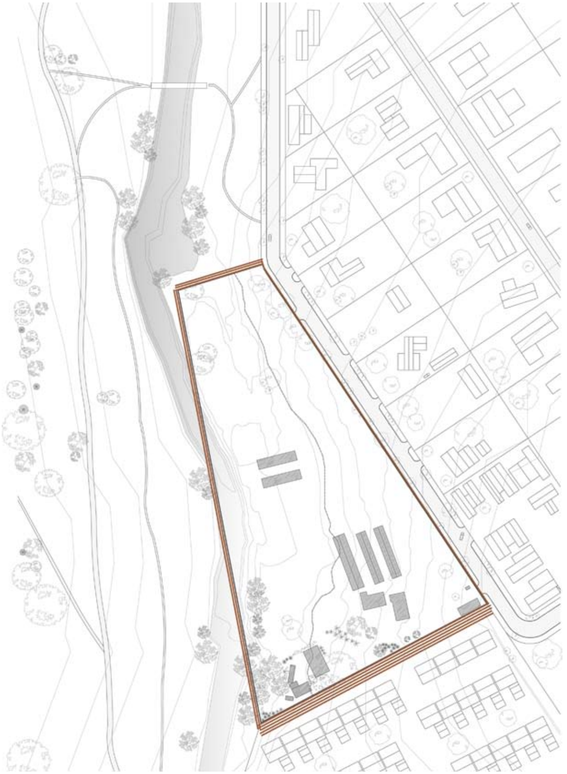














Saturday 11:00 am : Opposite the site, to its eastern side, are seven properties with entrances onto Marlborough Avenue. Six of these properties, each about 2000m² in size, are occupied by single houses one to two storeys in height. The property on the end of the row combines three of these stands and contains eight townhouse units. Vehicular entrances are given more prominence than pedestrian access. Walls crowned with electric fencing obscure, if not eliminate, any views to or from the residences. Neat, well kept pavements, freshly painted walls and large trees and shrubs maintain the ambience of a typical older established northern suburb in Johannesburg.










The Braamfontein Spruit, a largely natural stream, forms the western boundary of the site. Early Joburgers used the spruit for fishing, livestock and household needs. Today, it is used by religious groups on Sundays for baptism. On the opposite bank of the spruit is a large extent of grassland which forms the edge of Delta Park, a large green lung which accomodates the








Delta Environmental Centre. A small pedestrian bridge provides access from the suburb of Craighall Park to the park and the paths alongside the spruit which are enjoyed by walkers, runners and cyclists seeking natural surroundings. This area adjacent to the site, presents it with a very distinct pastoral character, reminiscent of the history of Craighall Park.

On a large urban planning scale, revitalisation on the chosen site would ideally produce linkages to existing aspects within Craighall Park, most importantly acting as a gateway to the large extents of underutilized green space and the Braamfonteinspruit with its pedestrian and cyclist route along its bank. The project must address ideas of community building and the strengthening of everyday interactions between residents by presenting a place which offers multiple functions for a variety of different people.

It should introduce a density and diversity of ***housing options***, providing various alternatives to the large houses and properties throughout the rest of the suburb, catering for different classes and the current shift away from the traditional family structure. These units should be provided with a gradient of different degrees of privacy and public interaction: from private spaces, private but communal areas, more public communal areas as well as direct access to the completely public places.

Existing tenants on the site must be accommodated for within the new design. The largest tenant, the ***plant nursery***, which draws its clientele from many surrounding suburbs, should continue to act as a major attraction to the site. It should also be expanded to include food gardens to be managed by the nursery and run by residents on the site, with produce sold from the site, as well as prepared into meals at a restaurant on site.

Horse stables for fifteen horses, also currently on the site, should have direct access to the spruit crossing and Delta Park where they are exercised. Some of these horses are privately owned and others are used as a mounted patrol along the spruit.

The smaller tenants on the site are the Rosa Organic Store, a woodworking studio and a second-hand book store, are also to be included in the scheme. Other ***commercial*** activities, which are supportive of both the residential component and the growth of businesses within the suburb, should be placed at street level.

Provision should be made for ***social clubs*** who want to rent space, as well as community meetings and indoor events.

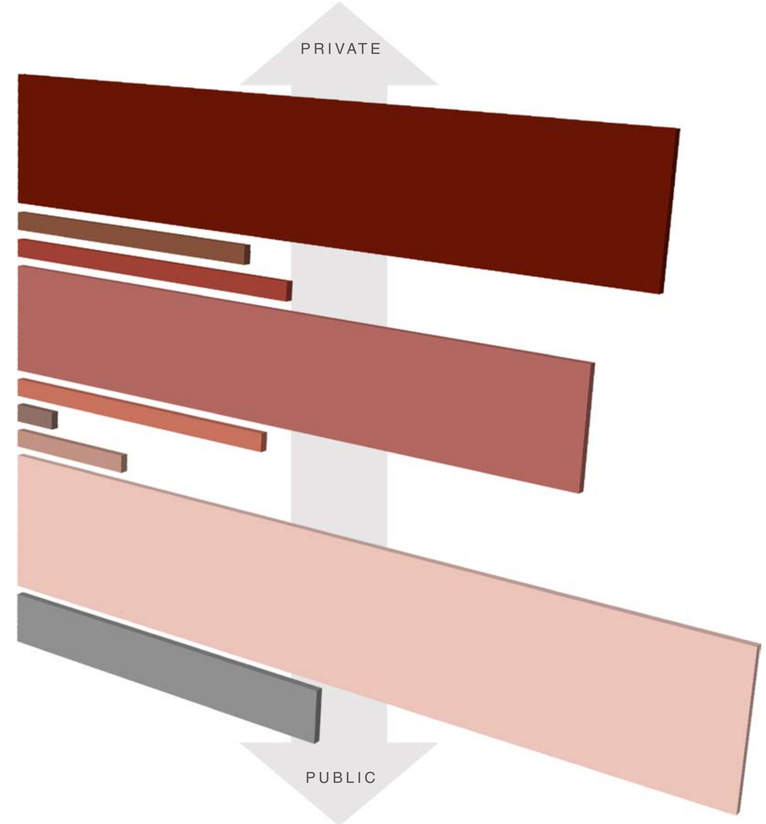
A ***recycling*** waste collection point, to be utilized by residents on site and from the surrounds, should include a weigh-in booth and refund point.

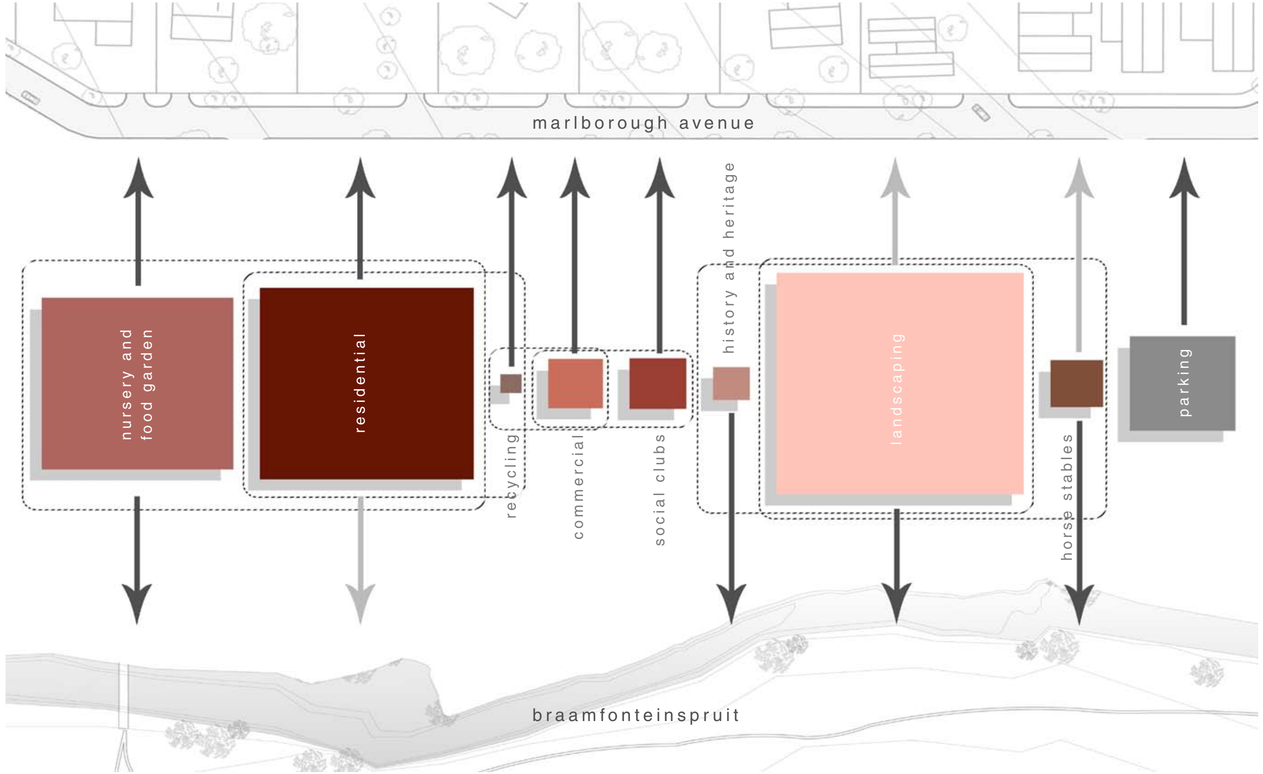
A small ***history and heritage*** centre should provide a platform for residents to reminisce and learn about the roots of Craighall Park. As it is an older area, some residents have resided in the area for many years, and a place of memory could serve as a platform of discussion and learning.

A large portion of the site should remain ***landscaped***, as a safer public zone. Various functions such an outdoor event area, a children's play area, hard surface areas, grassed areas and an area of existing dense vegetation should be included. All new landscaping should be indigenous, but large existing trees should be retained as far as possible.

Pedestrian movement should be encouraged but automobiles still have to be accommodated for. As such all residential units should be provided with secure ***parking*** bays, and parking for commercial functions must be supplied.

Issues of safety and security should be addressed through strategies such as passive surveillance, as a multi-use development is used throughout the day and night. Level changes and terracing could ensure that the entire site is visible, as well as regulating access to certain areas.





LINK TO STREET OR SPRUIT

	area	number	total area (m²)	
Residential				**9511**
Bachelor apartment	6 x 8 = 48	21	1008	
1 Bedroom apartment	6 x 14 = 84	26	2184	
2 Bedroom apartment	6 x 18 = 108	8	864	
Communal Areas			2288	
Circulation and Services			3167	
Horses				**565**
Stables	3.6 x 3.6 = 12.96	15	194.4	
Equipment Store	3.4 x 8.6 = 29	1	29	
Food Store	3.4 x 11.5 = 39	1	39	
Administration	3.6 x 3 =10.8	1	10.8	
Ablutions	3.6 x 4.5 = 16.2	1	16.2	
Circulation and Structure			275.6	
Social Clubs				**662**
Large indoor space	6 x 30.6 = 183.6	1	183.6	
Small indoor space	6 x 19.5 = 117	1	117	
Outdoor area	6 x 50 = 300	1	300	
Ablutions	2.8 x 4.5 = 12.6	2	25.2	
Circulation and Structure			36.2	
Nursery and Food Gardens				**7526**
Paypoint	6 x 8 = 48	1	48	
Indoor Plants/Bulbs			333	
Flowering Plants			700	
Seedlings			823	
Trees and Shrubs			340	
Indigenous Plants			532	
Food Garden			1650	
Garden and Equestrian Equipment			333	
Public/Staff Ablutions	2.8 x 4.5 = 12.6	2	25.2	
Storage	5.8 x 6 =34.8	1	34.8	
Circulation and Structure			2707	

	area	number	total area (m²)	
Commercial				**618**
Coffee/Deli/Work Zone	6 x 14 = 84	1	84	
Book and Stationary Store	6 x 7 = 42	1	42	
Art Studio and Store	6 x 11 = 66	1	66	
Video Store and Pizza Take-away	6 x 10 = 60	1	60	
Dry Cleaner/Laudromat	6 x 8 = 48	1	48	
Woodwork Studio/Store	6 x 8 = 48	1	48	
Organic Restaurant/Juice Bar/Produce	17 x 12 = 204	1	204	
Rosa Organic Store	6 x 6.5 = 39	1	39	
Shared Ablutions	3 x 4.5 = 13.5	2	27	
Recycle				**94**
Refund/Information Booth	4 x 3.4 = 13.6	1	13.6	
Weigh-in Booth	4 x 2.1 = 8.4	1	8.4	
Metal Collection Bin	4 x 3 = 12	1	12	
Plastic Collection Bin	4 x 3 = 12	1	12	
Paper Collection Bin	4 x 3 = 12	1	12	
Glass Collection Bin	4 x 3 = 12	1	12	
Organic collection Bin	4 x 3 = 12	1	12	
Non Recyclable Waste Bin	4 x 3 = 12	1	12	
History and Heritage			284	**284**
Landscape				**12594**
Outdoor Event Area			1000	
Off-street Play Area			850	
Boardwalk			1544	
Paths			1500	
Hard Surface			1300	
Grassed Area			3900	
Retain Existing Vegetation			2500	
Parking				**2305.5**
Residential	2.5 x 5 = 12.5	83	1037.5	
Public	2.5 x 5 = 12.5	40	500	
Circulation and Structure			768	
TOTAL				**34159.5**

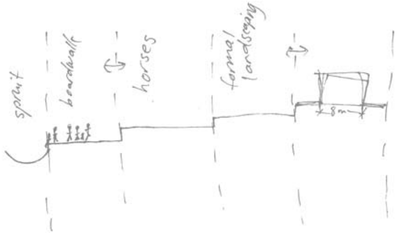
SCHEDULE OF AREAS



PART THREE : CONCEPTS PRECEDENTS DESIGN DEVELOPMENT

The site, on the bank of the Braamfontein spruit has a twelve metre level change as it slopes from the highest point at the south eastern corner on the road edge to the north western corner. By maintaining the height difference and terracing the entire site down towards the spruit, a visual overlooking is created, providing the site with a natural surveillance strategy.

Each terrace becomes a specific zone, thus determining the number of levels to be created.



Some parts of the landscaping on the terrace will be formal, while some of the existing overgrown 'English country garden' vegetation can be left, along with some of the existing buildings, in order to maintain a history of the site and a sense of the site as it is at present.

The series of horizontal planes along the Seine River in Paris, allow for a summer transformation. The riverside thoroughfares become a car-free ***Paris Plage*** (Paris Beach), complete with sea sand and deck chairs.



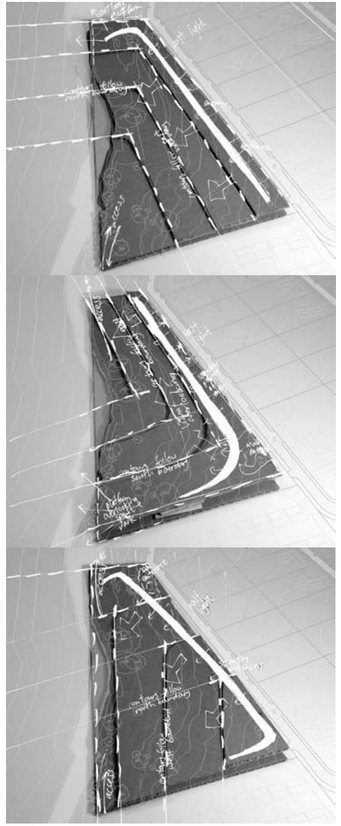
Source: www.webshots.com

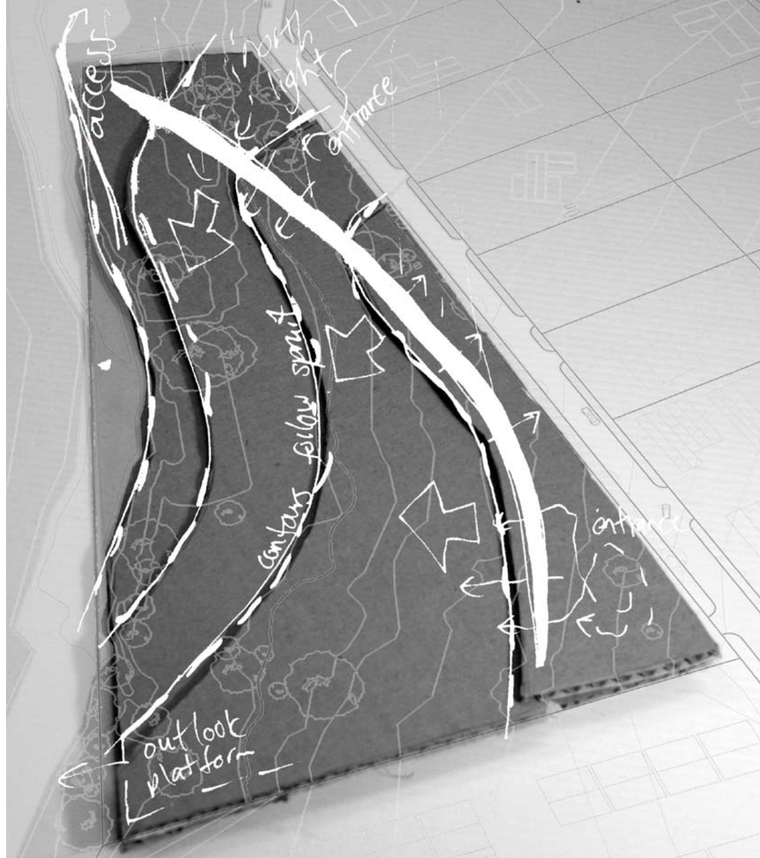


Source: www.free.fr



Source: www.ciofrance.com





A PERMEABLE WALL

Suburbia is obsessed with walls. Walls offer residents a sense of protection, privacy, separation and security.

In Craighall Park, walls and fences surround large properties and the houses are placed in the centre. Instead of protecting, this essentially creates very vulnerable islands, to be 'attacked' from any side.

Throughout history, walls of grand scale and intention have been constructed as border defences in many parts of the world: The Great Wall of China, Hadrian's Wall in northern England built to defend the Roman Empire's outermost province, The Berlin Wall built to contain not deter, and most recently, the Israeli West Bank Barrier.

The success or failure of such strategies aside, walls are generally negative symbols of constraint, control and oppression to be condemned, conquered or climbed. But this does not have to be the case.

A wall does not have to be an impenetrable barrier. A wall can reveal, entice, define and advertise. It can even become a habitable space.

Residents have erected particularly high walls on the boundaries of their properties which face the road and the subsequent 'dangerous' open space that borders the spruit. Perhaps, by constructing a wall on the other side of the road, they will begin to open out their properties and allow the new, permeable wall to protect them from the space.











Banksy, the infamous English grafitti artist, has adorned the West Bank Barrier with images defying the wall.
Source (all images): http://weburbanist.com



The surrounding fabric is laid out on a linear grid



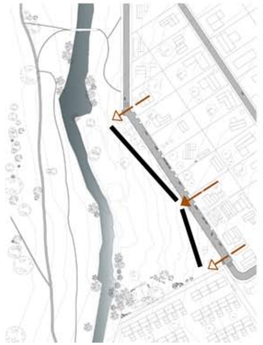
A new permeable wall along the street edge



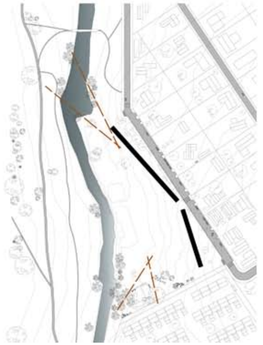
The wall becomes a curve to invite people in, breaking the linearity and following the arc of the spruit



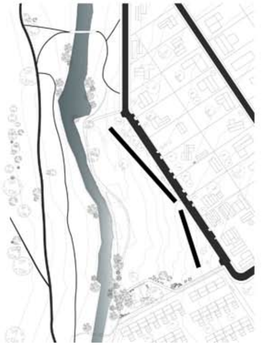
At critical points: the centre of the curve and either end, the wall is entirely broken through



Forming a natural main entrance at the point closest to the street edge and two subsidiary entrances to parking



Two important views, as shown earlier, form focal points to be considered in the design



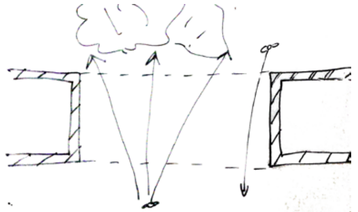
The existing foot paths and cyclist trails along the spruit and entering the suburb



Are plugged into with a new boardwalk along the edge of the site, pathways and a new bridge to complete the circuit

This notion of a building becoming a wall, with no additional surrounding boundary, is highly developed in ***Mediterranean vernacular*** buildings.

Alvaro Siza's ***Housing in Quinta da Malagueira*** is a range of housing units in Evora, Portugal, based on the courtyard house which is common in the region, which allow for visual permeability from the street edge through the entrance into the courtyard. Framing fleeting views of the daily lives of the inhabitants for the casual passer-by.





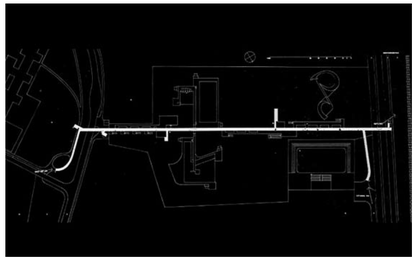
The houses in Frigiliana in southern Spain are in effect 'habitable walls'.
Source: Atroshenko, 1991: 121



Housing in Quinta da Malagueira
Source: Nakamura, 1989: 76

Aurelio Galfetti's ***Bagno Pubblico*** project in Bellinzona demonstrates a wall becoming a bridge as a flow of people in and out of the complex occurs on the ground floor.

Physical permeability on the ground, aligned with the street level in certain parts is of utmost importance if a project is to entice people to enter





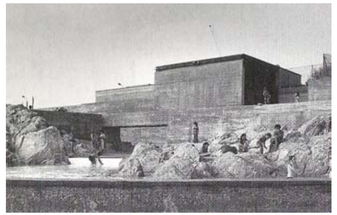


Source (all images): www.aureliogalfetti.ch

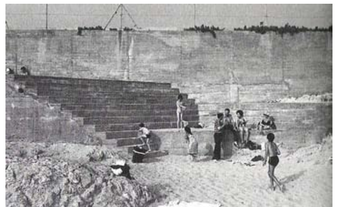
The wall must respond to either side of it, as well as to the functions it accommodates. In the case of Craighall Park, the wall will respond to the residential character of the street on one side, and open up onto the green space and the spruit on the other. The

Alvaro Siza's ***Swimming Pool*** in Leca da Palmeira, Portugal resides comfortably on its site between road and ocean, unfolding in various ways on the ocean side to contain a range of recreational functions.



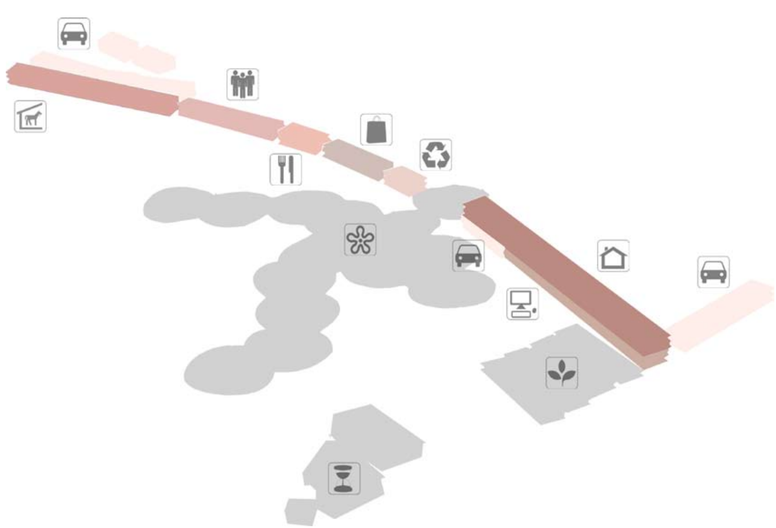


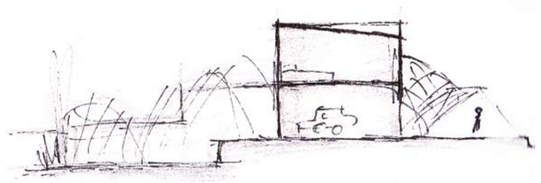


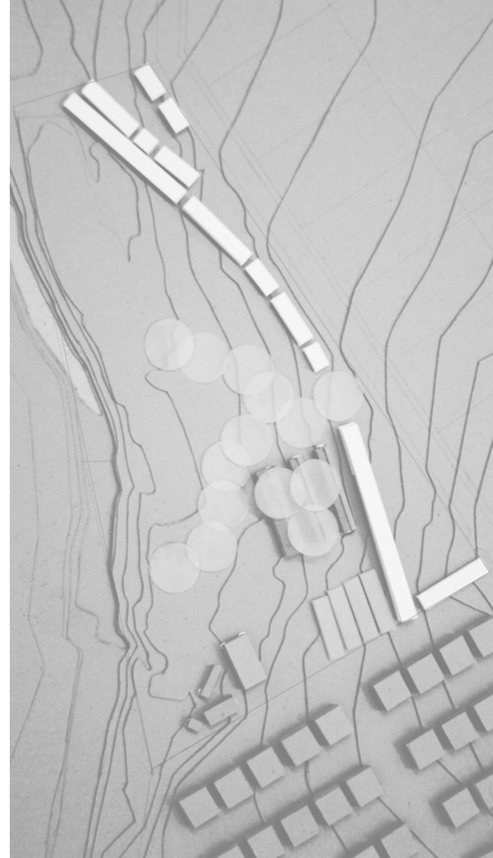




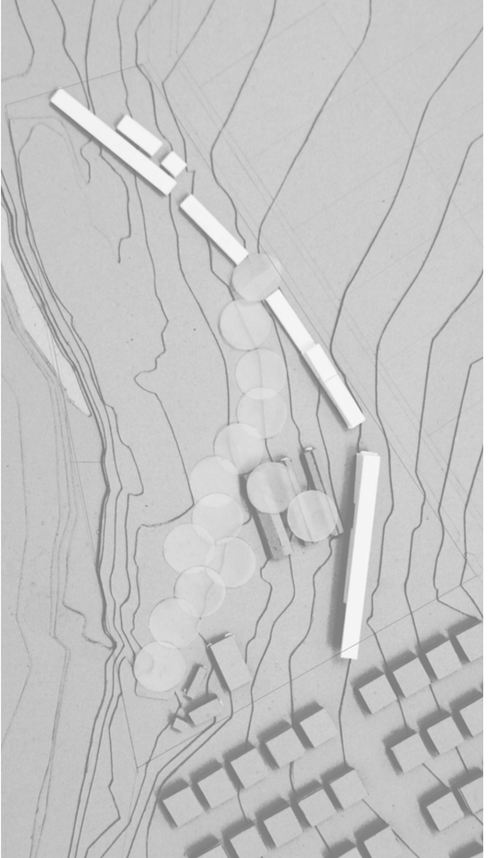
Source (all images):
Nakamura, 1989: 24-27

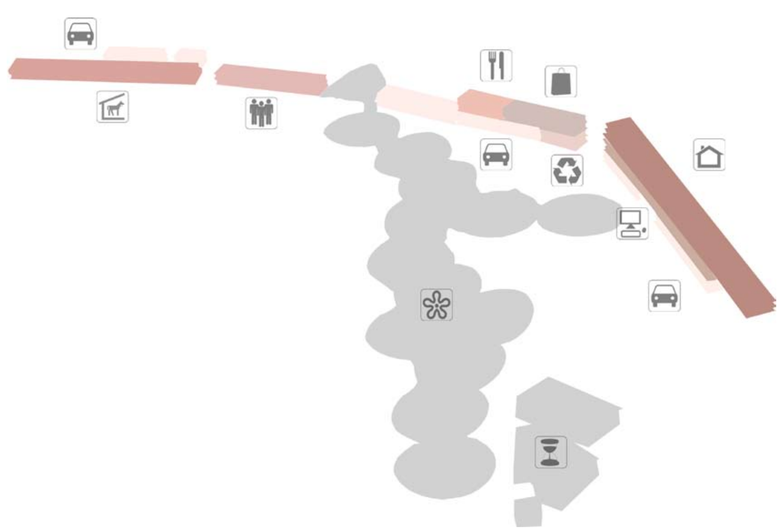


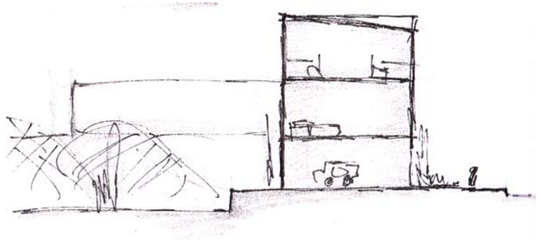


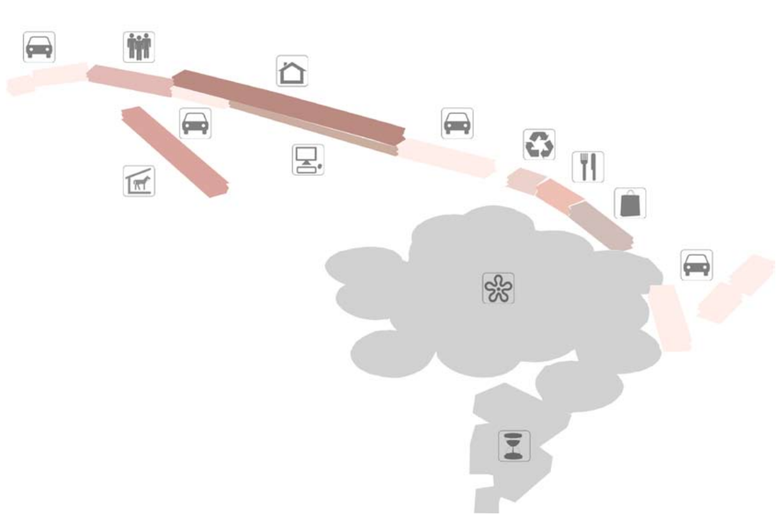


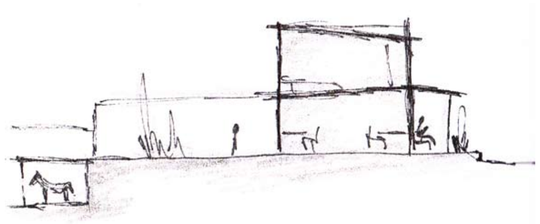
PLACING THE PROGRAMME ON THE SITE













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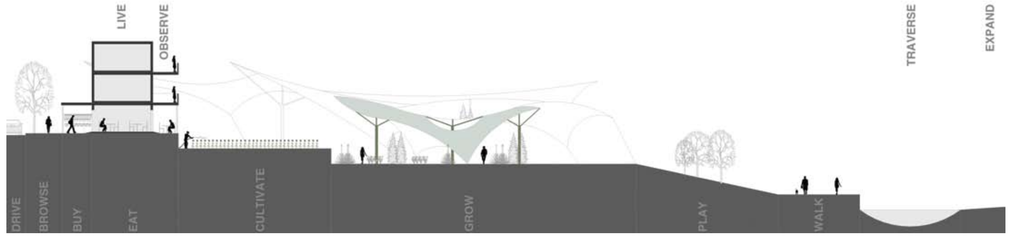
LIVE
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TRAVERSE
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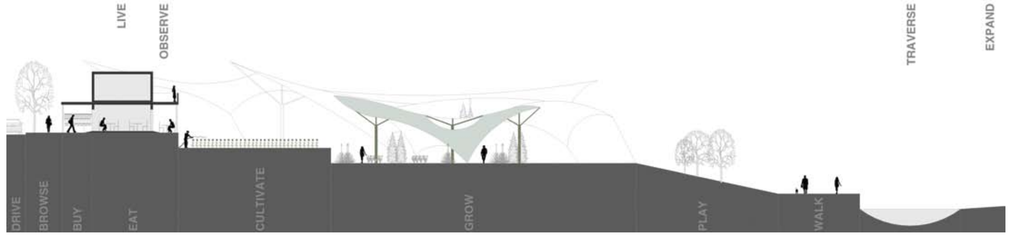
BROWSE
BUY
EAT
CULTIVATE
GROW
PLAY
WALK

2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BUY
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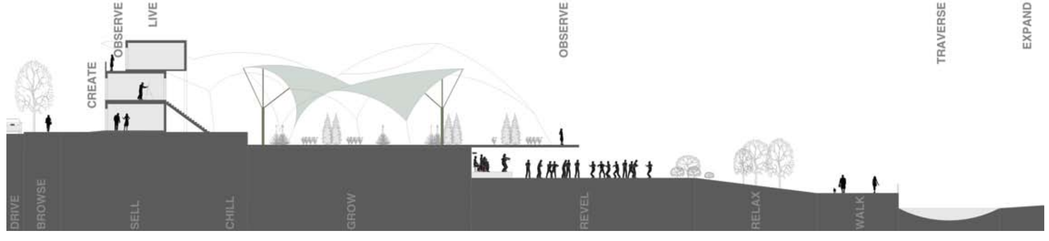
CULTIVATE
GROW
PLAY
WALK

3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LIVE
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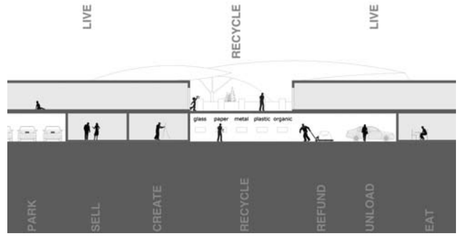
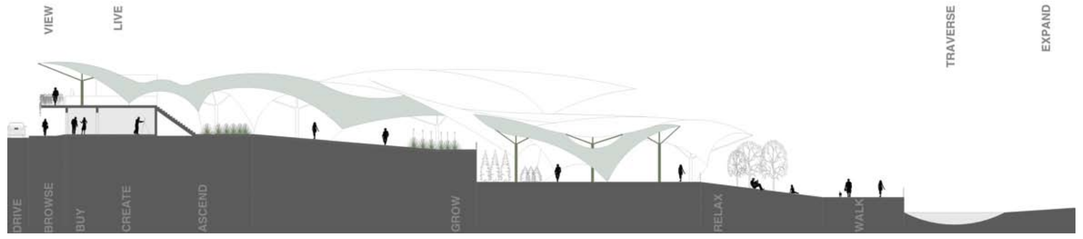
TRAVERSE
EXPAND
DRIVE
BROWSE
SELL
CHILL
GROW
REVEL
RELAX
WALK

4


LIVE
RECYCLE
LIVE
glass
paper
metal
plastic
organic
PARK
SELL
CREATE
RECYCLE
REFUND
UNLOAD
EAT

5


VIEW
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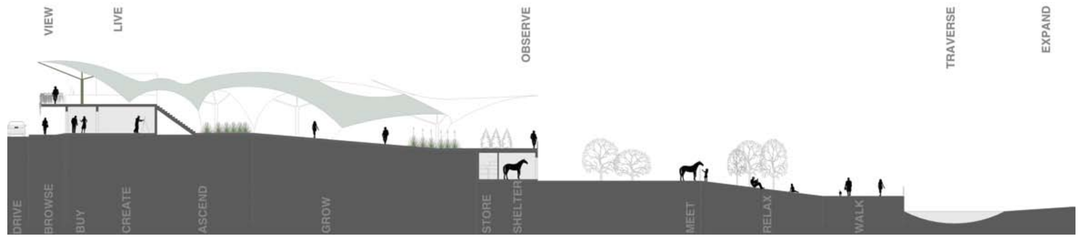
TRAVERSE
EXPAND
DRIVE
BROWSE
BUY
CREATE
ASCEND
GROW
RELAX
WALK

6


VIEW
LIVE
OBSERVE
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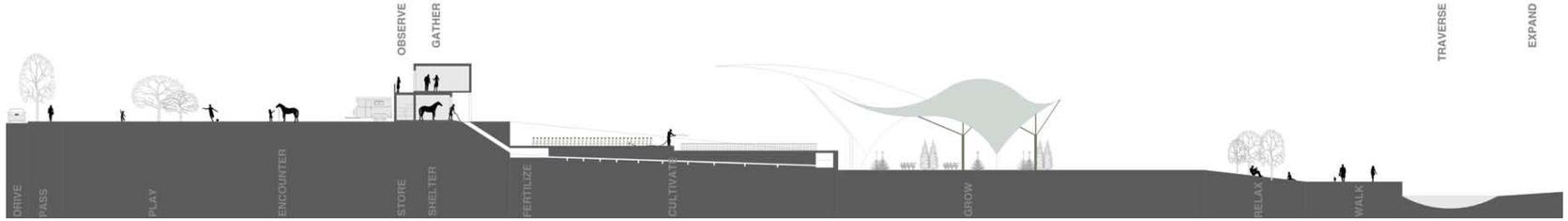
BROWSE
BUY
CREATE
ASCEND
GROW
STORE
SHELTER
MEET
RELAX
WALK

7



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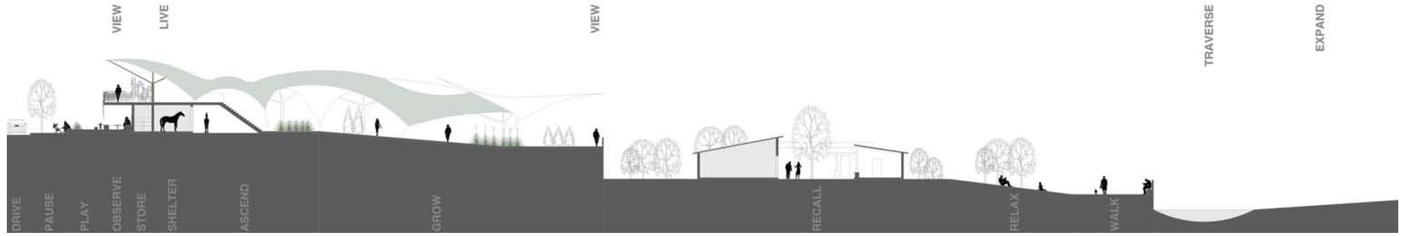

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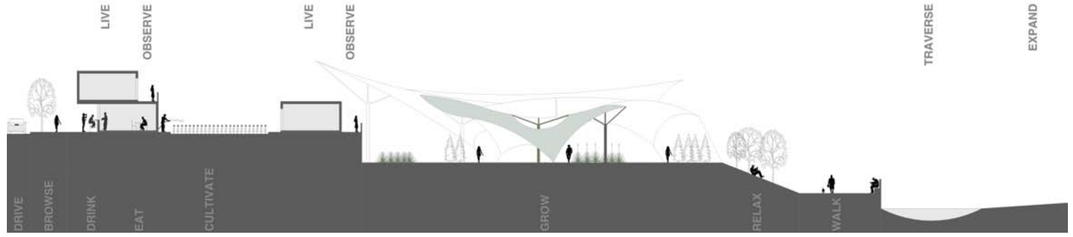


The different functions within the scheme should be visually or physically connected to one another as they step down the site towards the spruit to form one integrated whole.

Sections 1 and 2 illustrate the relationship between the organic food store, restaurant and food gardens - the idea of seeing the food growing and then either buying it to take away or sitting and eating it, in order to appreciate where it comes from.

Section 3 focuses on how the nursery structure can become a roof for the outdoor events area on a lower level.

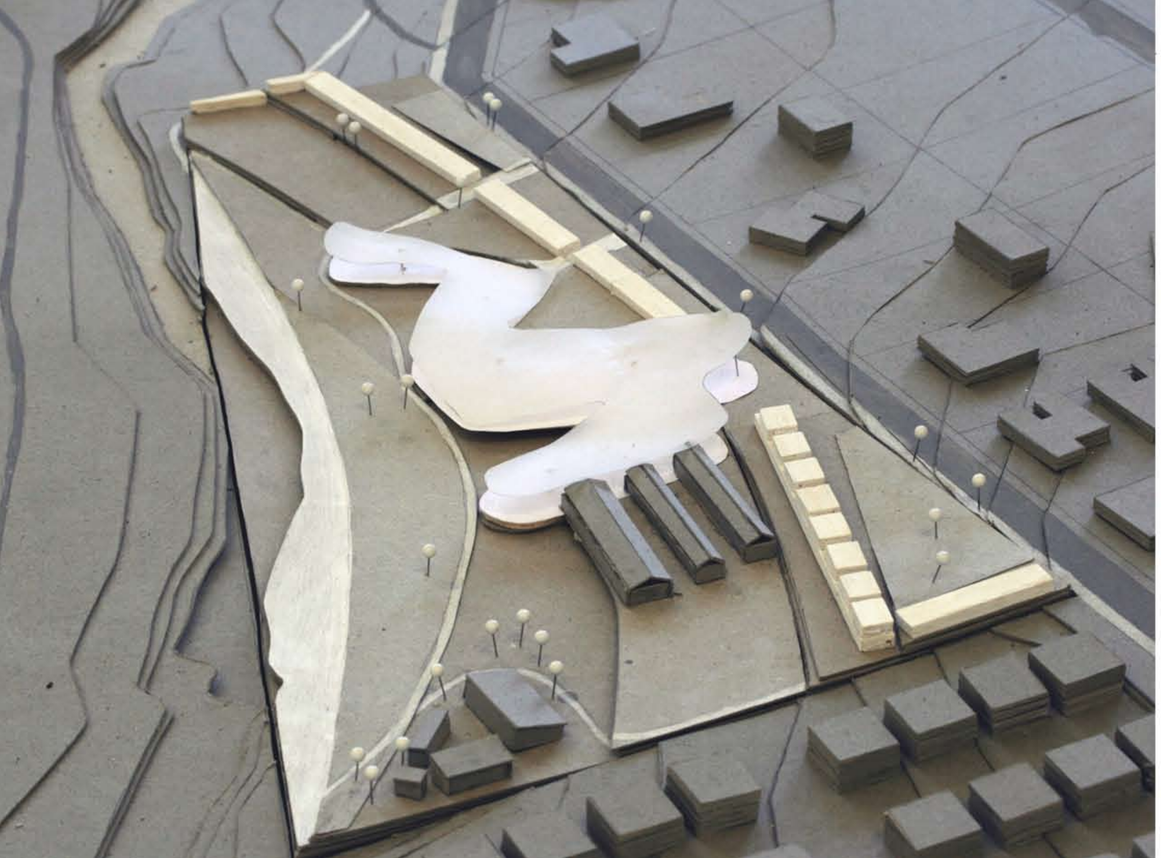
Section 4 shows the recyclable waste collection point and how it connects with the residential and commercial functions as well as catering for the surrounds, particularly the suburban phenomenon of informal waste collectors, who can drop off waste such as scrap metal at this point and receive a refund.

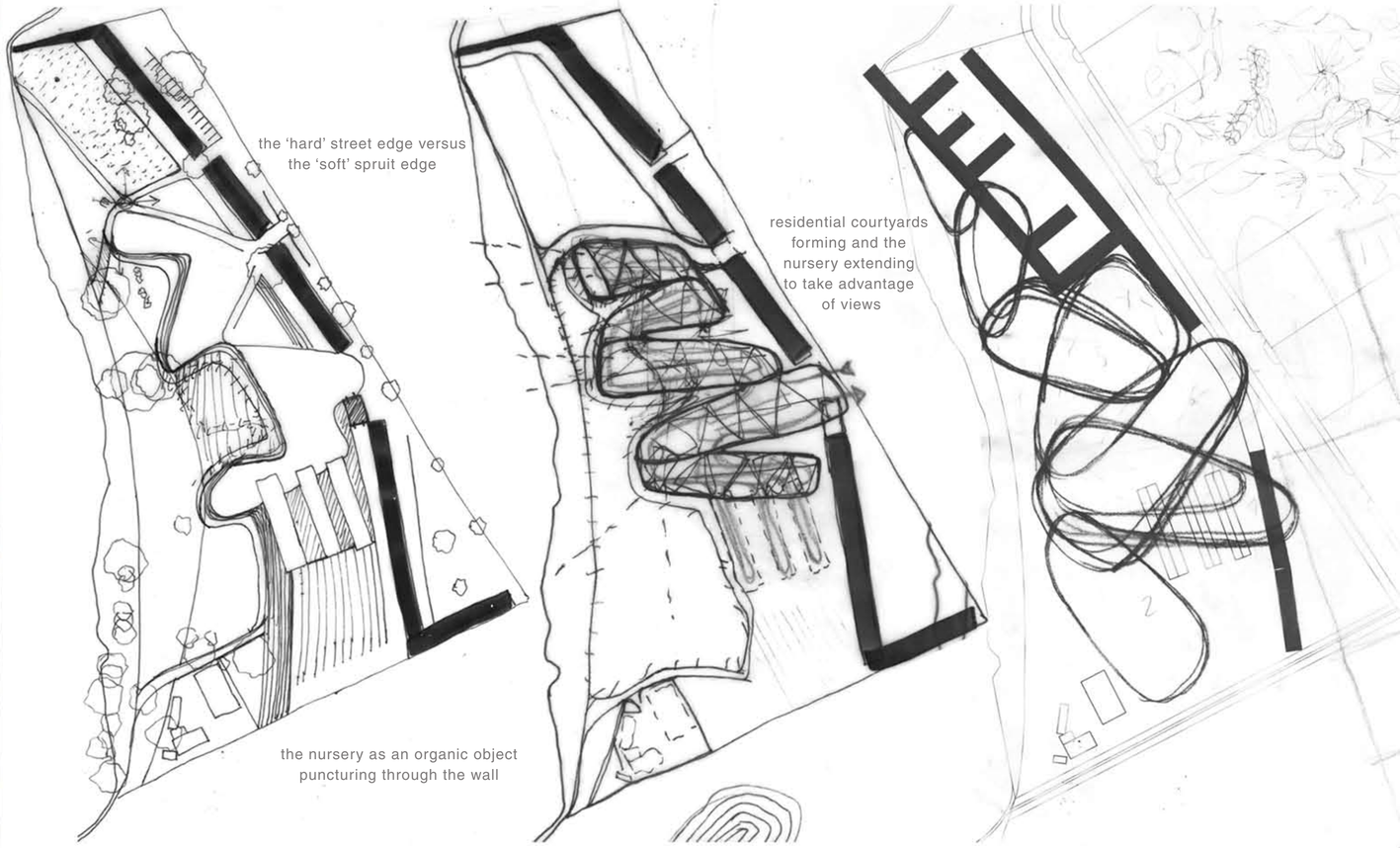
Sections 5 and 6 demonstrate the idea of the nursery climbing over the ‘wall’ to become visible from the street.

Section 7 shows how the waste from the horses could be used to fertilize the food gardens.

Section 8 illustrates the relationship between the existing buildings to be converted into a history and heritage centre and the new design, as well as how the street edge of the ‘wall’ can be used as public space with seating and children’s play area.

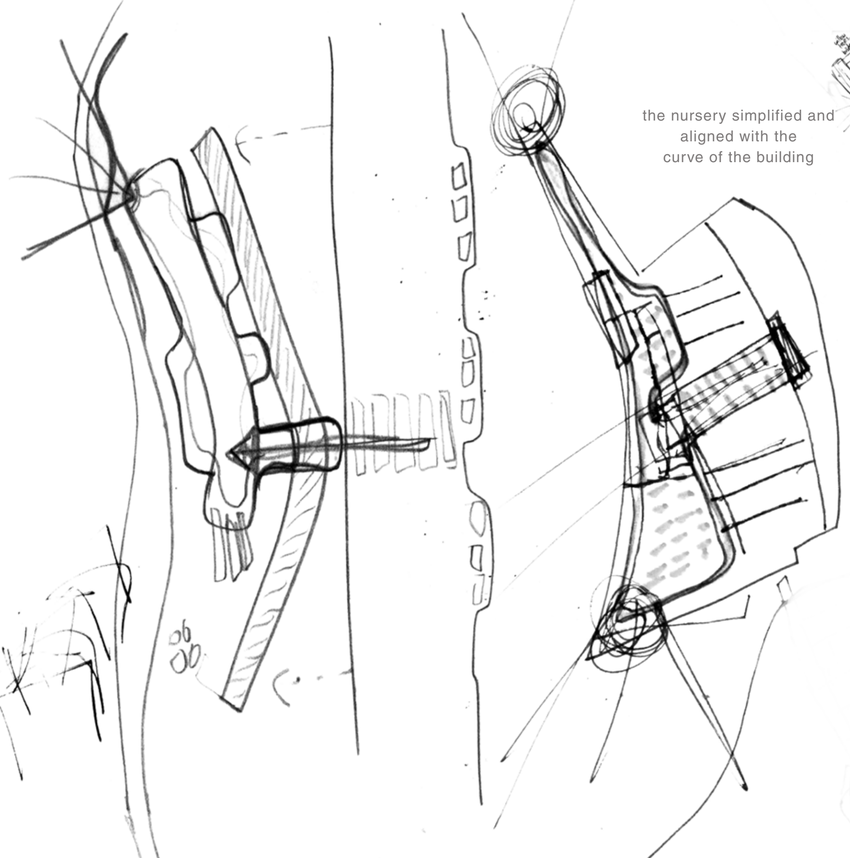
Section 9 demonstrates the creation of courtyards for the residential component.

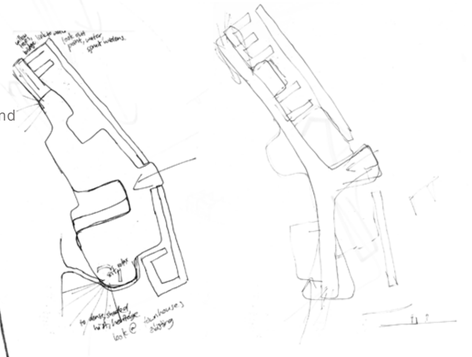


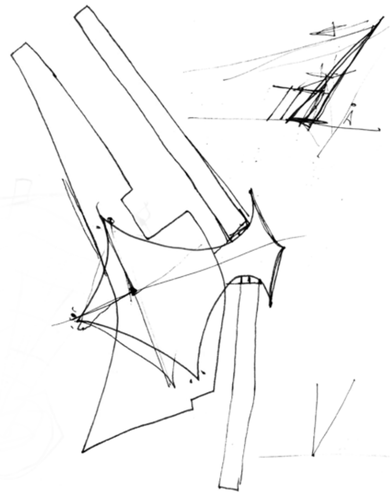

the ‘hard’ street edge versus
the ‘soft’ spruit edge
residential courtyards
forming and the
nursery extending
to take advantage
of views
the nursery as an organic object
puncturing through the wall

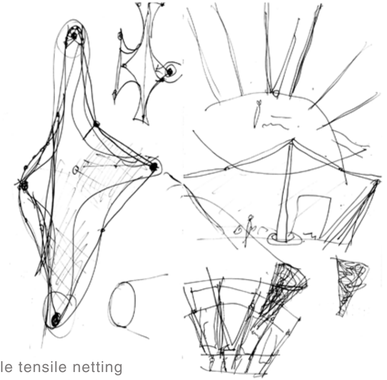
the nursery simplified and
aligned with the
curve of the building

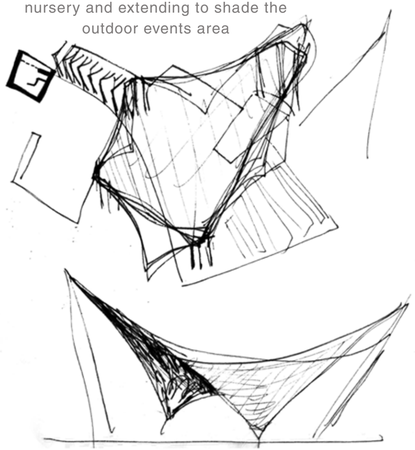
a simple tensile netting
roof structure for the
nursery and extending to shade the
outdoor events area

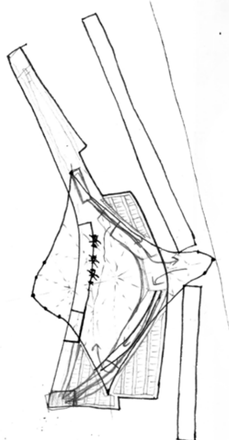


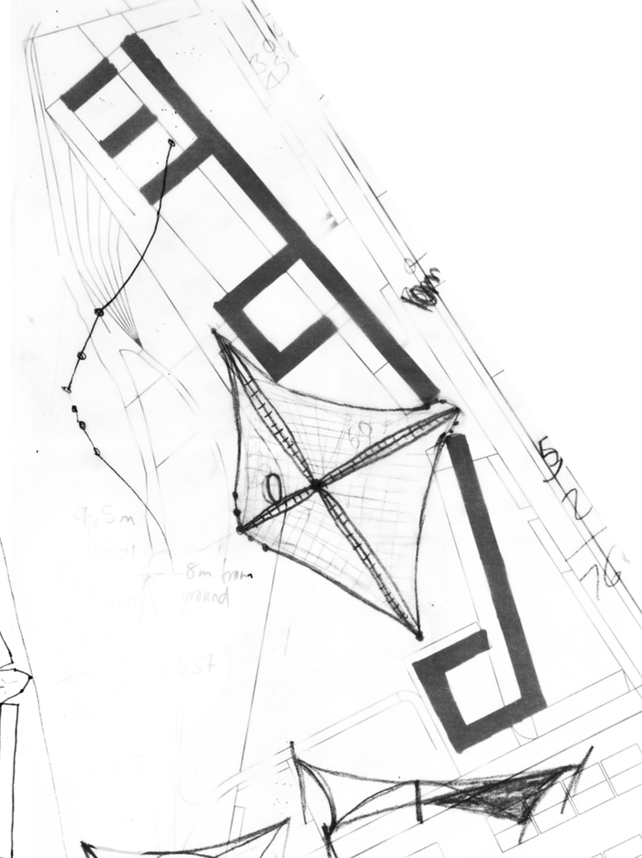




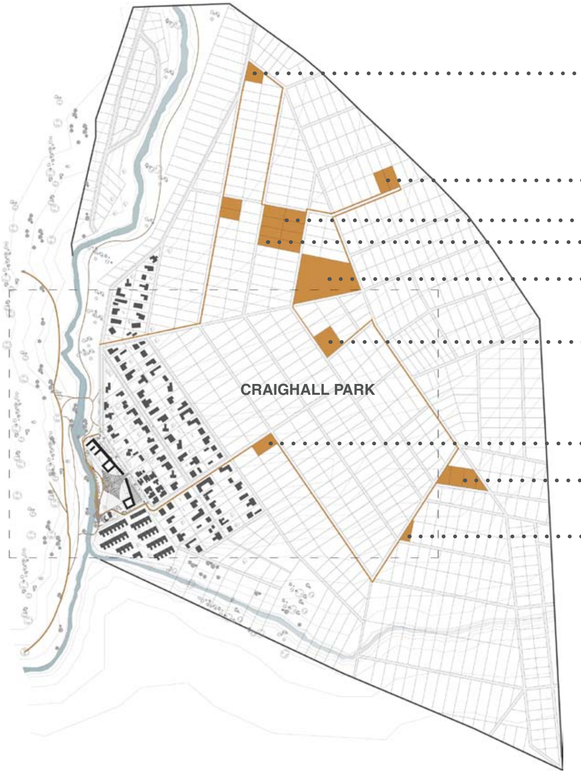








PART FOUR : FINAL DESIGN



Hands on Wellness Centre

Craighall Tennis Club

Saint Theressa's Mercy School

Saint Martin de Porres Catholic Church

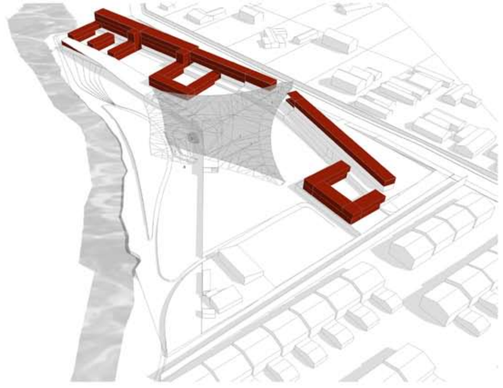
Craighall Primary School

Rutland Playschool

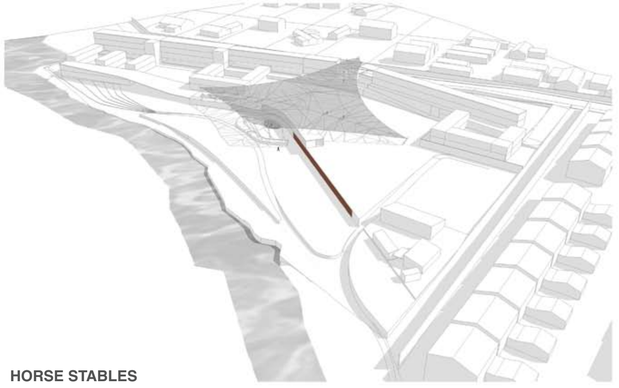
Triba Wellness Centre

Wesleyan Community Church

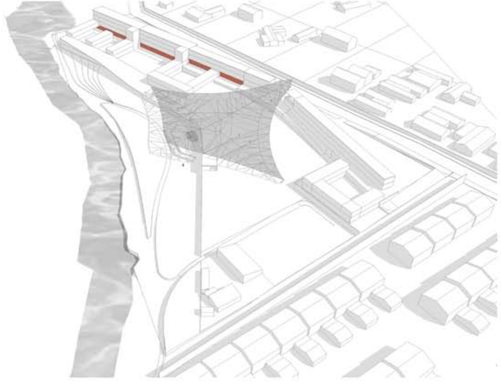
doctor's rooms



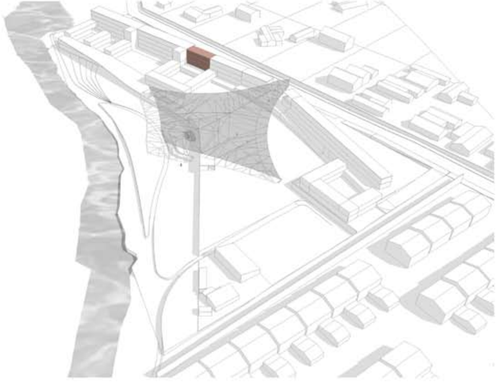
RESIDENTIAL



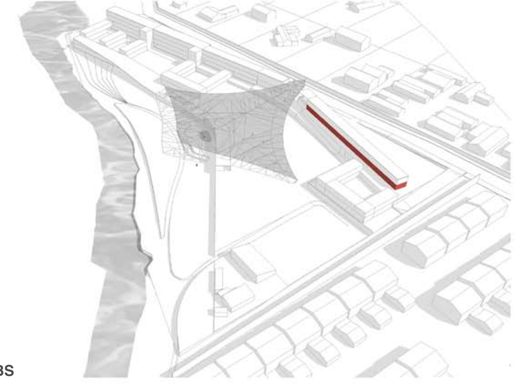
HORSE STABLES



COMMERCIAL



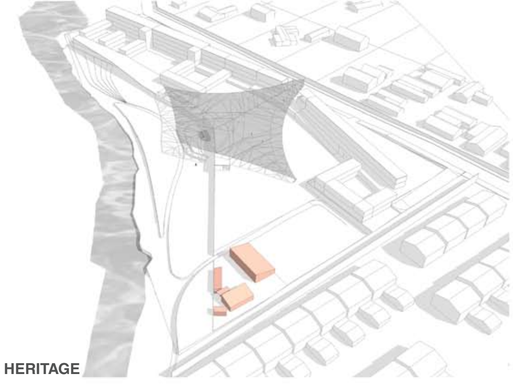
RECYCLING



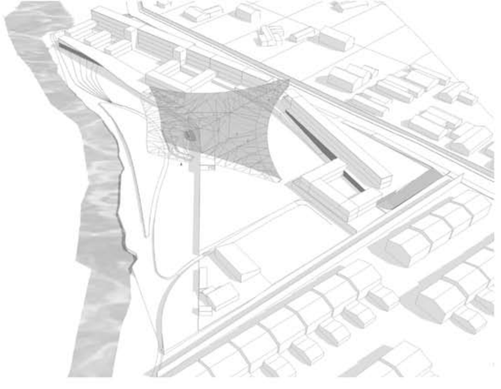
SOCIAL CLUBS



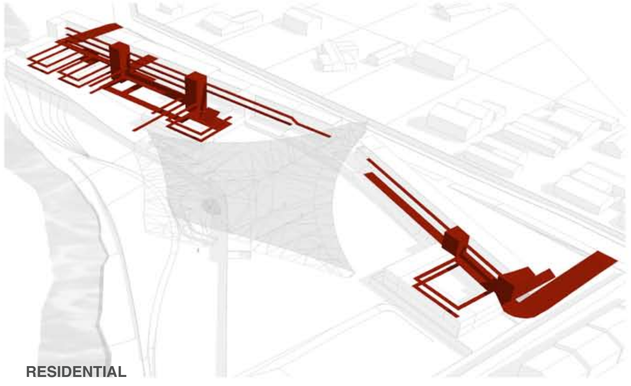
NURSERY AND FOOD GARDENS



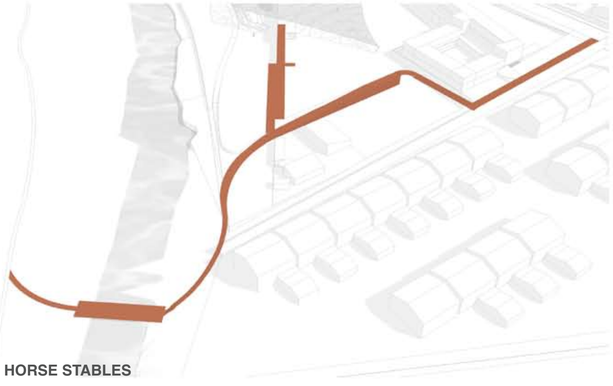
HISTORY AND HERITAGE



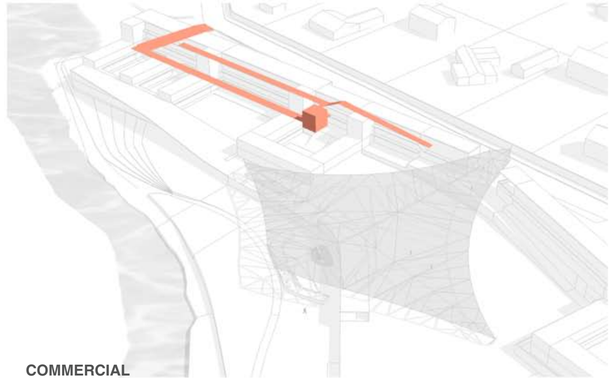
PARKING



RESIDENTIAL



HORSE STABLES



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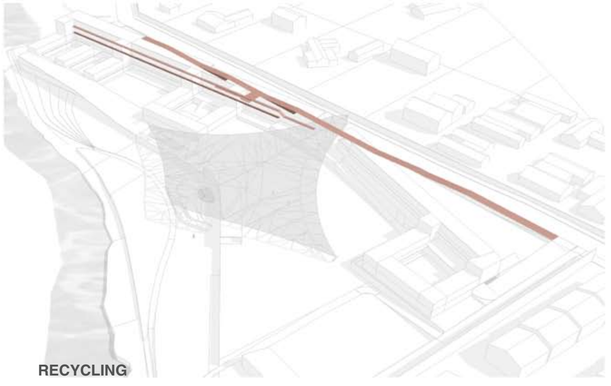

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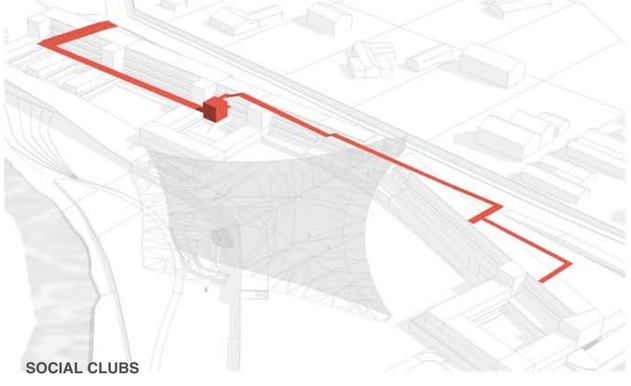
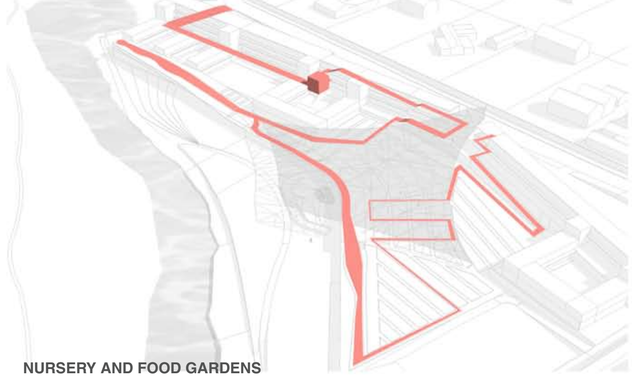
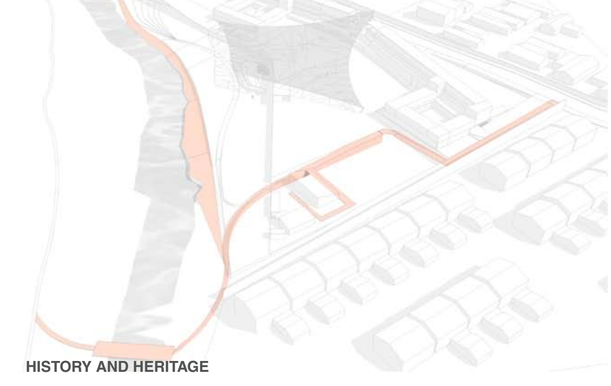


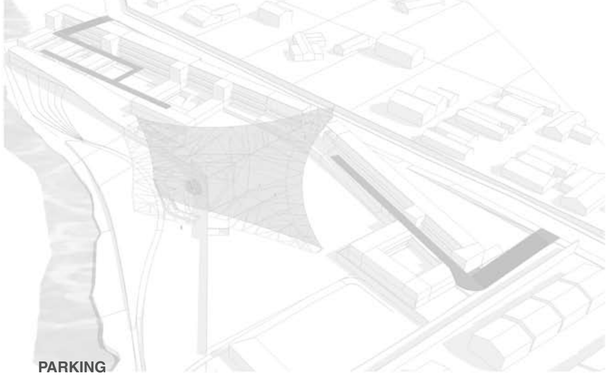
SOCIAL CLUBS



NURSERY AND FOOD GARDENS



HISTORY AND HERITAGE



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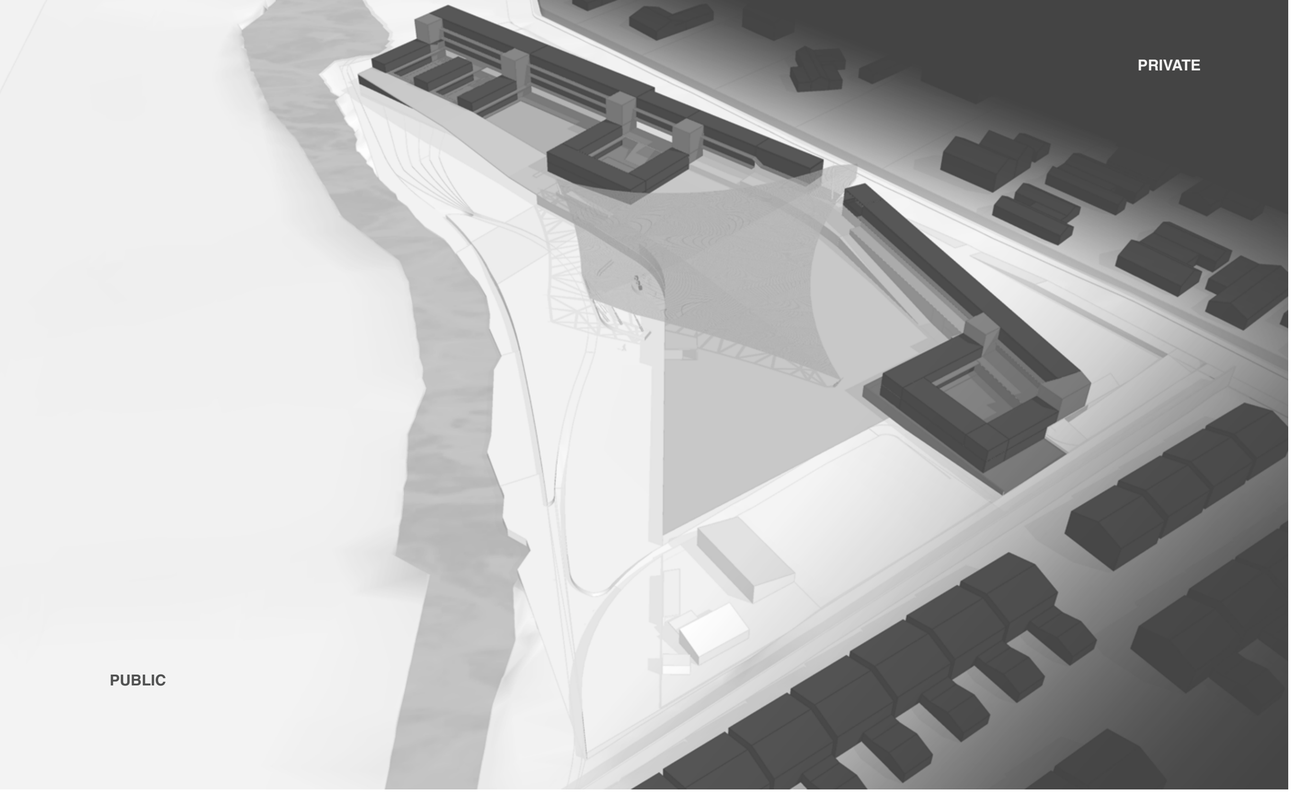
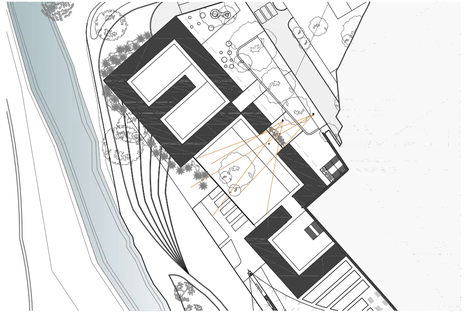
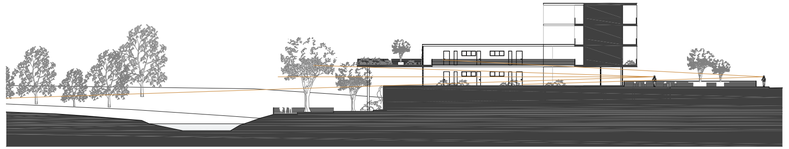
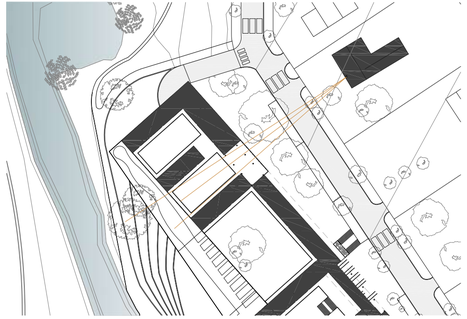




LEVEL 0

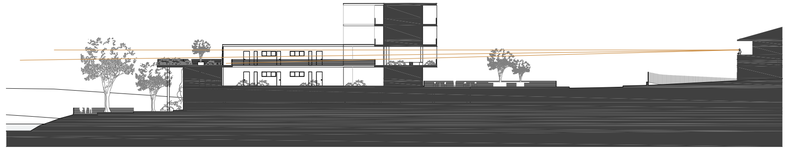
On street level, portions of the ‘wall’ are visually permeable and allow for pedestrians to view through into the public residential courtyards and beyond to the park.





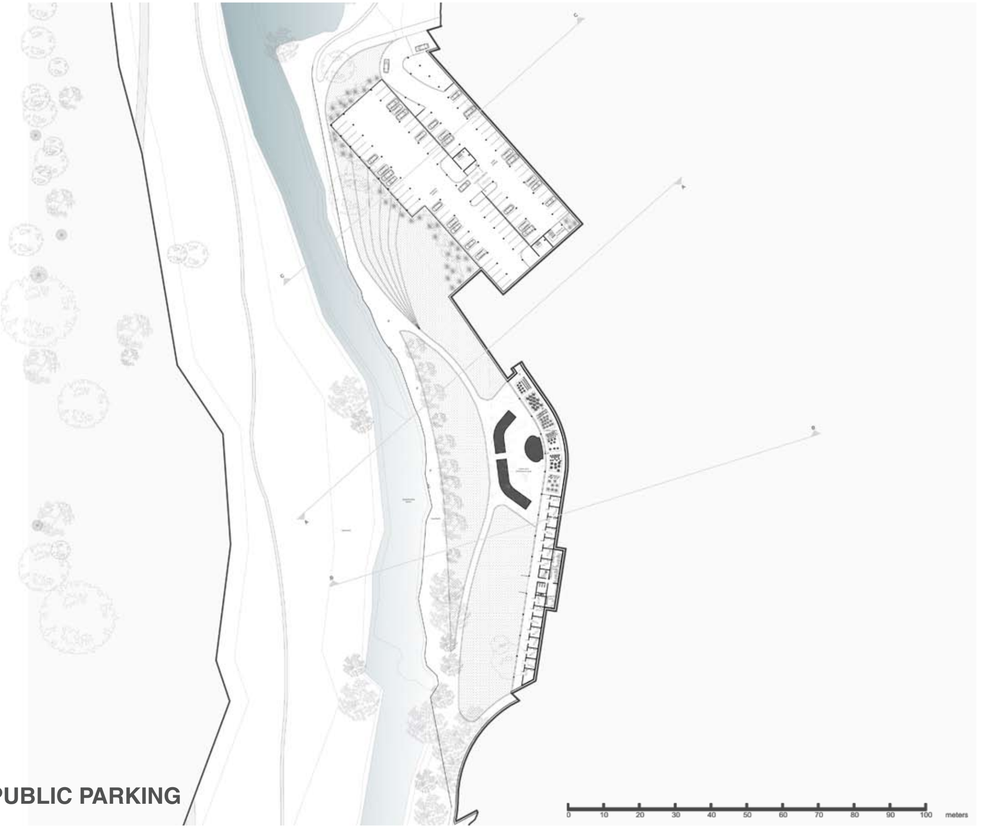
LEVEL 1

Roof gardens, placed on each level of the building at strategic points according to heights, allow residents of surrounding houses to view through the building, into the nursery and park beyond.

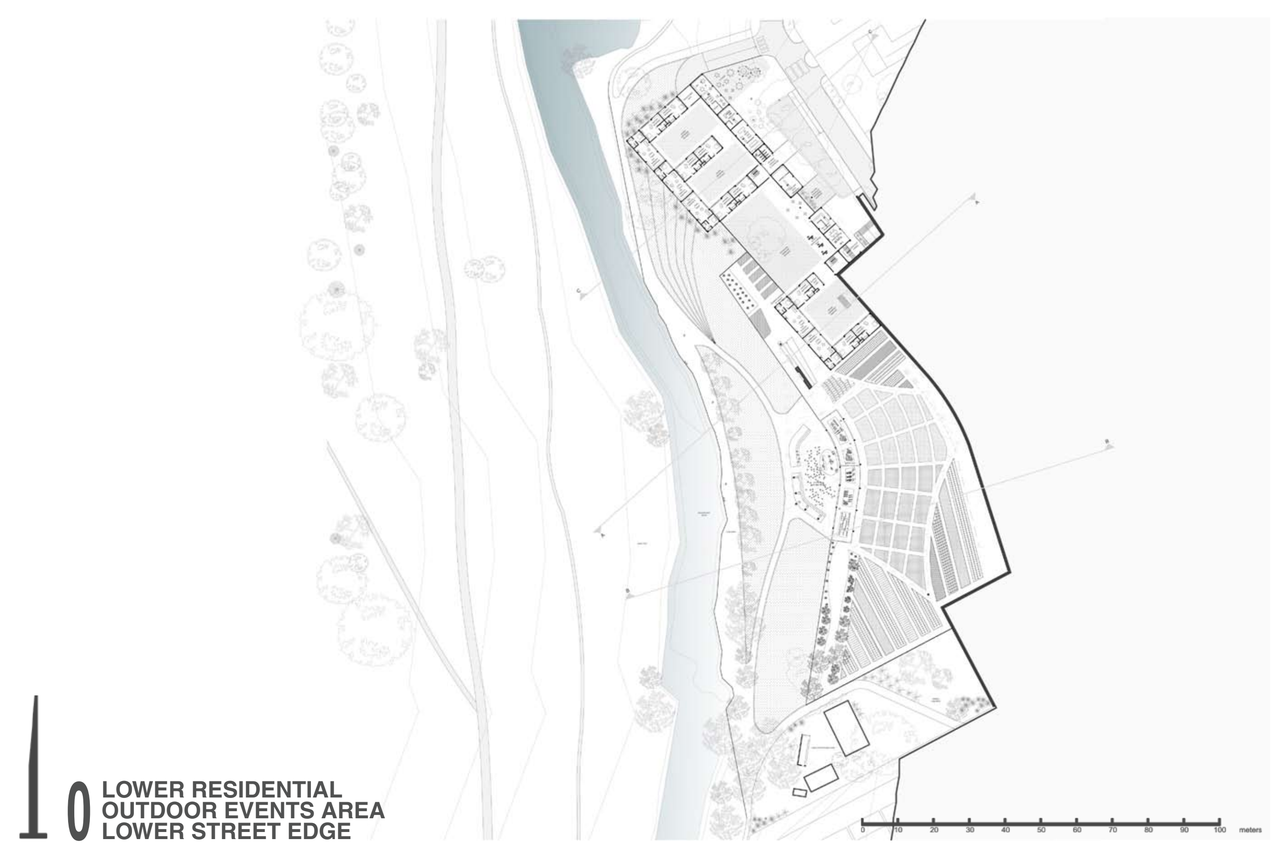


VIEW OF STREET EDGE

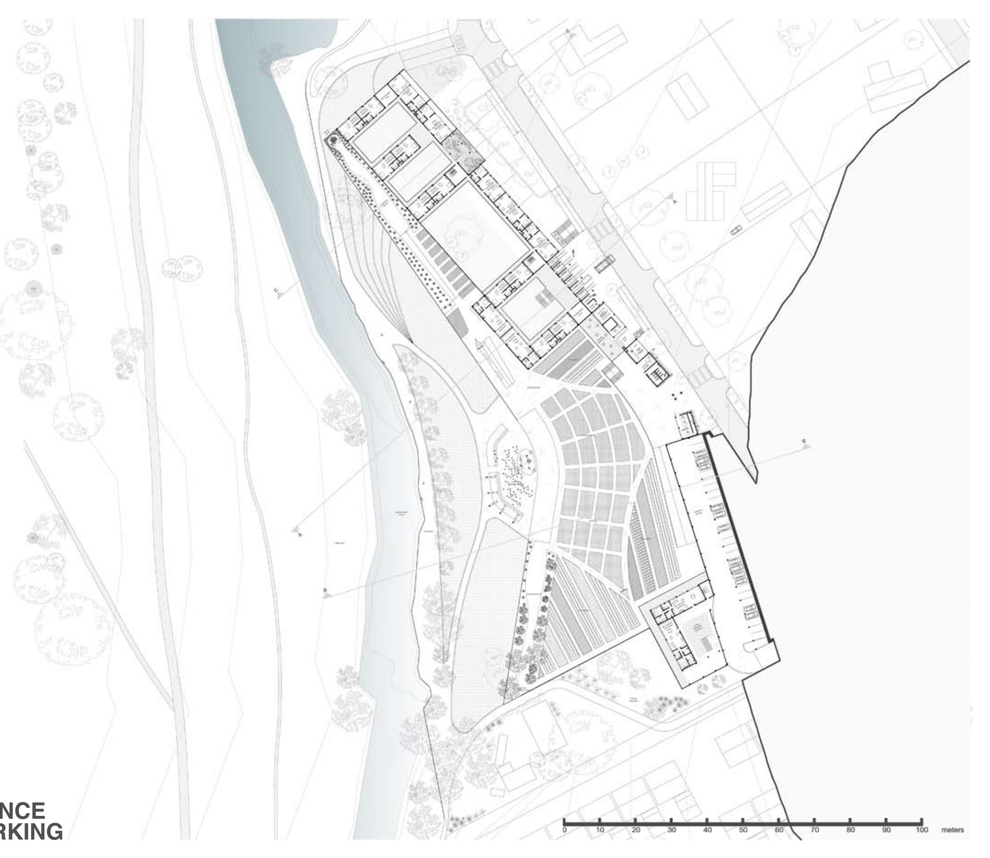




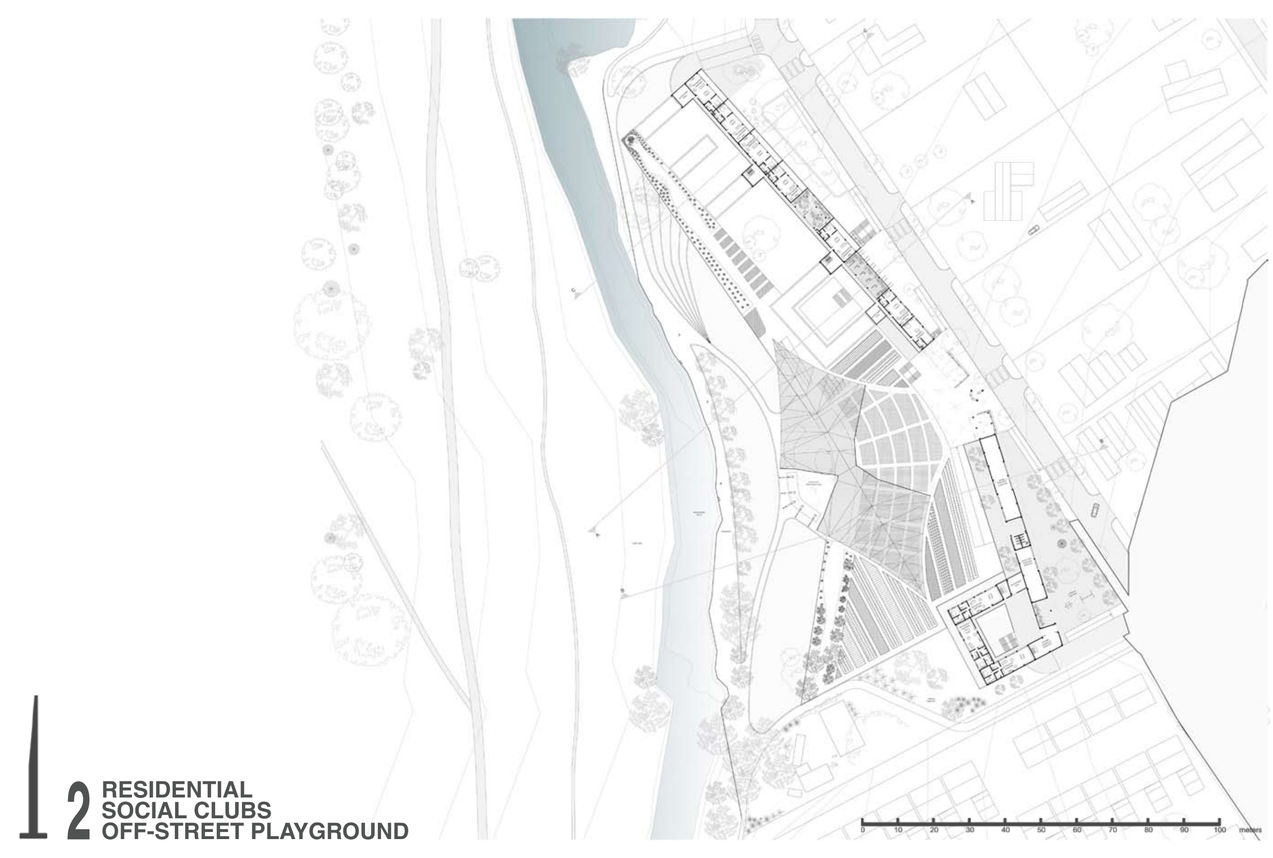
1-1 RESIDENTIAL & PUBLIC PARKING
HORSE STABLES



10
LOWER RESIDENTIAL
OUTDOOR EVENTS AREA
LOWER STREET EDGE



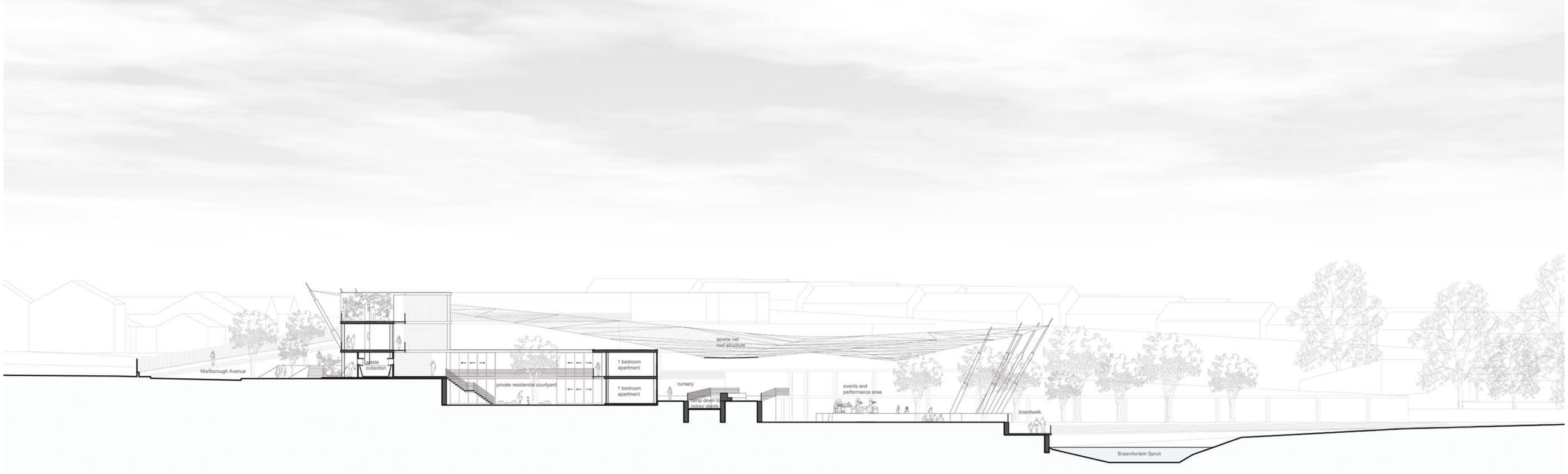
11
RECYCLING
NURSERY ENTRANCE
RESIDENTIAL PARKING



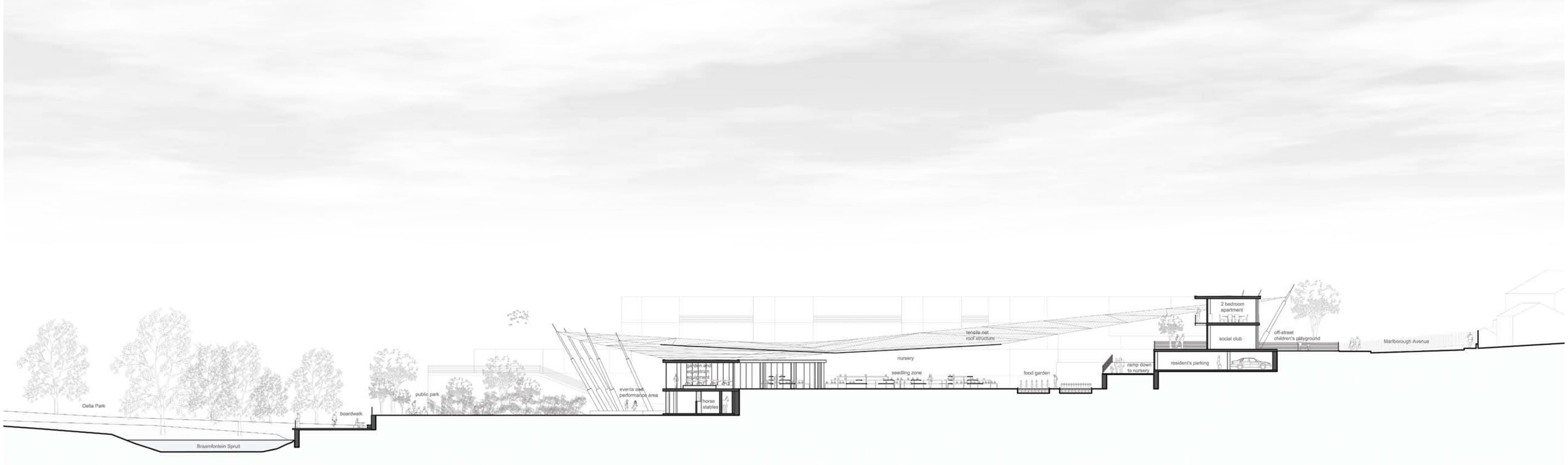
2 RESIDENTIAL
SOCIAL CLUBS
OFF-STREET PLAYGROUND



3 UPPER RESIDENTIAL UNITS


Marlborough Avenue
waste collection
private residential courtyard
1 bedroom apartment
1 bedroom apartment
tensile net roof structure
nursery
ramp down to indoor play
events and performance area
boardwalk
Braamfontein Spruit
0
5
10
15
20
25
meters

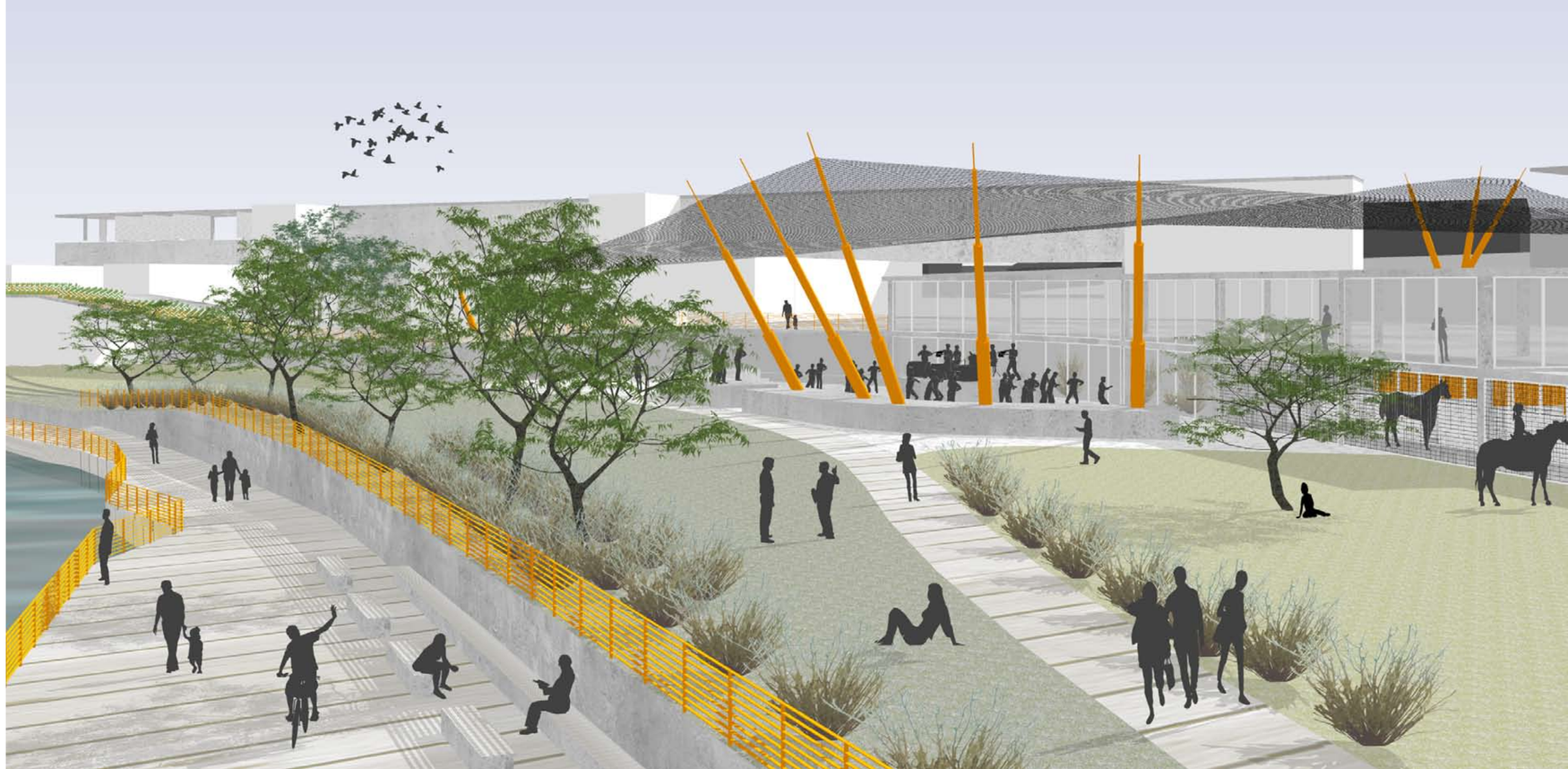
SECTION AA


Delta Park
boardwalk
Braamfontein Spruit
public park
events and performance area
garden and equestrian equipment
horse stables
nursery
seedling zone
tensile net roof structure
food garden
ramp down to nursery
resident's parking
social club
2 bedroom apartment
off-street children's playground
Marlborough Avenue
0
5
10
15
20
25
meters

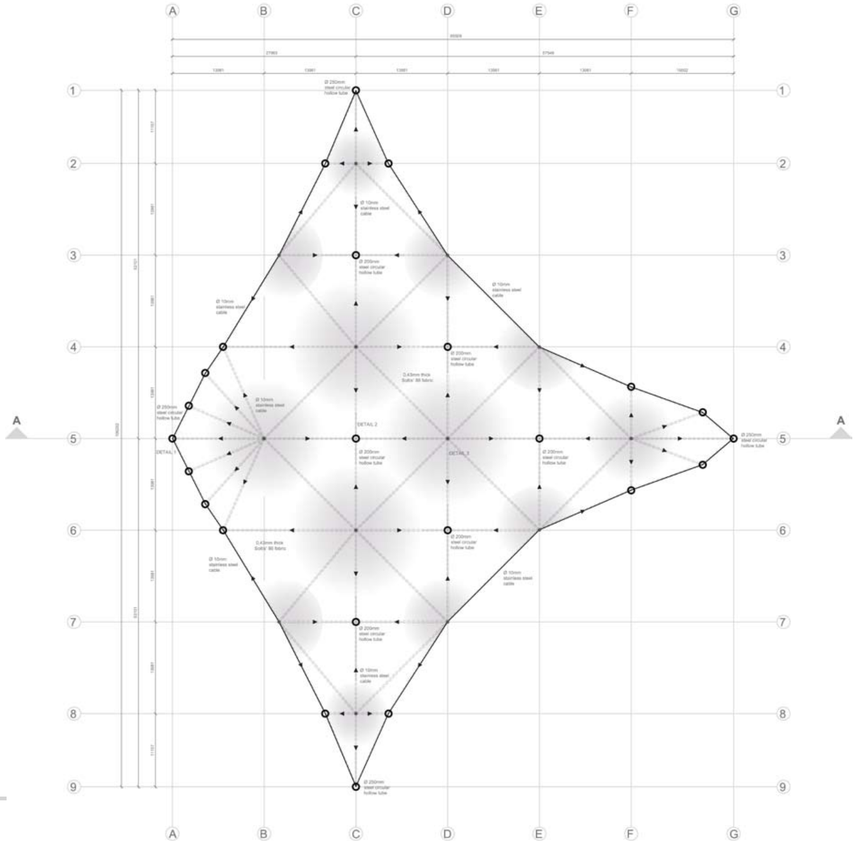
SECTION BB


one bedroom apartment
one bedroom apartment
roof garden
nursery
one bedroom apartment
art studio and store
Delta Park
boardwalk
resident's parking
public parking
Marlborough Avenue
Braamfontein Spruit
0
5
10
15
20
25
meters

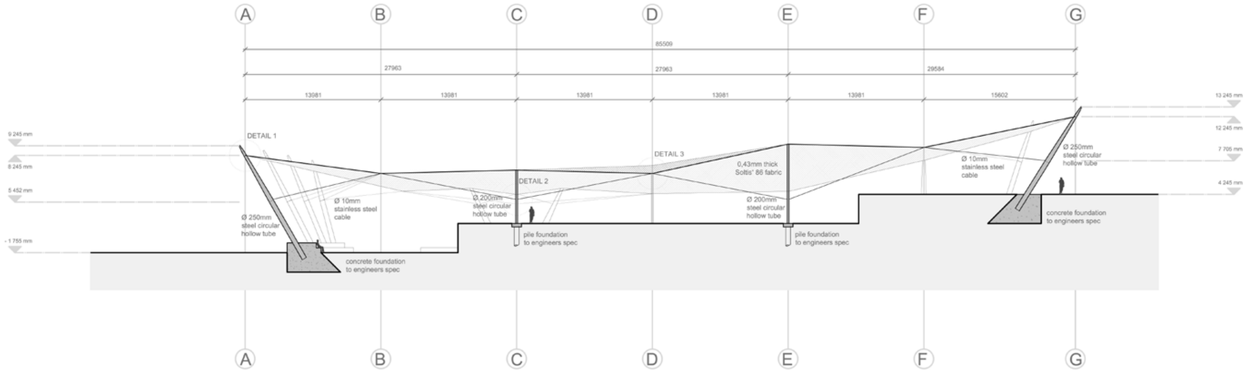
SECTION CC



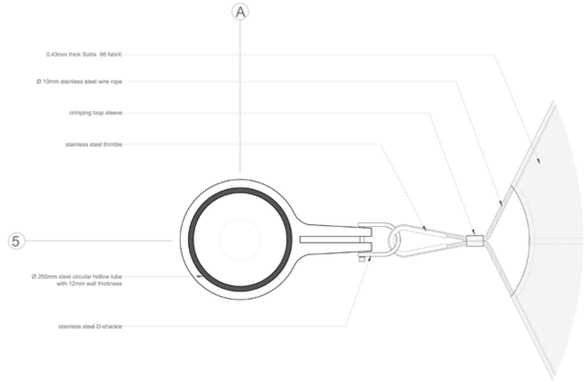
VIEW OF BOARDWALK, PUBLIC PARK AND OUTDOOR EVENTS AREA

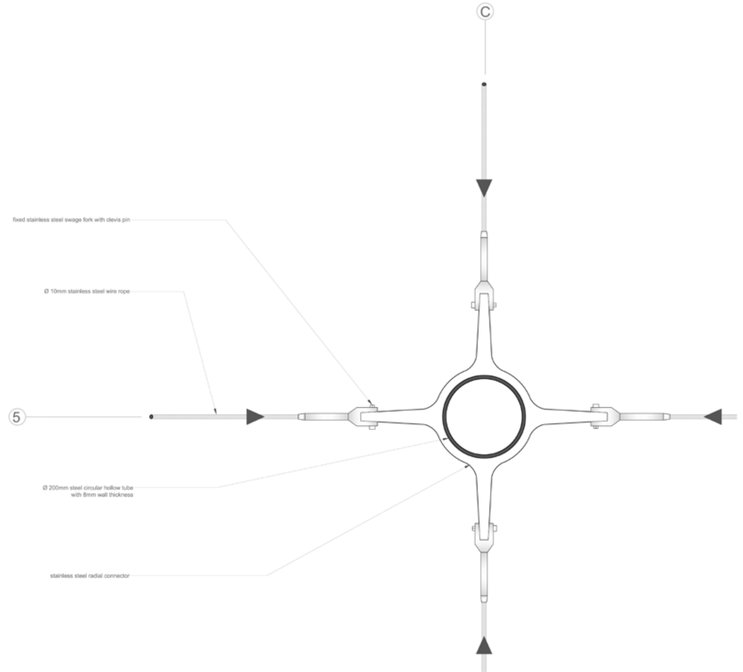


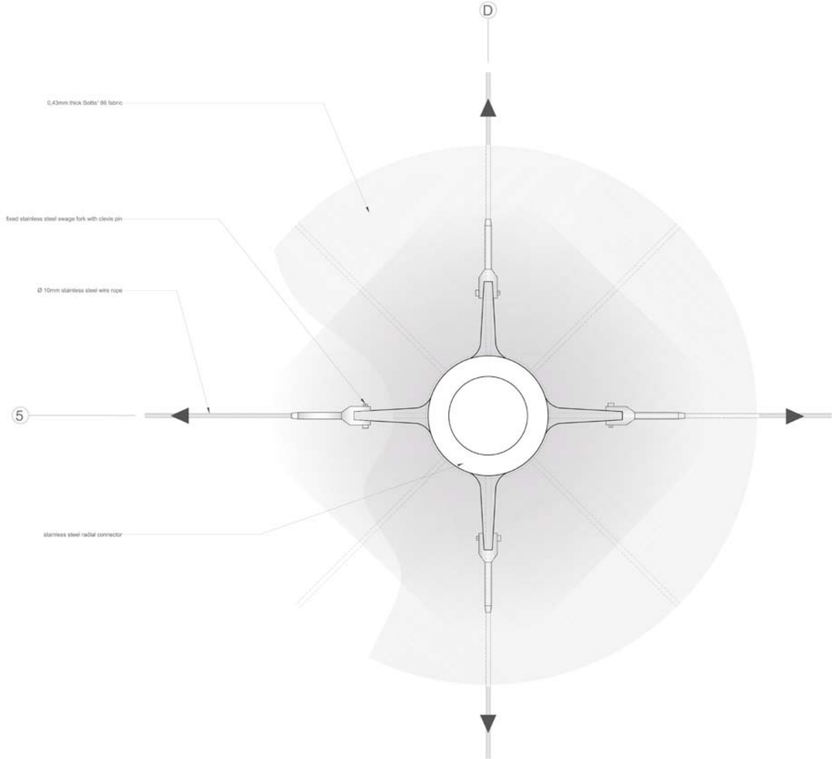
NURSERY ROOF PLAN



NURSERY ROOF SECTION


A
0,43mm thick Soltis 86 fabric
Ø 10mm stainless steel wire rope
crimping loop sleeve
stainless steel thimble
5
Ø 250mm steel circular hollow tube
with 12mm wall thickness
stainless steel D-shackle


C
fixed stainless steel swage fork with clevis pin
Ø 10mm stainless steel wire rope
5
Ø 200mm steel circular hollow tube
with 8mm wall thickness
stainless steel radial connector


D
0,43mm thick Soltis 86 fabric
fixed stainless steel swage fork with clevis pin
Ø 10mm stainless steel wire rope
5
stainless steel radial connector



VIEW OF STREET EDGE WITH RECYCLING, RESIDENTIAL, COMMERCIAL