UNIVERSITY OF KWAZULU-NATAL

INYUVESI YAKWAZULU-NATALI

Drugs and Substance Abuse Prevention through an Awareness and Skills Development Centre for Chatsworth.

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Submitted in partial fulfilment for the degree:

Masters in Architecture

University of KwaZulu Natal

Date: 26-02-2016

Abstract:

Many programmes have been developed to address the pandemic of drugs and substance abuse amongst young people. All of these initiatives differ in terms of their objectives and nature of the organisations to provide services and strategies to curb drugs and substance abuse. Some initiatives are focussed on the post effects through rehabilitation and therapy, whilst others attempt to reduce the supply and availability of drugs through law enforcement. Still others are focused on changing policy and legislature to legitimise the use of drugs, and provide users over the age of 18 with special legal rights.

This research is based on drug and substance abuse amongst the youth. Since the effect of drugs and substance abuse amongst young people and children differs significantly to that of adults, any of the approaches will be biased against young people. Therefore, this dissertation is focused fundamentally on the primary early intervention and prevention of drugs and substance abuse.

The literature examines the damaging effects of drugs and substance abuse amongst the youth, both globally and locally. Primary prevention is one of the most sought-after approaches when dealing with adolescents. In order to pursue this approach, more positive elements need to be implemented in both individuals and their environments. This could be a step forward in reducing the perils of drug abuse and in building a more resilient youth. To further best develop an appropriate design response to this social issue, the research looks at social theory and its connection to architecture. Architecture's obligation is to be the catalyst for this social interaction. Through design, the creation of connected environments in the urban realm must come from knowledgeable decisions, so that they may be useful to the community at large. There is nothing superfluous about this approach. Rather, it adopts the notion that architecture has a social function – that addressing the needs of people or society is of primary concern. There are many people working in the area of Chatsworth to implement various programs that create awareness and prevention of drugs and substance abuse. The simple introduction of a youth facility within the area can help initiate a platform that further encourages a positive and supportive environment to these prevention initiatives.

There are currently multiple initiatives that are operational to curb the drug and substance abuse issue. However, none of these can be deemed as efficient. In dealing with the abuse of drugs amongst youth, the ideal and most effective approach would be to promote primary prevention.

Declaration

I, Ronelle Chetty, declare that:

1.   The research reported in this thesis, except where otherwise indicated, is my original research.

2.   This thesis has not been submitted for any degree or examination at any other university.

3.   This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

4.   This thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

    a.   Their words have been re-written but the general information attributed to them has been referenced
    b.   Where their exact words have been used, then their writing has been placed in italics and inside quotation marks, and referenced.

5.   This thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References sections.

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Signed

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Date

Acknowledgements

Working towards this dissertation has been challenging but having the guidance, support and patience of the following people has made it possible to accomplish.

- Bonga Ntuli who despite his many other commitments undertook to act as my supervisor. Thank you for imparting your knowledge and motivating me.
- Bridget Horner who undertook to act as my co-supervisor. My sincere thanks go to her patience, motivation, enthusiasm and immense knowledge.
- To my fellow studio mates, who offered support throughout my final exam, regardless of the work pressures we were facing together.
- To my dad, Christian Chetty, thank you for your love and support throughout my life. You have given me the opportunity to reach for the stars and chase my dreams. I am forever grateful. My brother (Jeremy Chetty), sister in law (Rekha Chetty) & my beautiful nieces who deserve my wholehearted thanks as well.
- To my best friends in no particular order: Pashini Naidoo, Simine Khan & Leticia Moonsamy: Thank you for the years of support and friendship. There's no other tribe that gets me like you do!
- To the rest of my family and friends, thank you all for your unending encouragement and support.
- Thank you Lord for always being there for me.

This dissertation is dedicated to my late grandparents. When hope was lost, I remembered your kind words of wisdom and persevered.

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<p style="text-align: center;">**Chapter 1: Introduction**</p>

1.1. Outline of the Problem

According to the World Health Organisation, the abuse of substances by young people is deemed as a serious social and health problem in many countries. Due to the abuse of substances, young people are being robbed of their childhood. The possibility of them enjoying a healthy lifestyle in their future is very slim. Primary prevention should be a universal priority so that the health and the future lifestyle of young people is enhanced. This approach of engaging the problem at its roots, could prove to be beneficial to the prevention of substance abuse (World Health Organisation, 2000:3).

Despite the large sums of money devoted to encouraging stricter law enforcement and rehabilitation treatment facilities, we seem incapable of reducing the impact of drugs and substance abuse in our society. In order to affect change in a community with problematic social conditions, direct engagement with the community is vital. Those living within the community know their communities best. And it is through them that there is opportunity to affect change from the outside. Despite the geographical location, traditions, cultures, socio-economic and political backgrounds, those living within a community are key to aiding the prevention and awareness of drugs and substance abuse. Since it is impossible to eradicate drug abuse from this world, we must adopt a pragmatic approach – and that is to prevent our youth from engaging in narcotic abuse in the first place.

1.2. Motivation for the Study

In South Africa, our social ills and a lack of support in the community, is causing drug and substance abuse to escalate in local communities. A recent article in the Tribune Herald newspaper highlighted the dire issue of drug and substance abuse rife in the community of Chatsworth. It also emphasised the lack of manpower or support (Tribune Herald, 2014: 3). The publication also underscored the need for better support systems within the community; systems that would help quell the increasing number of addicts. The article included the opinions of local people, voicing their frustrations in dealing with the effects of drugs and substance abuse, and its impact on society, health, education and employment. The article mentioned how users were often forced into drug dealing, prostitution and a life of crime to support their addiction.

1.3. Hypothesis

Community prevention is important because drug and substance abuse problems are deeply ingrained in people's lifestyles. This is having a great effect on how our societies are being organised and perpetuated. Despite the fact that we are all individually responsible for the decisions we make about

drug and substance abuse, community prevention recognises that individual behaviour is influenced by corporate consciousness. Therefore acting corporately can prove to be far more effective than acting alone. By investigating the issue of drug and substance abuse more closely in the community of Chatsworth, this study can perhaps lead to a more positive and stable community design intervention.

1.4. Aim of the Study

The aim of this research is to explore and understand the problem of drug and substance abuse, and to ascertain the negative impact this has had on the community of Chatsworth. The focus demographic of this study is the youth of Chatsworth. Further investigations within this study have shown that the crisis within this community is predominantly amongst Chatsworth's youth (Anti-Drug Forum SA). The exploration and understanding of this community's dynamics may provide the platform for early prevention strategies to flourish. This understanding can directly motivate and inform design responses which may in turn result in promoting a better community lifestyle.

The main outcome of this research will be to provide a drug and substance abuse preventative and awareness Centre that reaches out to the community of Chatsworth, especially its youth. The research specifically addresses the issue of preventing drug abuse rather than the social ill of drug addiction. In so doing, the approach is to look at the root of the problem rather than its fruit.

According to Markwood (2011), a better understanding is needed in order to make effective plans for prevention. This document aims at presenting the "bigger picture" – to understand substance abuse prevention methods, rather than just substance abuse itself. Its goal is not to capture every detail of the very complex set of facts and issues involved, but to present enough of an overview so that a matrix of understanding may be framed, within which architecture and drug prevention awareness may be explored within the community.

1.5. Objectives of the Study

The objectives of this study are:

- To understand the social, economic and political problems arising from drugs and substance abuse in the community.
- To investigate the community's perspective on their current social environment, and how it relates specifically to the drug and substance abuse problem.
- To identify existing prevention efforts already underway in the community.
- To investigate various methods of strengthening the community, and more specifically to prevent the youth from falling prey to drug and substance abuse.

- To determine an appropriate architectural response, and to plot a way forward where architecture can assist in alleviating this area's social problem.

1.6. Research Questions

- What are the social, economic and political problems arising from drugs and substance abuse in the community?

- What is the general understanding of the community in relation to preventing this social problem of drug and substance abuse?

- What methods of drug and substance abuse prevention systems already exist in the community?

- What kind of preventative methods can be implemented in this community?

- How can architecture be a contributing factor towards promoting community development?

Chapter 2: Research Methodology

2.1. Research Design

The research conducted for this dissertation is aimed at developing the theoretical framework for understanding the current reality of drug and substance abuse problems, in order to inform an architectural initiative that creates drug prevention and awareness within the community. The character of this research resulted in a qualitative process when doing data collection and analysis thereof. The relevance of this section will be to explore the methods of useful information gathering; one that provides guidance, informs and answers key questions.

2.2. Research Methods

The informative process of this study will include both primary and secondary data. Primary data will include the use of a case study, uncovering the notion of creating a safe haven for youth within the community. This data will be evaluated to form a base that informs the research and design process.

The secondary process of this research explores the study on a broader scale, with the use of a literature review. This will include consulting with media resources, journals, and articles for further understanding, and unravelling key questions in the study. The research will cover the social, economic and political problems arising from drugs and substance abuse in communities, and strategies that can be used to strengthen a community's endeavours to prevent its youth from falling prey to drug and substance abuse.

2.3. Primary Methods – Interviews and Case Studies

A case study will be conducted on a youth centre located in Chatsworth which focuses on uplifting the social conditions within the community. The case study will provide a first-hand understanding of how the facility caters to its users both positively and negatively. Although the centre is not focused solely on drug and substance abuse awareness and prevention strategies, the examination of this centre will uncover certain conditions and characteristics. These will form the basis and foundation for the research proposal.

Interviews will be conducted with those who manage the facility, and in so-doing interact with the community. These interviews can further provide an analysis of the current facility and its engagement with the surrounding community, from a personal perspective.

Further interviews will be conducted with local NGO's and key community members (social worker, local police, local clinic) who are actively involved in drug and substance abuse awareness and

prevention programmes. These community members can provide insight into the issues of this community, and shed light on the strategies that have already been implemented.

The interviews will be carried out one-on-one with the use of a questionnaire. This will assist in understanding the opinions and perspectives of these key role players in the community, and how it correlates with the key questions of this study.

2.4. Secondary Methods – Literature Review and Precedent Studies

This will explore the aspects of drug and substance abuse prevention and awareness within communities on a broader scale, with the use of a literature review and precedent studies. This will include consulting media resources, journals, and articles for valid information, and will be used to assist in the understanding and unravelling of the key questions. It will consist of a review of concepts and theories, and will be presented in the format of a comprehensive literature review and relevant precedent studies that help relate the concepts and theories to examples.

Chapter 3: Literature Review

3.1. Introduction

Throughout the world, one of the main challenges that face our societies is the growing incidents of drug and substance abuse amongst our youth. There is no single cause or a simple cure to drug and substance abuse. This is perhaps why its many related problems have continued to increase throughout many regions in the world. The problems connected to drug and substance abuse is severe; deaths, increase in crime, broken or dysfunctional families, lowered levels of productivity, academic failure and so forth. The literature has promulgated that drug and substance abuse hinders both individual and social development. The method of using early prevention programs can be successful if they are implemented with people in the community at grassroots level, and if effort is made to identify matters of high priority to them - including social relationships and individual capabilities. It has also been noted that progress in the area of drug and substance abuse prevention and awareness is dependent on several factors. Within the literature, Brounstein and Zweig (1999) introduces research that demonstrates the interaction between the risk and protective factors; both within and between the person and environmental realms. According to these researchers, risk and protective factors determine the level at which drug use occurs. Hawkins, et al. (1992) suggests that programs should target those with the highest risk, by their exposure to multiple risk factors. Drugs and substance abuse is a complex social problem. However, by understanding deeper relationships or connections to the problem, we may find a way forward to support and encourage early prevention.

3.2. Review of Literature

According to the World Health Organisation (WHO), "Increase in numbers of youthful smokers, drinkers and users of illicit drugs seem to have paralleled the rapid growth in urban populations observed in the last century." (Obot and Saxena, WHO, 2005: 204). Substance abuse then is directly linked to urban development. As the environment evolves, so evolves the individual and their personality. This can result in positive changes or negative changes. Although the results are often positive, it can also be negative in other cases. This negative result that Obot and Saxena speak of, is substance abuse and its related harms. In order to seek prevention and awareness strategies for the problem, a grasp of the factors associated with drug and substance abuse is needed.

Similarly in South Africa, one of the main challenges facing the youth is drugs and substance abuse (Obot and Saxena, 2005: 104). "When we look at the drug scene in South Africa, we see that the country is by far the largest market for illicit drugs entering southern Africa. Drug trafficking and abuse

have escalated in recent years" (Boone, UNODC, 2004: 3). The use of drugs has escalated notably since the mid-1990s. This increase of substance abuse has led to an increase in demand for treatment facilities as well as other attendant services within communities. Services like security, police, clinics, and social workers are needed to manage the problems associated with and arising from drug and substance abuse (Obot and Saxena, 2005: 104). Many areas have been denigrated due to high levels of crime, poverty and unemployment. Obot and Saxena state that the local government is overstretched and incapable of providing services at the rate at which they are needed.

3.2.1. A brief background of Substance Abuse in Chatsworth

Chatsworth is traditionally an Indian township. It is located in Durban about 14km south-west of the city centre, in the Umhlatuzana River Valley, north of Umlazi. Initially, Chatsworth comprised mostly of poor working-class Indian people, whose culture is significant to Durban's identity, and a direct result of the Group Areas Act.

Chatsworth was planned in stages and each development was referred to as a unit. The mixed development of housing consisted of sub-economic houses, which were to be occupied on a tenancy basis, and "economic" homes which could eventually be bought by its occupants (Rajab, 2014:72). Residents would be faced with row upon row of repetitious apartheid-style housing. Despite being a massive suburban area, streets remained unnamed for decades. Address descriptions such as "House 4, Road 8, Unit 11" became the norm. Even though Chatsworth was a religiously active and devout community, it was notable that only a few places of worship were built. Despite the central role that religion played in the lives of these residents, Chatsworth was, in the words of community leader P. R. Pather, a "ghetto" (Rajab, 2014:72).

Chatsworth has developed into a living, breathing landscape of people and culture. Through the everyday experiences of residents, the continuities and discontinuities in residents' lives can be seen. This includes how the broader social practices and structural constraints affect them, as well as the internal divisions and conflicting interests (Desai & Vahed, 2013). Desai uses the metaphor of a container of limited utility to describe this township under apartheid. Residents had to travel to other parts of the city to earn a living, seek an education, or to access cultural and sporting facilities. These were sorely lacking in Chatsworth. Yet despite these disadvantages, Chatsworth remained unique (Desai & Vahed, 2013).

According to a study conducted by Anand Singh about substance abuse among the youth in Durban, the area of Chatsworth is somewhat a lower middle-class to mainly working class state-subsidised housing complex, developed to accommodate at least 250,000 people.

The problem of substance abuse in this area compared to wealthier middle class areas is considered to be broader and more visible. Singh informs that *"the norms of households arrangements currently consists largely of broken marriages, single parent families, ad hoc arrangements stemming from desperate situations among deprived people. Unemployment and poverty are endemic problems in Chatsworth and is understood to be the basis of the extensive problem of substance abuse in the area"* (Singh, 2013: 204). He further states that the relegated people of this area often tend to be reluctant towards assistance that community-based organisations offer in terms of counselling and rehabilitation. According to Singh's research, there is consensus among residents in Chatsworth that the problem is massive and increasing. If this problem is not acted upon with urgency, it could certainly lead to a catastrophe in time to come. In a random sample of individuals, Singh found that there was a positive unanimity to the question: *"Do you think drugs and alcohol are a problem in Chatsworth?"* The majority answered that the problem is either "very serious" or "beyond control," and that in their opinion, the ones most responsible for the drug and substance abuse were the distributors (Singh, 2013: 204).

3.2.2. Determining factors of Drug and Substance Abuse

In order to better understand the causes and the consequences of drug and substance abuse, a framework was developed by researchers. This framework is still evolving. The fundamental elements of this framework are risk factors and protective factors. The interplay between the two is what researchers believe to be the manner by which the causes and the consequences of drug and substance abuse during the social development of children can be understood (Brounstein & Zweig, 1999; Catalano, et al., 1996). The literature puts forth that a range of health and social problems, including drug abuse, can be predicted due to certain risk factors. Hawkins et al. (1992) provides a research-based discussion on the most common risk and protective factors, most applicable to the prevention of substance abuse. Preliminary applications of these frameworks have indicated that they have some applicability in the South African context (e.g. Morojele et al., 2001).

To support this framework, Brounstein and Zweig (1999) further demonstrate that there are five life domains that influence the relationship between drug use risk and protective factors, (figure 1). The five environmental or life domains that influence the individual at the core of this model are: society, family,

community, school and peers. The interaction between the risk and protective factors, both within and between the person and environmental realms, determines the level at which drug use occurs. The table in Figure 1 below, therefore, provides insight as to what factors need to be addressed in order for prevention programs to be successful.
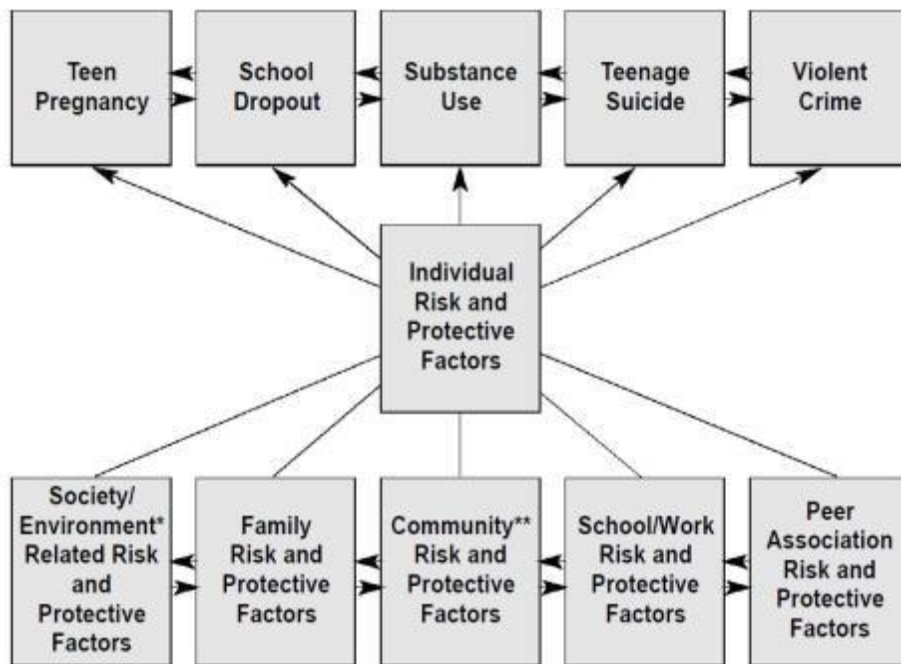

Figure 1: The web of influence: Drug use risk and protective factors (*Brounstein and Zweig 1999. P5)*

*Society/Environment: Refers to the total complex of external social, cultural, and economic conditions affecting a community or an individual.
**Community: Refers to the specific geographic location where an individual resides and to the conditions within that particular area.

Among these domains, the literature points out that the most common risk factors are found in community, school and family. The risk factors within these domains have proven encouraging toward drug use, availability of drugs, high levels of economic deficiency, lack of neighbourhood connection and community organisation, friends who participate in the problem behaviour, academic failure, family histories of the problem behaviour, and hostile family relationships. Furthermore, resulting personal behaviours are affected; raised degrees of withdrawal, recklessness, hostility, defiance, violent behaviour, poor performance at school, and so forth. The overall assumption here is that should an individual's lifestyle and environment be exposed to more risk factors rather than it being protective, then they are most likely or at a greater risk to fall prey to drug and substance abuse (Newcomb & Bentler, 1988). Some communities are characterised by certain conditions that place young people within those contexts at a greater risk for substance use than other communities (Obot and Saxena,

2005: 110). Researchers therefore postulate that drug and substance abuse would be curbed if the risk factors in a child's life were reduced.

Brounstein and Zweig (1999) however, have stated that the connection between risk factors and drug use is not linear. Not all children exposed to risk factors in their childhood will resort to the use of drugs or other problem behaviours. There are many high risk environments where children are brought up without having fallen prey to problem behaviours. The reason for this is that the lives of these young people have a higher presence of protective factors. Hawkins et al (1992) defines protective factors as being the positive, healthy aspects of a young person's life. These are the factors which act to provide more stability, thereby diluting the influence of the risk factors. According to Hawkins et al (1992) perspective, it is the affirmation of protective factors that makes overcoming drug abuse easier to achieve, rather than trying to alter the risk factors.
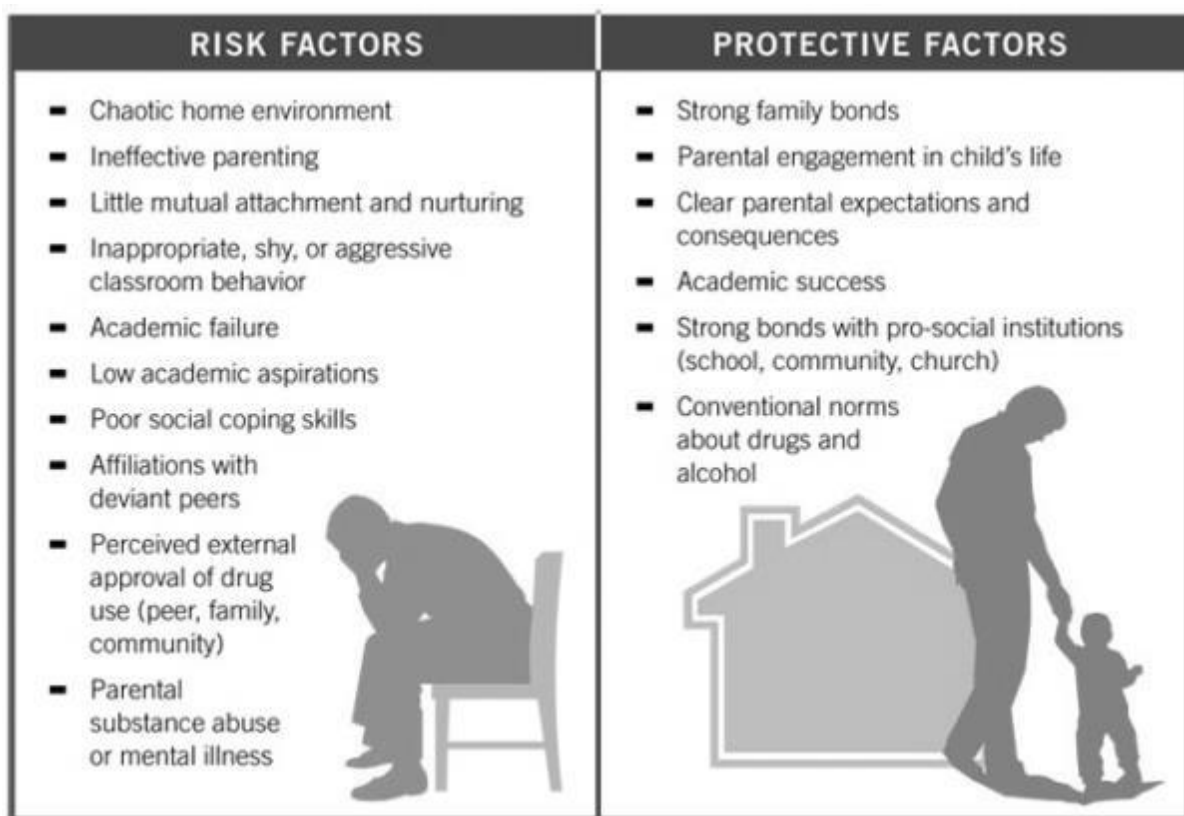
RISK FACTORS	PROTECTIVE FACTORS
- Chaotic home environment - Ineffective parenting - Little mutual attachment and nurturing - Inappropriate, shy, or aggressive classroom behavior - Academic failure - Low academic aspirations - Poor social coping skills - Affiliations with deviant peers - Perceived external approval of drug use (peer, family, community) - Parental substance abuse or mental illness	- Strong family bonds - Parental engagement in child's life - Clear parental expectations and consequences - Academic success - Strong bonds with pro-social institutions (school, community, church) - Conventional norms about drugs and alcohol

Figure 2: Examples of drug abuse risk and protective factors (*National Institute on Drug Abuse, 1997*)

Brounstein and Zweig (1999) reiterate that prevention and risk factors are not counterparts of the same coin. Like Hawkins et al (1992), they also concur that a more favourable approach would be to encourage and build on the positive elements in individuals and their environments. Past prevention

programs which focused on risk factors have been criticised for emphasising shortfalls. In the process, the victims were blamed regardless of the risk factors being beyond their control.

To generate further understanding, the following list enumerates some of the factors that researchers have come to associate with the drug and substance abuse among the youth.

3.2.2.1. Availability of drugs, alcohol and other substances

In South Africa, there is rarely a lack of accessibility to alcohol and illicit drugs. According to Parry and Bennetts, (1999), there are an estimated 200,000 illegal liquor outlets in addition to the legal outlets that abound. It is unfortunate that the Government's prohibition of minors (those under 18 years of age) to purchase alcoholic beverages is not strictly adhered to (Obot and Saxena, 2005: 110). As a result of the easing of border controls since the end of apartheid, illicit drugs have become more readily available within communities. Drugs being smuggled into the country have become less difficult to traffic through (Obot and Saxena, 2005: 110). South Africa has now joined the ranks of being one of the key transit points along with other major world destinations for smuggling drugs.

Today we have a greater variation in the types of drugs available, more sources from which to acquire drugs, more drugs at an affordable price, and a choice of narcotic products of varying quality. There is also evidence from drug seizure data, obtained by a city-based surveillance study (Parry et al., 1999), of an overall increase in the volume of drug sales in the market between 1996 and 1998. There are numerous informal reports of how dealers of illicit drugs systematically lure young people into a lifestyle of drug involvement. Their approach is to create an addict; one who will be their customer and perpetually dependant on the dealer for new supplies of drugs.

3.2.2.2.. Stressful living conditions

South Africans are characteristically stressed due to the country's housing difficulties, crime, poverty, unemployment and separation from extended families (Flisher and Chalton, 1998). It is possible that there is a bi-directional relationship between substance abuse and stress. Adolescents in various studies commonly report that their alcohol use is for stress relief. It is their means of dealing with their worries and problems (see, for example, Nkonzo-Mtembu, 1994).

According to a brief survey of substance use among adolescents in urban areas, conducted by members of the World Health Organisation in 2005, children living in relatively poorer communities

and/or households with less economic resources are at higher risk for substance use and other social problems (Obot and Saxena, 2005: 201). Along with these stressful living conditions comes a direct relationship with one of the protective factors (mentioned earlier by Brounstein and Zweig (1999)), known as family support. Family involvement is a very strong protective factor for a range of substance abuse, as well as perceived access to drugs (Obot and Saxena, 2005: 202).

3.2.2.3. Family, Peers, School and Community Support

The lack of parental supervision, infrequent involvement in their children's lives, family conflict, sexual or physical abuse, economic instability, and a lack of attachment to their children are many of the risk factors that may influence drug and substance abuse among individuals. These factors are often called low family bonding (Hawkins & Catalano, 1992).

Peer use, peer norms favourable towards use and peer activities conducive to use are major contributors to drug and substance abuse (Brounstein et al., 2001:10).

An individual's relationship and attitude towards their school environment is another risk factor. Many researchers believe that student-based risk factors develop when students are unable to achieve satisfactory results from their academic efforts (Brounstein et al., 2001:11). This lack of achievement creates a detachment to school and negatively influences these students' ability to set future orientated goals. A negative school environment is part of the characteristics linked to this domain; teachers, instructional methods, classroom management techniques, class size, student-teacher ratios, and educators' attitude toward students, all affect the environment in a particular school (Brounstein et al., 2001:11).

Community related risk factors refer to the lack of bonding or attachment to social and community institutions, or the lack of community awareness, or the tolerance of substance abuse and abusers, and insufficient community resources to support prevention efforts (Brounstein et al., 2001:11). According to Brounstein, community institutions like churches, boys and girls clubs or scouts can often provide individuals with opportunities to develop personal capacities and interact with prosocial peers in constructive endeavours (Brounstein et al., 2001:11).

3.2.2.4. Recreational facilities

Within urban environments, it is believed that there is a lack of recreational facilities for the youth which is both affordable and easily accessible. Initially the urban environments were designed spatially to

address the primary housing needs. It is most likely that the lack of positive leisure amenities, especially for economically deprived youngsters, can result in drugs and substance abuse (Wegner et al, 1999: 133).

3.2.3. Approaches to Primary Prevention

Hawkins et al (1992) state that in designing interventions for the prevention of drug use problems the focus needs to be on the possible positive effects of protective factors. In other words, programs ought to target those with the highest risk by their exposure to multiple risk factors. Where these programs cannot reduce the risks, they should investigate ways of improving the protective factors in order to buffer the risks that are difficult to change.

"Normal development throughout the life cycle is built around the successful achievement of specific developmental tasks. In adolescence, for example, the individual needs to achieve a stable and enduring identity, individuate from parents, establish patterns of sexual intimacy, and prepare for entry into the workforce, among other challenges" (Braverman, M. 1999. p6).

Brounstein and Zweig (1999) developed eight prevention programs, all of which target the youth demographic of the population. The range of youth selected for the study ranged from general to high risk groups. There were three unifying themes common to all eight of these prevention programs:

- Encouraging more caring and supportive relationships between the youth and their families, communities and friends.
- Encouraging a multifaceted type of intervention that is specifically tailored to the needs of the end users i.e. the youth.
- Reducing the onset use of drugs or reducing the risk factors, and/ or increasing protective factors, had a direct impact on future drug use.

In addition to Brounstein and Zweigs themes, the following are principles published in 1997 by the National Institute of Drug Abuse, to guide development of substance abuse prevention initiatives:

"Prevention programs should be designed to enhance protective factors and to move toward reversing or reducing known risk factors. Prevention programs should include skills to resist drugs when offered, strengthen personal commitments against drug use, and increase social ability (e.g., in communications, peer relationships, self-efficacy, and assertiveness) in conjunction with

reinforcement of attitudes against drug use. Prevention programs for adolescents should include interactive methods, such as peer discussion groups, rather than instructive teaching techniques alone. Prevention programs should include parents' or caretakers' to reinforce what the children are learning, such as facts about drugs and their harmful effects. Moreover, the intervention should promote opportunities for family discussions about use of illegal substances and family policies about their use. Prevention programs should be long term and should continue over the school career, with repeated interventions to reinforce the original prevention goals. Family-focused prevention efforts have a greater impact than strategies that focus on parents only or children only. Community programs that include media campaigns and policy changes, such as new regulations that restrict access to alcohol, tobacco, and other drugs, are more effective when they are accompanied by school and family interventions. The higher the level of risk for the target population, the more intensive the prevention effort must be, and the earlier it must begin. Programs should be age-specific, developmentally appropriate, and culturally sensitive" (NDIA, 1997: 12-17).

Although principle-based programming is debatable, it does encourage that prevention strategies should encompass a diverse range of factors and must relate to home, school, and community.

In most communities, substance abuse prevention programs tend to be treated on an ad hoc basis, and such disjointed approaches are likely to remain the same as long as this is the case (Adelman & Taylor, 2003:341). Therefore, there is the need to question how communities and policymakers can make such matters vital and fundamental. In this respect, a statement by Schaps and Battistich (1991) is worth quoting here: *"Prevention programs should attempt to create and maintain a positive social climate that facilitates socialization, rather than attempt to compensate for a prevailing negative social climate"* (Adelman & Taylor, 2003:345). This emphasises further that prevention programs should become an important part of the school curriculum. Prevention programs should be reflected in the overall practices, systems and environment of the school. The primary goal is to promote and encourage better personal and social development in a child's life (together with educational growth and achievement of academic skills) (Adelman & Taylor, 2003:345).

Adelman & Taylor also state that currently, due to prevention programs being so disregarded, both communities and schools still continue to function with an extreme lack of proper guidance about the most effective approaches. The consequences of all this can be seen in the lack of efforts to map,

analyse, and rethink resource allocation. In order for research and practice agendas of substance abuse prevention to be endorsed, policies need to place emphasis on prevention programmes.

3.2.3.1. Linking Schools, Families, and Communities

In formulating a way forward, new thinking and bolder directions are emphasised in order to relate to the deficiencies of substance abuse prevention efforts. Current and innovative trends can provide inspiration to create environments which promote the well-being of young people (Adelman & Taylor, 2003:346). Based on Adelman & Taylor's understanding, the following suggestions give bearing in how to address the problems associated with prevailing drug and substance abuse amongst young people.

"Substance abuse prevention is best pursued as an integrated part of a comprehensive, multifaceted range of interventions designed to address obstacles to learning and to promote healthy development. Secondly, comprehensive, multifaceted approaches are only possible if the resources of schools, families, and communities are linked together" (Adelman & Taylor, 2003:346). In other words, there must be a holistic approach. In order to tackle the issue of drugs and substance abuse, the approach must encompass social, political, economic, psychological, biological and cultural factors. With this approach, initiatives towards the prevention of drug and substance abuse can be designed recognising the wide range of causes. Therefore, preventative initiatives need to be multidimensional and broad.

3.2.3.2. Linking with Community Resources

According to Adelman & Taylor, when dealing with the concern of drug and substance abuse prevention, there is a great necessity to foster stronger connections between private community activities and the public to school sites. In light of this improvement of access to serve its patrons, organisations in the community have developed the concept of "*school-linked"* services. "*School-linked*" services are referred to as "*the coordinated linking of school and community resources to support the needs of school-aged children and their families"* (Adelman & Taylor, 2003:346). Successful "school-linked" projects have demonstrated the intent of cultivating results for families, young people and neighbourhoods through the connection of schools and its neighbourhoods. The aim of engendering school-community connections is to improve co-ordination between the two. This approach can sooner or later incorporate diverse platforms that further improve their connections to school sites. The aims of these projects, as put forth by Adelman & Taylor, are to:

"(a) Improve access to health services (including substance abuse programs) and access to social service programs, such as foster care, family preservation, and child care; (b) Expand after school academic, recreation, and enrichment, such as tutoring, youth sports and clubs, art, music, museum programs; (c) Build systems of care, such as case management and specialized assistance; (d) Reduce delinquency (preventing drug abuse and truancy, providing conflict mediation and reducing violence); (e) Enhance transitions to work/career/post-secondary education; (f) Enhance life in school and community, such as programs to adopt-a-school, use of volunteer and peer supports, and building neighbourhood associations" (Adelman & Taylor, 2003:347).-

Youth development initiatives encourage a view not only of being community centres where families can simply access facilities, but also as centres for wide ranging community activities, varying from learning to sporting activities.

3.3. Conclusion

Prevention programs can be successful if they can connect with people in the community on matters of high priority to them, including social relationships and individual capabilities. There is no single cause or a simple cure to drug and substance abuse. This is perhaps why its many related problems have continued to increase throughout many regions in the world. The resultant ills of drug and substance abuse is severe; deaths, increase in crime, broken or dysfunctional families, lowered levels of productivity, academic failure and so forth. The literature informs us that drug and substance abuse hinders both the individual and social development. It has also been noted that progress in the area of drug and substance abuse prevention and awareness is dependent on several factors. To reiterate, Hawkins, et al. (1992), programs should target those with the highest risk by their exposure to multiple risk factors. Where these programs cannot reduce the risks, they should then seek out ways to improve on the protective factors, in order to buffer the risks that are difficult to change. People, communities and institutions need to get involved in order to allow these factors to become a priority in communities, so that there is support for the prevention of drugs and substance abuse.

Chapter 4: Theoretical Framework

4.1. Introduction

This chapter aims at investigating how architecture can relate to sociology, and to social theories and concepts. Furthermore, it aims to summarise the practical ways of expanding on the built form in relation to the way in which we define society or communities. The findings of many social theorists have been employed to further expand on this concept of architectural sociology.

4.2. Social Theory and Architecture

The role of architecture has always been significant through history because it creates a physical frame of social life, and is also a symbol of social values and aspirations (Backovic & Masirevic, 2010:227). Architectural conceptions are influenced by social thought. Modernism is an excellent example of how social goals can direct the spatial planning of cities. Architecture's obligation is to be the catalyst for this social interaction. Through design, the creation of connected environments in the urban realm must come from knowledgeable decisions, so that they may useful to the community at large. In the development of an urban community, the conservation and improvement of areas of cultural identity are also vital, in order for people to relate to their neighbourhood. This in turn, creates an environment that residents can take pride in.

The relationship between architecture, society and theory is multifaceted. Architecture is a visible and physical structure, with an indelible daily impact on people. Architecture is a permanent stage of men's events (Backovic & Masirevic, 2010:228).

Sociologist Dr Heike Delitz asserts that Architecture is not just a representation or expression of a society, but rather something that makes an indelible difference within the social realm. Spaces are created for everyday living, and these spaces coexist with the people that inhabit them. Spaces can facilitate affects, movements, activities, interactions, beliefs and views. Rather than just acting as an object (passively), architecture acts as an instrument for social interactions, emotions and subjective motivations. It is in creative architecture that a society can begin to view itself through new eyes, and thereby perhaps more positively. Therefore, architecture can be seen as a medium through which society can foster stronger and more positive communities (Delitz, 2010).

The starting point of architectural sociology began with George Simmel. In his essay "*The Metropolis and Mental Life",* Simmel links self to space (Smith, R.W. & Bugni, V. 2006:125). He focussed on the city and how its intense social interaction, change and stimuli impacted on the individual. The city is

considered to enhance individual freedom. Yet at the same time, city dwelling also influences individuals living in that environment to become more reserved, impersonal and calculated - as a means of shielding themselves from the over stimulation (Smith, R.W. & Bugni, V. 2006:125). In Simmels view, the city and the self (or the place and the self) are inter-reliant. Simmel believed that if an individual's environment had to be fractured, this could impact on the individuals' behaviour. Those who feel isolation, or any form of alienation or emotional hostility, will in turn adapt their behaviours and performances in response to their environment. Psychologist William James also expanded on this theory of the self and place. He labels it as the *empirical self,* and uses three components of self to define this (Smith, R.W. & Bugni, V. 2006:125):

1. *"The social self"* - refers to how an individual is observed and acknowledged by others.
2. *"The spiritual self"* - refers to an individual's inner self.
3. *"The material self"* - refers to how people, places and tangible objects influence the individual.

The reference that has been made to tangible objects could be extended to that of architecture and the natural environment.

E. Doyle McCarthy also put forth suggestions to logically explain further the relationship between people and architecture. He came up with four summarising propositions: *"(1) physical objects play a central role in constituting and maintaining the self; (2) physical objects provide the self with a stable and familiar environment; (3) the acts of touching and grasping physical objects play a central role in our reality construction and maintenance; (4) the self's relationship with the physical world is a social relationship"* (Smith, R.W. & Bugni, V. 2006:126). Christopher Day defined the way in which the built environment allows communities to come alive as expressions of self. He strongly believed that architecture should be the place where human emotions and *self* can be nourished by physical shapes, forms, appearances and spaces (Smith, R.W. & Bugni, V. 2006:126). People express who they are through the home environment and through certain objects. For example, children who construct their own tree houses are displaying the ability to express their creativity and mould their environment to suit their *self*. The tree house therefore becomes an expression of their self. In turn, the tree house becomes the means by which they too learn more about themselves (Smith, R.W. & Bugni, V. 2006:126). A similar interplay occurs when we start to define ourselves through clothing, houses, furniture, or even in choosing the town we live in. In essence, we are creating and establishing an identity that in turn teaches us more about ourselves. The lesson here for architects, is that buildings should be designed within the context of being an expression of the users, rather than in abstraction,

and devoid of personal meaning. Architecture has the capacity to connect people. By projecting ourselves to others and by our interpretations, these places and spaces can reflect who we are.
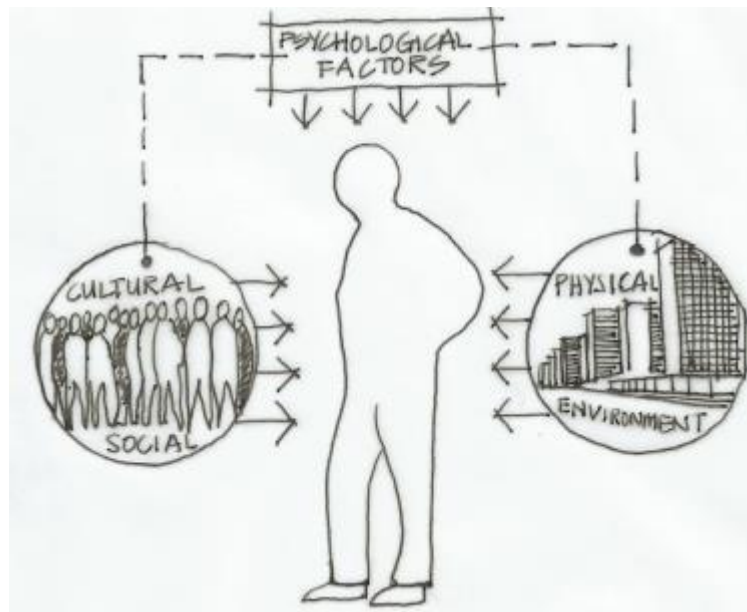

Figure 3: sketch illustrating how the individual is mutually influenced by the social and physical environments (Source: *by author)*

4.3. Architecture is Regulatory

In recent studies, a reoccurring concept is the notion of how architecture can act either as a regulatory force or simply as a guiding force (Katyal, 2002). This idea of regulation refers to the way in which architecture can influence and affect behaviours. The following subsections explain further.

4.3.1. Architecture can affect how people interact

Social interactions can be encouraged or discouraged by our built environments. For example, hallways can discourage social interaction, whereas circular spaces or rooms tend to encourage it (Osmond, 1957). More commonly recognised is the way in which front porches or stoeps, placement of drinking fountains and common stairwells, can facilitate social interaction. A good application of where architects can encourage more social interaction is by the creation and design of open plazas. The city of New York typically bargains with developers to create these open plazas, despite the controversy of the under-utilization of earlier plazas and open public spaces. William Whyte began to research what made successful plazas, and came up with interesting observations. He found that in order to make these spaces successful, plazas needed to incorporate more areas conducive to relaxation and leisurely activities. It needed to be an area that functioned as a release space, amidst the busy lifestyles of work, school and family. With extended examination, Whyte documented that

successful plazas were those equipped with seating facilities, food stands, decorative features like water fountains and visible leisurely activities to watch (Whyte, 1988). It was through the formulation of Whyte's findings, that plazas became increasingly popular as spaces that encouraged social interaction (Gifford, 2002).

Applied on a bigger scale, these same influences for social interaction were introduced through the "*New Urbanist Movement*". This movement sought to address neighbourhoods and cities that would encourage more social interaction through its urban development (Katz, 1993). The desired outcome was to initiate the makings of building stronger communities (Talen, 2002).

4.3.2. Buildings can shape people

Architectural scholar Thomas Markus was intrigued by the notion of the power that buildings possessed over people. This led him to produce a very descriptive history of buildings, and a commentary of how these buildings have shaped the people around them. He used detailed examples of hospitals, schools and other public buildings that have influenced and shaped people (Markus, 1993). His research was heavily disciplined by the observation and architectural guidance reflected in other theories and philosophies. He surmised that buildings affect our freedom. Buildings can control the spatial capacity, and also govern their interaction through a set of rules, programme or limit encounters. Buildings notably define people's paths of movement, as well as their visual paths. The overall conclusion Markus postulated was that both the built form and the people who inhabit it will determine who does what, when, with whom and will be observed by whom.

4.4. The Built Environment - Connecting and Strengthening Communities

A sense of community is engendered when people receive care and feel commitment towards a group (Butterworth, 2000). A sense of belonging and social connection can also be linked to this. A resultant physical health and mental wellbeing amongst individuals can be attributed to this sense of community and belonging, within places where people commute, work and live (Ogunseitan, 2005). Comfort, security and confidence are established through the adoption of this notion of belonging. This can in turn encourage residents to be more physically and mentally involved in their neighbourhood, thereby further generating an increase in social connectedness to others (McNeill et al. 2006; Michael 2006). Incidental interactions can result when individuals are "out and about," or during day to day interactions when people commute together, live in close proximity or work in common spaces during synonymous times. The importance of promoting interaction within communities is to enhance caring and connection to one another, harnessing perceptions of safety. While

decreasing feelings of isolation or loneliness, all of these contribute towards positive mental health (Maas et al. 2009; Odgers et al. 2009).

Extensive research and reviews were conducted by the Healthy Built Environments (HBEP) with regards to the benefits of strong and connected communities. The Healthy Built Environments Program was developed at the University of South Wales. They discovered that social interaction, community empowerment and a sense of community are all related to the well-being of individuals residing in that community. They sourced out and reviewed other scholastic literature to develop a deeper understanding of how the built environment can be managed, in order to support the many community related health factors (HBEP, 2011: 65).

4.4.1. How can the Built Environment Connect and Strengthen Communities?

The best way to connect and strengthen communities is to encourage day-to-day interactions between people, their environments and nature. Interactions like this can take place on streets, within buildings and in safe public spaces which are easily accessible, responds well to its cultural context and is visually pleasing. This notion of encouraging community connectedness should not be limited to just residential neighbourhoods or its walk-able structure, but it should also be applied to employment surroundings, commercial centres, recreational facilities and mobility amenities like roads, footpaths and public transport. Visibly demarcated cycling routes or public transportation nodes increase the perception of safety for its users, thereby enhancing community connectedness.

According to HBEP, a community is not mono-dimensional or monolithic. Instead, a community is a complex interweaving of its cultural and socio-economic demographics. That which works for one community will not necessarily work in another community. A community's specific locality, time and demographics characterise each community separately, and prescribes the way in which a community should be developed (HBEP, 2011: 65).

To put forth this notion of strengthening communities, the HBEP developed the following key factors that promote community connectedness through the built environment (HBEP, 2011: 66).

4.4.1.1. Interaction in Open Spaces

The location and treatment of green open spaces play an important factor in encouraging interaction with the built environment. Both the contact with nature and the contact with community should be encouraged. An environment lacking nature can have a negative impact on the quality of life of its

residents. Unexpected meetings with community can take place anywhere. Designing areas that are safe and welcoming around residential blocks or facilities can encourage casual interactions. These casual and serious interactions become the building blocks of a community. A typical case in point is the seating area at public-transport stops (HBEP, 2011: 66). The HBEP reiterated what William Whyte put forth regarding the use of plazas, and how this encouraged gathering and interaction between people in the midst of home, work and travelling. The HBEP did however state that the design of these spaces are subjective and cannot always be generalised. The design needs to relate to its primary users and accommodate their specific needs. Teenagers for example would require a different space than the elderly would, one that facilitates opportunistic interaction (HBEP, 2011: 69).

Figure 4: sketch rendition of interaction in open spaces (Source: *http://sketchup-ur-space.com/dec11/Quick_Drawings_for_Parks_and_Open_Spaces.html)*

Figure 5: sketch rendition of interaction in open spaces (Source: *http://sketchup-ur-space.com/dec11/Quick_Drawings_for_Parks_and_Open_Spaces.html)*

4.4.1.2. Community Gardening for Interaction

Community gardens (figure 6) are conducive to both casual and planned interactions. These spaces can help encourage individuals to integrate with their community, whilst also maintaining their contact with nature. A keen example of this is the Monarch Garden in Albemarle, North Carolina. Monarch is an establishment that assists people with intellectual and developmental disabilities, mental illness and substance abuse challenges. They initiated a project to use community gardens for the benefit of their patients (HBEP, 2011: 66). Through their investigation and research, the HBEP observed that learning activities such as tending to vegetable gardens or practicing the habit of conservation could be very beneficial towards the health and well-being of a child (HBEP, 2011: 70). Facilitating incidental interactions with nature and each other through the environment can support good mental health.
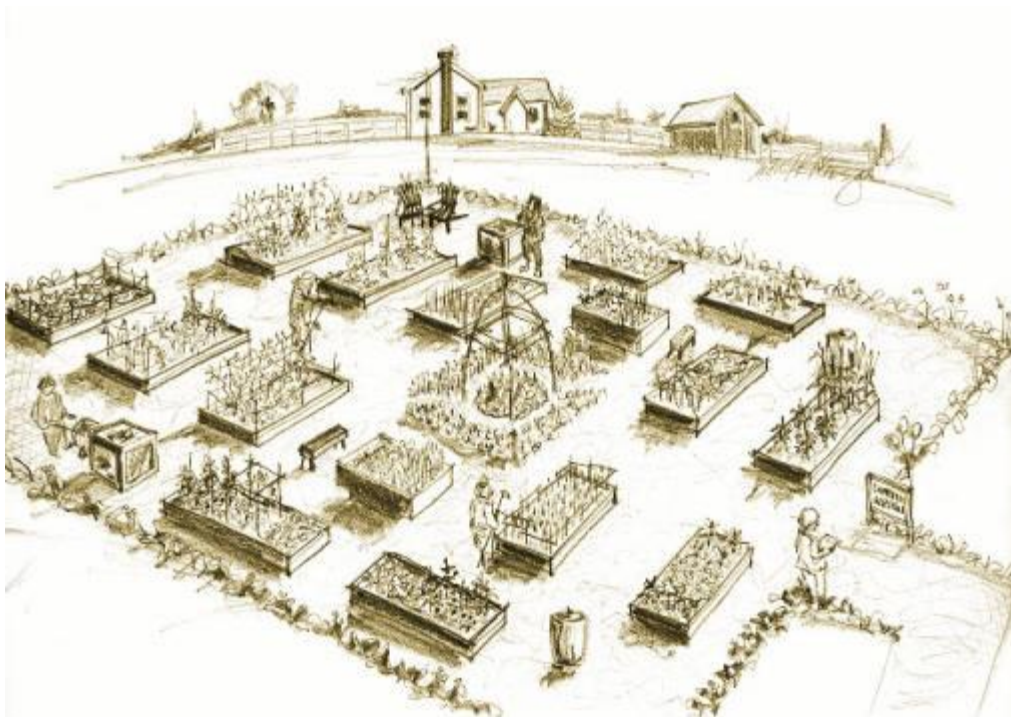

Figure 6: design sketch for community garden implemented in the Monarch Garden
(Source: *http://www.gracefulroots.com/monarch-community-garden)*

4.4.1.3. Interaction on Streets and in the Neighbourhood

Both the macro scale development of communities and the micro scale development of buildings itself can influence incidental interaction on streets and in neighbourhoods (figure 7) (HBEP, 2011: 71). These interactions are fertile grounds for encouraging a connected network within a community. The greater the opportunities there

are for interaction, the greater the chance of creating caring and lasting connections in the community (HBEP, 2011: 71). Research shows that encouraging movement along walkways and streets can boost physical activity, and support the increase of social interactions, whilst discouraging feelings of disconnectedness and isolation (HBEP, 2011: 71).

Figure 7: sketch rendition of interaction on street edges (Source: *http://sketchup-ur-space.com/dec11/Quick_Drawings_for_Parks_and_Open_Spaces.html)*

4.4.1.4. Safety

Although a sense of community and social interaction are determinants of health, studies advise that individuals will not interact or feel a sense of belonging in a community they observe to be unsafe (HBEP, 2011: 75). HBEP suggests that public places of interaction should optimise on good visibility, functionality and approachability. Buildings should be welcoming and clearly visible. The built form should foster an openness and natural surveillance. Access points should be clearly visible. Natural surveillance should occur on the streets and between buildings (HBEP, 2011: 75). The evolution of communities in the built environment will lead to a reduction of crime and a strengthening of the community. This plays a crucial role in social development.

4.4.1.5. Education

The built environment can encourage organised or ordered social interaction by reducing uncertainty in opportunities, and by educating communities about interactive norms. This is mostly important in unfamiliar or new surroundings, such as common pathways or community gardens (HBEP, 2011: 77). When people know how to conduct themselves in a public space, the chance for friction between users is minimised. Opportunities for positive and natural interaction is

enhanced. HBEP explains that this can come about through careful placement of signage, facilitation of educational campaigns, and the provision of legible built design (HBEP, 2011: 77).

4.4.1.6. Participation and Empowerment

The involvement of community in the built environment can be very beneficial for interaction and psychological well-being. Involvement can foster custodianship and foster a sense of empowerment. Participation can be maintained and promoted in the built environment through governance (HBEP, 2011: 78). HBEP states that to build on community participation and empowerment, designers need to: (a) engage community members early in the planning process to accommodate their ideas about their local area; (b) liaise with young people and children when planning new development areas or urban renewal projects (HBEP, 2011: 78).

4.5. Conclusion

Architecture and its built environment is very much entwined with our social environments. We cannot separate them. Through the theory of architecture and sociology, the lesson to be learnt by architects is that buildings need to be designed to address expressions of the users, and cannot be devoid of personal meaning. Architecture has the power to connect people and to facilitate us projecting ourselves to others. By our interpretations, these places and spaces can reflect who we are. Through the regulatory nature of architecture and the built environment, architects are able to strengthen and build communities more positively. The possibilities of achieving this lies in the ways in which we develop a connectedness and foster interaction amongst people in their communities. The anticipated outcome is more positive behaviours and attitudes amongst individuals.

Society cannot be altered by architecture alone; only people in a holistic configuration can bring about significant change. As architects, our responsibility is to develop and provide more meaningful architectural environments to those living on society's margins. The social theory of spaces establishes that the built environment is the tool and platform that allows for the manifestation and acquisition of a vast range of human interests.

<div align="center">**Chapter 5: Precedent studies**</div>

5.1 Introduction

The following chapter reviews key precedent studies in dealing with community and youth orientated centres. The precedents illustrate a wide range of issues and opportunities that arise when designing with youth in mind. An evaluation of precedents can help us understand the dynamics needed to design for youth in the proposed intervention.

The various precedent studies will be critically analysed against the various theories and concepts discussed in previous chapters. The analysis of the various precedent studies will allow for conclusions to be drawn. This will play a vital role in the design intervention of the proposed Youth Centre for Westcliff, Chatsworth.

5.2. The Ashland Youth Centre - Community Participation and Empowerment

Project Description:

Architects: RossDrulisCusenbery Architecture, Inc.

Location: Alameda County, Ashland, CA

Area: 31,000 sq. ft. (2,880 sq.m)

Project year: 2012

Background:

Similar to the community of Chatsworth, the East Bay community of Ashland faced a lack of services and facilities for the youth to engage in. Community leaders (city officials, architects and engineers) together with a group of teenagers volunteered to work together to establish a way forward as to what key services and facilities could benefit and encourage recreational, social, health and economic opportunities in their community. According to the Architects, the end result is a pure reflection of what the community needed. The involvement of community in the built environment can be very beneficial towards interaction and psychological well-being. The precedent strongly relates to the theoretical framework put forth earlier on the strengthening and connecting of communities. It fosters custodianship and a sense of empowerment (HBEP, 2011: 66).

Figure 8: Vibrant night image of the Ashland Youth Center, with its checkered façade. Its expansive glazing signifies openness and transparency to the public. (Source: http://aiare.org/design_awards/ashland-youth-center/)

Site:

The site is situated on a commercial zone, adjacent a school and is in close proximity to residences. The site also sits directly within the new Holland Park recreational open space. The youth centre acts as a link between the two immediate contexts: commercial highway and Neighbourhood Park, addressing both equally.

Figure 9: Conceptual site plan illustrating the building's spatial relationship to its context. (Source: http://aiare.org/design_awards/ashland-youth-center/)

Design Considerations:

The two storey building accommodates multi-use spaces for youth-oriented programmes. These programmes include educational programs, job-training, counselling and mentoring. The accommodation in the building (figure 10/11) also includes provision for a health services clinic, a day care centre, café, library, multimedia centre, a dance and aerobics room and space for arts and crafts. The pattern of the commercial buildings in the area is what motivated the orientation and massing of this building. The adjacent park environment encouraged the spatial experience of this building. The building is designed to be more in harmony to the flow and openness of the park.

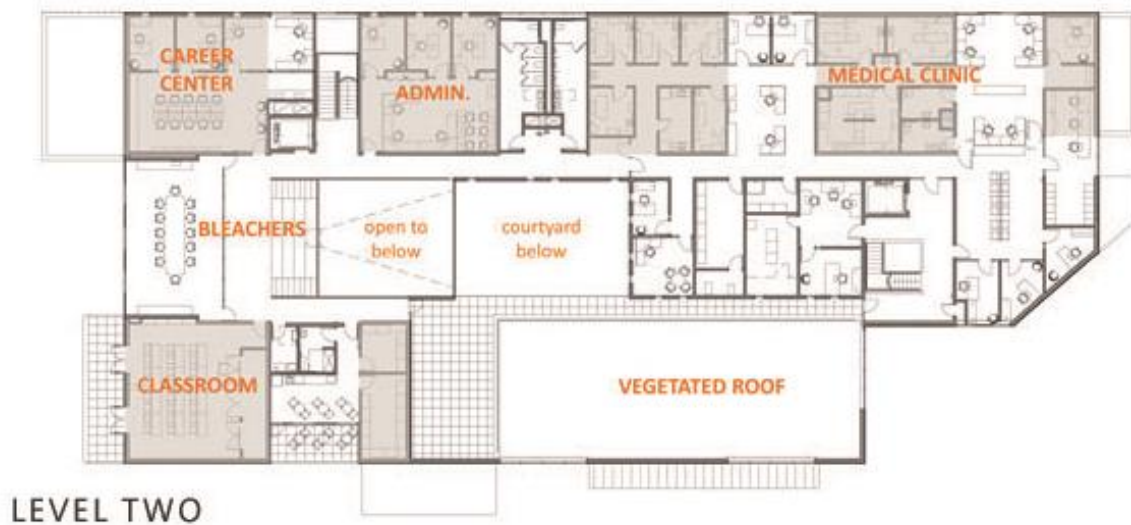Figure 10: Ground floor layout (Source: http://aiare.org/design_awards/ashland-youth-center/)

Figure 11: First floor layout (Source: http://aiare.org/design_awards/ashland-youth-center/)

Figure 12: Design perspectives massing of the building relative to spatial organisation within the building (Source: http://aiare.org/design_awards/ashland-youth-center/)

The theoretical framework referred to the way in which the building can help to shape people (Markus, 1993). The building can affect our freedom. Buildings can control people's interaction through a set of encounters, by defining their paths of movement as well as determining their visual paths. The design of this building is a prime example of this. The design accentuates the use of openness, transparency and flexibility between its various functions. The result is a public facility that promotes exploration, social connectivity and encourages adaptability.

Concurrently, the project team collaborated closely to ensure that a more sustainable design and construction was achieved. The design outcome was a combination of a vegetative roof, porcelain tiles and expansive lengths of energy-efficient glazing. The interplay in the façade between the glass and solid panels was designed to form a checkerboard pattern, which facilitated filling the interior with natural light, and giving this two-story building a higher sense of scale.
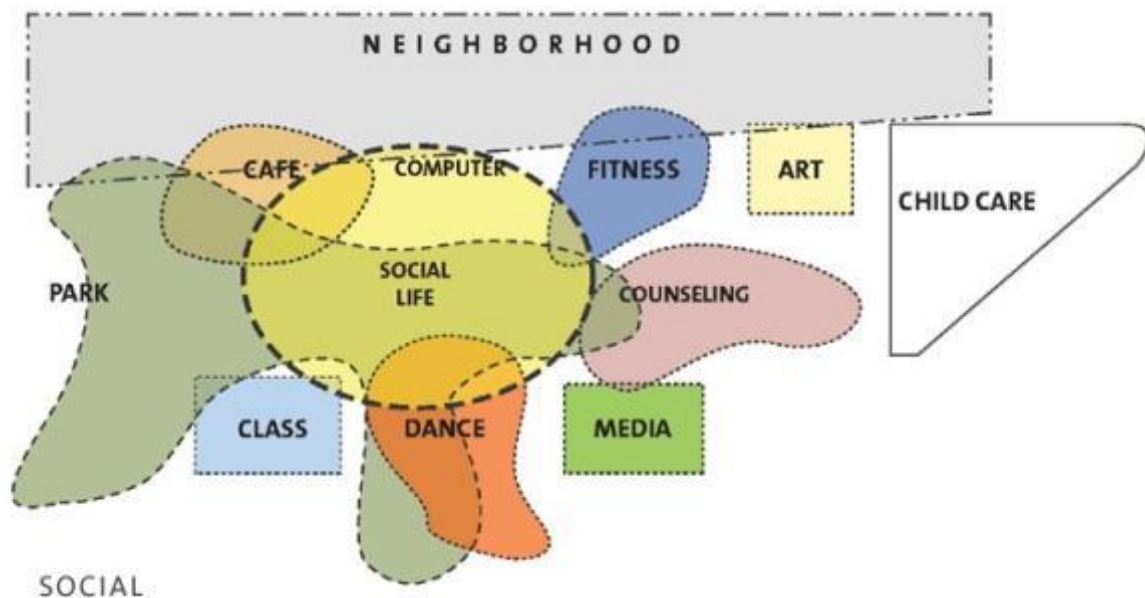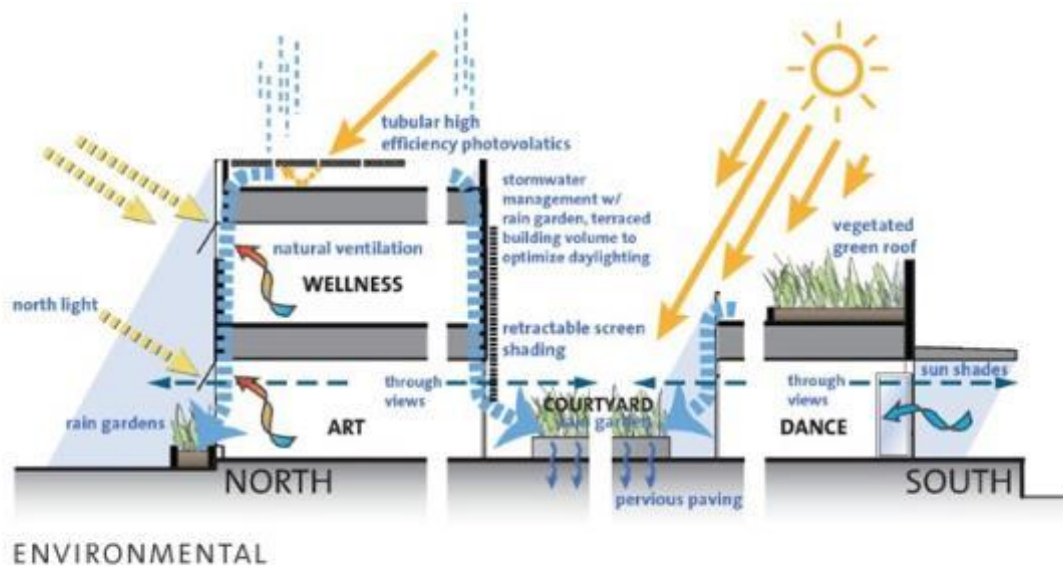
Figure 13: Diagrams illustrating social spaces relating to environment and sustainability (Source: http://aiare.org/design_awards/ashland-youth-center/)

Concluding rationalisation of precedent:

- Community participation and empowerment: This building contains a wide range of facilities that house its activities. These facilities were exclusively informed by its end users – the youth of that community. This is a successful response to how the built environment can be a medium for social positivity (Delitz, 2010). In order to encourage a

sense of empowerment and community ownership, the moulding and design of this building was informed by community participation, supporting interaction and psychological health.

- Connecting and strengthening community: The spaces are arrayed around a central courtyard. This allows for spaces to be flexible, and to shift easily between indoors and outdoors. Dance studio users, for example, can extend their class into an impromptu performance space with outdoor seating simply by opening a set of folding doors. The building also connects and extends outwards to a community park. The green open space has a skate park, a playground and ample amount of lawn space. The built environment can offer a sense of community by facilitating everyday interaction with people, their built environments and nature.
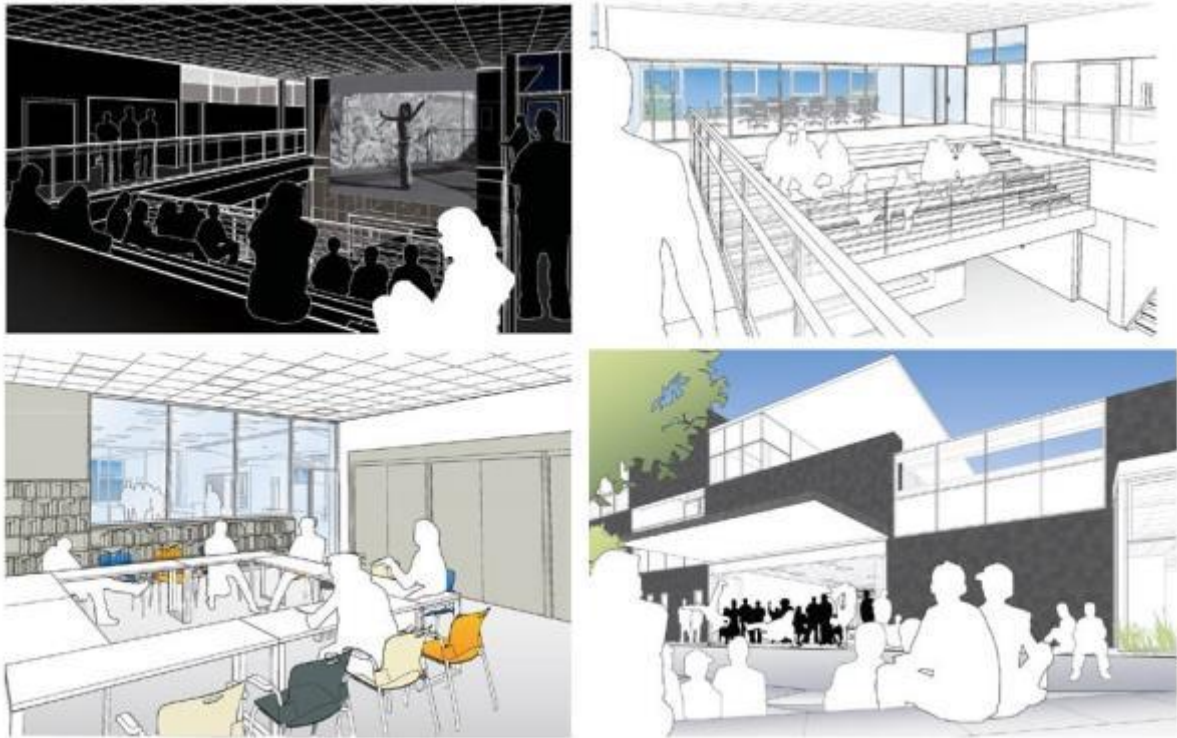

Figure 14: Conceptual perspective of flexible activity spaces that encourages more social integration, connection and community building (Source: http://aiare.org/design_awards/ashland-youth-center/)

5.3. The Lighthouse Young People's Centre – Strengthening and Connecting Communities

Project Description:

Architects: Associated Architects

Location: 100 Alma Way, Birmingham

Area: 1,930 m²

Project year: 2013

Background:

The facility was designed for the Birmingham Youth Service. The MyPlace programme provided funding to develop a series of world class youth facilities for young people in the disadvantaged areas of Birmingham.

Figure 15: Image of the iconic lighthouse young people's building in Birmingham (Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)

The MyPlace programme is a collaboration between community organisations working in conjunction with the Birmingham Youth Service to promote youth partnerships that overcome local limitations, celebrate diversity, challenge gang affiliation, and deal with the local struggles of their neighbourhood. The local youth members were consulted extensively and were involved throughout the design process. Once again we note that the involvement of community in the built environment can be very beneficial to garner interaction and psychological well-being. The precedent relates strongly to the theoretical framework put forth earlier on the strengthening and connecting of communities. It fosters custodianship and a sense of empowerment (HBEP, 2011: 66).

Site and Design Considerations:

The site has a very robust visual presence in the area. It overlooks a prominent route into the Birmingham CBD. The ground floor of the building consists of a combination of accessible "public" spaces, both informal and flexible. These spaces include group study rooms, computer rooms, social areas, a cafe and a counselling centre. More dedicated types of accommodation are located on the storeys above. Those spaces include a 4-court sports hall, which incorporates performance and conference uses, a dance studio, changing facilities and music rooms.
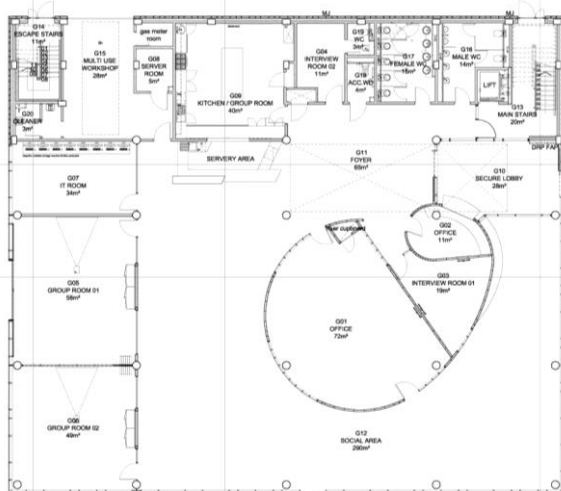

Figure 16: Ground Floor Layout

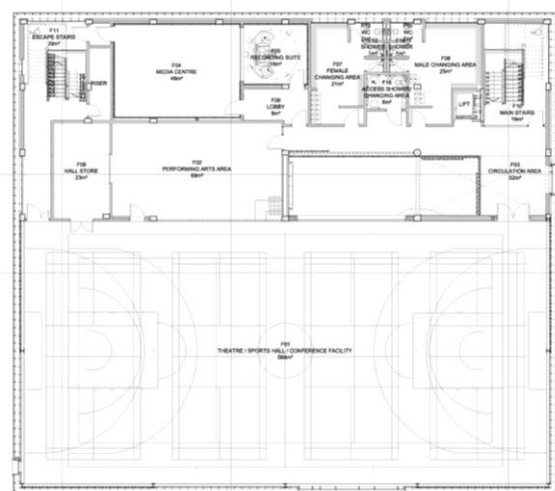(Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)

Figure 17: First Floor Layout

(Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)
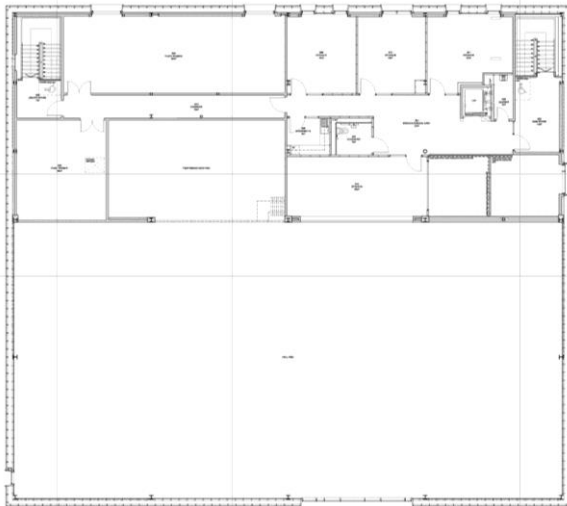
Figure 18: Second Floor Layout
(Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)
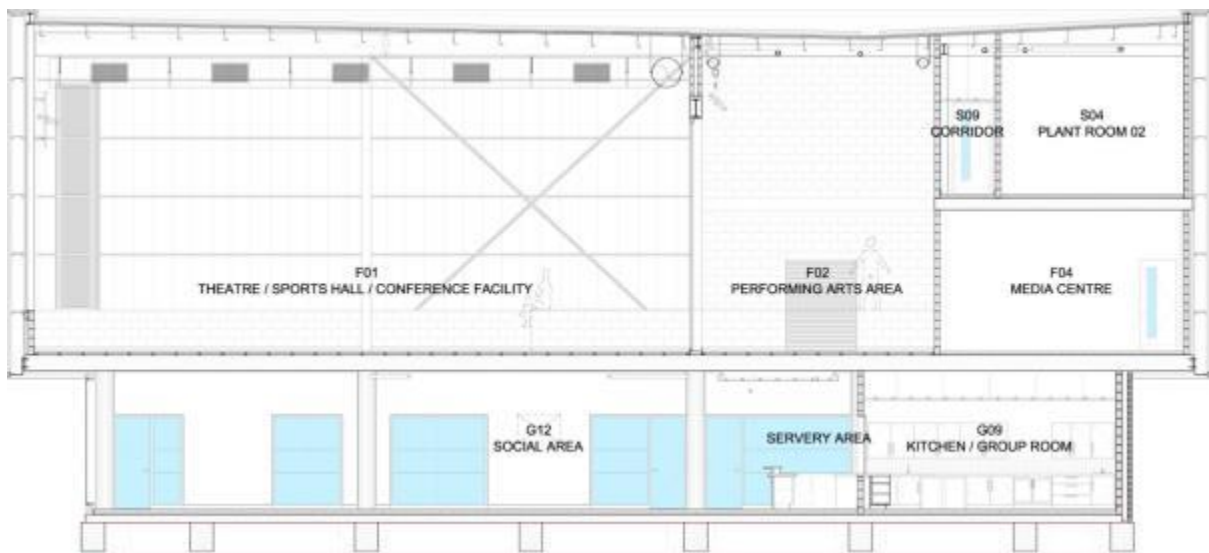

Figure 19: Section illustrating the overlaying of social gathering and interaction spaces. (Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)

The façade is a semi-transparent coloured cladding, which allows the sports hall to make use of natural light in the day, and offers a strong vibrant presence in the area. At night, the use of feature LED lighting allows The Lighthouse to become an icon within the community.

Figure 20: The Lighthouse as an iconic landmark within the community (Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)

Figure 21: Interior images of spaces encouraging social interaction and engagement amongst the youth in the community (Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)

Figure 22: Interior images of multipurpose sports hall encouraging social interaction and engagement amongst the youth in the community (Source: http://www.archdaily.com/330882/the-lighthouse-young-peoples-centre-associated-architects/)

Further rationalisation of precedent:

- Community participation and empowerment: Similarly to the previous precedent, The Ashland Youth Center, this building is home to a range of activities and facilities that where exclusively informed by its end users – the youth in the community. This is a successful response to how the built environment can be a medium for social positivity (Delitz, 2010). The involvement of community in the built environment can be very beneficial towards interaction and psychological well-being. It can foster custodianship and a sense of empowerment. Participation can be maintained and promoted in the built environment through governance.

- Social Interaction: The building offers a combination of relaxed, formal and flexible spaces that encourage the youth to gather and socially interact with each other. This helps to facilitate healthier bonds between young people in the community and encourage exchange of knowledge and learning. As a building for young people, the design and aesthetics of this building is vibrant and powerful. The aesthetics and its vast amount of activities commands the attention of its users, and thus promotes gathering and interactions to occur.

5.4. The JDS Youth Centre – Promoting Social Interaction

Project Description:

Architect: JDS Architects

Location: Lile, France

Project area: 6,980 m²

Project year: 2011

Background:

The JDS Youth Centre reflects its commitment to the younger generation. The project developed from the notion of creating an urban catalyst that could accommodate three distinct typologies on a triangular site – a youth hostel, kindergarten & offices.

Figure 23: *Image showing the raised corners for public gathering and linking the indoor to outdoor.* (Source: http://www.designboom.com/architecture/julien-de-smedt-jds-architects-euralille-youth-centre-lille-france-11-17-2015/)

Design Considerations:

The raised corners of this iconic building creates a covered public gathering place, which integrates the building with its surrounding environment and its passers-by. The youth hostel and kindergarten are each enclosed in their own wing of the triangle. However, they still contribute to the community

atmosphere. The three sections of the triangular building creates a massive inner courtyard. Each section has a roof that serves as an essential part of its sustainability. The kindergarten roof has a vegetated garden with a grassy play area surface. This helps to cool the building. The youth hostel has walk-out balconies made of recycled timber. The roof above the office section is fitted with solar panels which help to supplement powering the electric utilities of the building. Floor-to-ceiling windows in the offices also permit for natural light and ventilation to permeate the building.

Figure 24: *Perspective showing the massive courtyard surrounded by the three sections roofed to feature sustainable design.*
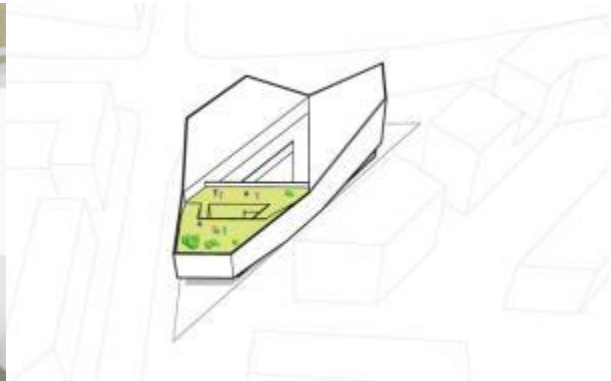(Source: http://jdsa.eu/lil/)

Figure 25: *The kindergarten roof is a vegetated garden area with a grassy play surface that helps cool the building.*
(Source: http://jdsa.eu/lil/)

The architects placed a typology in each point of the triangle to encourage maximum privacy while still keeping an intimate and continuous space. The three functions are organised around a garden, which acts as a place of tranquillity in the center of the bustling building. The elevating of the mass at the corners, activates, connects and engages the neighbouring public spaces. This accentuates the connection from the outside to inside of the building.
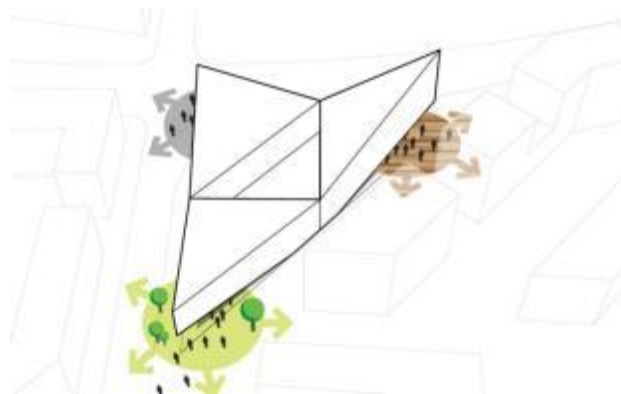

Figure 26: *Conceptual drawing showing the raised corners for public gathering.* (Source:
http://jdsa.eu/lil/)

Rationalisation of precedent:

- Social Interaction: The building offers spaces that encourage the youth to gather and interact socially with each other, and with the surrounding community. This helps to facilitate healthier bonds between the young people of the community, and encourages an exchange of knowledge and learning between all community members in a safer well-structured environment. The elevated edges of this building actively supports and facilitates community activities and interaction. It reflects as a good example of how to promote connections between the youth and the community in a safe environment, thus strengthening the community as a whole. Social interaction is fundamental to human development. Thus, spaces that provide for social interaction fosters a sense of identity and belonging.

- Resourcefulness: The sustainability of the building through organised interactive spaces like the vegetation garden, becomes a model that educates the community to be resourceful and self-sufficient.

Chapter 6: Case study

6.1. The Chatsworth Youth Centre, Durban

Project Description:
Architect: Sue Clark Architects
Location: Chatsworth, Durban
Project area: 6,000m²
Project year: 2003

6.1.1. Project Background

In 2000, 13 children lost their lives in a tragic incident at the Throb nightclub in Chatsworth. This catastrophe shocked the community and attracted widespread attention from across the country. This incident resulted in the outpouring of support and aid for the community of Chatsworth. The then-president Nelson Mandela, acknowledged that there was a need for community intervention amongst the youth. And to this end, he proposed that a Youth Centre be constructed in Chatsworth. The main intention was to provide a Centre that encouraged more positive activities for the young people of the area.

6.1.2. The Brief

1. An Entertainment Centre for the youth; pool tables, music studios, coffee shop & counselling facilities.
2. A media Centre; accessible to Youth and staff (to generate income to sustain the Centre).
3. Indoor and outdoor sports facilities; basketball, netball, volleyball, tennis, etc.
4. Administration facilities; for N.G.O's, child welfare organisations and counsellors for youth (to assist victims of HIV-AIDS, rape etc.). These organisations would generate funding to support the Youth Centre.

6.1.3. The Site

The site (figure 26) is situated on Chatsworth Circle, quite close to where the original Throb nightclub disaster took place. The site is higher up than the surrounding amenities, and overlooks the centrally located Chatsworth Shopping Centre, the historical R.K. Khan Hospital, Chatsworth Police Station and municipal buildings. The site descends to a 4m high cliff face (figure 27), which becomes the natural

demarcation of the lower end of the site. The primary pedestrian access is off the lower end of the site, whilst the primary vehicular access is through the top of the site.
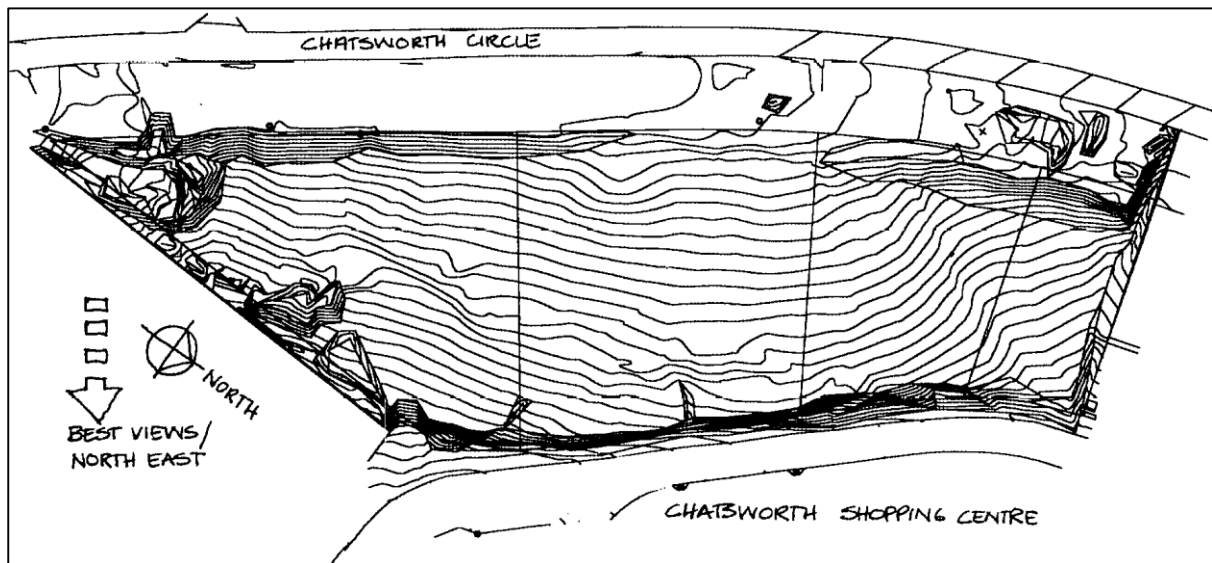

Figure 27: *Plan showing the hilly site* (source: http://media.wix.com/ugd/9c5554_b659fe3121b44780bedc64bf935a83ba.pdf)
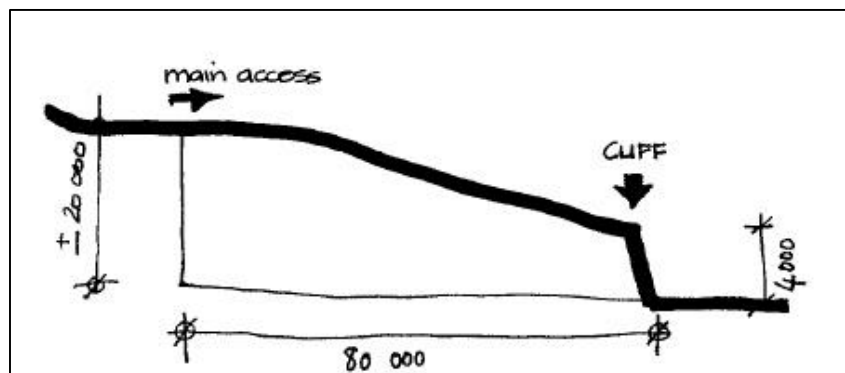

Figure 28: *Site section illustrating 4m cliff and main access (*source: http://media.wix.com/ugd/9c5554_b659fe3121b44780bedc64bf935a83ba.pdf)

6.1.4. Design Considerations

Principal architect Sue Clark explained the importance of not designing the youth centre to resemble a school, to prevent children from feeling obligated to use it (Reilly, C. 2004: 27). Rather, the facilities should aim to attract them and draw them in. Through much research and investigation, the design team concluded that the Centre should provide entertainment facilities such as pool tables, arcade games, computers and sporting amenities. They felt that it should be a well-lit and light-filled environment, in which youth could experience a sense of freedom in a "cool" place in which to "hang out." The main objective of this youth centre was to create an alternative venue for young people, and

act as a deterrent to "frequenting clubs and loitering around shopping centres." In addition, the centre had to also encourage educational and counselling activities to support a learning culture (Reilly, C. 2004: 27).

6.1.5. Spatial Organization

The main distribution space as depicted in figure 28, is surrounded by attractive activities like sporting facilities, gymnasium, and the entertainment / games area. The resource centre and counselling clinic are placed further away. This layout ensures that people who visit the centre are firstly exposed to the livelier and more eye catching activities, whilst seeing the lesser attractive resources available at the centre on their periphery.
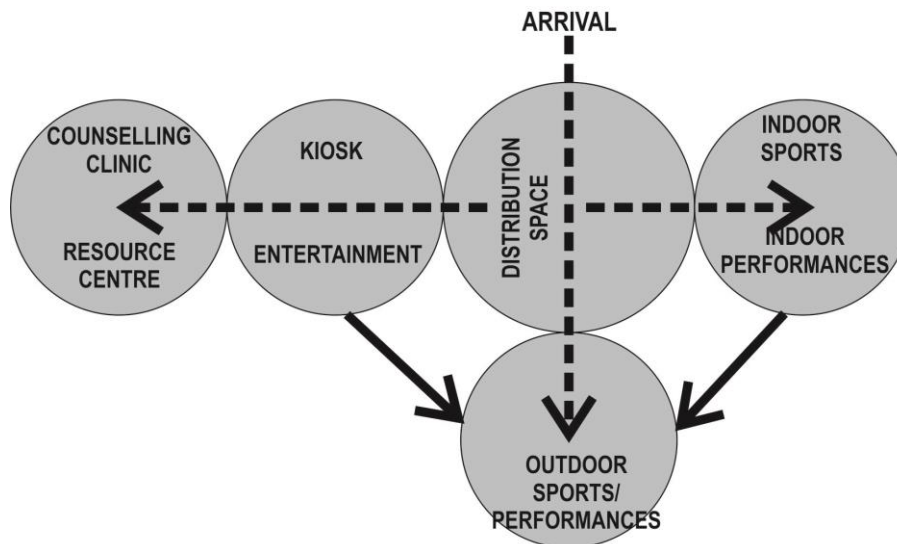

Figure 29: *Spatial organisation diagram (*source: by author)

Figure 30: *Spatial organisation relative to site (*source:

http://repository.up.ac.za/xmlui/bitstream/handle/2263/24781/04precedents.pdf?sequence=5&isAllowed=y)
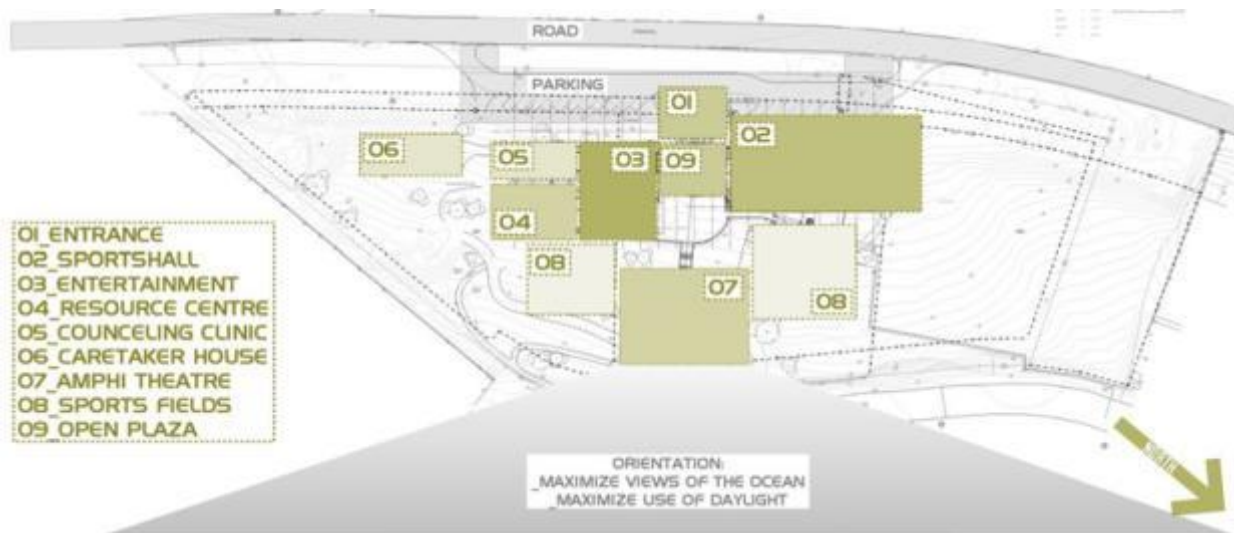
6.1.6. Main Design Features

The following design intentions strongly communicates to the theories and concepts examined in chapter 4 of this document.

- **Visibility**

The site's key feature is its visibility. The layout design and structural engineering had to connect the spaces in relation to the site. Spaces were layered in accordance with the contours of the property. This helped to create a natural amphitheatre, which was to be used for outdoor performances or concerts (figure 30).

Figure 31: *View of the centre from the amphitheatre (*source:
http://www.equilibriumstudio.co.za/#!educationcommunity/c1se4)

- **Access**

The main entrance is located at the top of the site, and leads vehicular traffic into the main parking area. The main entrance to the building feeds off from this space. The secondary entrance, which provides access only to pedestrians, is situated at the lower end of the site, facing the shopping centres and surrounding amenities.

Figure 32: *Image showing the main entrance off the top of the site located next to the main parking area.* (Source: http://www.equilibriumstudio.co.za/#!educationcommunity/c1se4)

Figure 33: *Image showing the central open plaza which links to various functions within the centre. (* Source: http://www.equilibriumstudio.co.za/#!educationcommunity/c1se4)

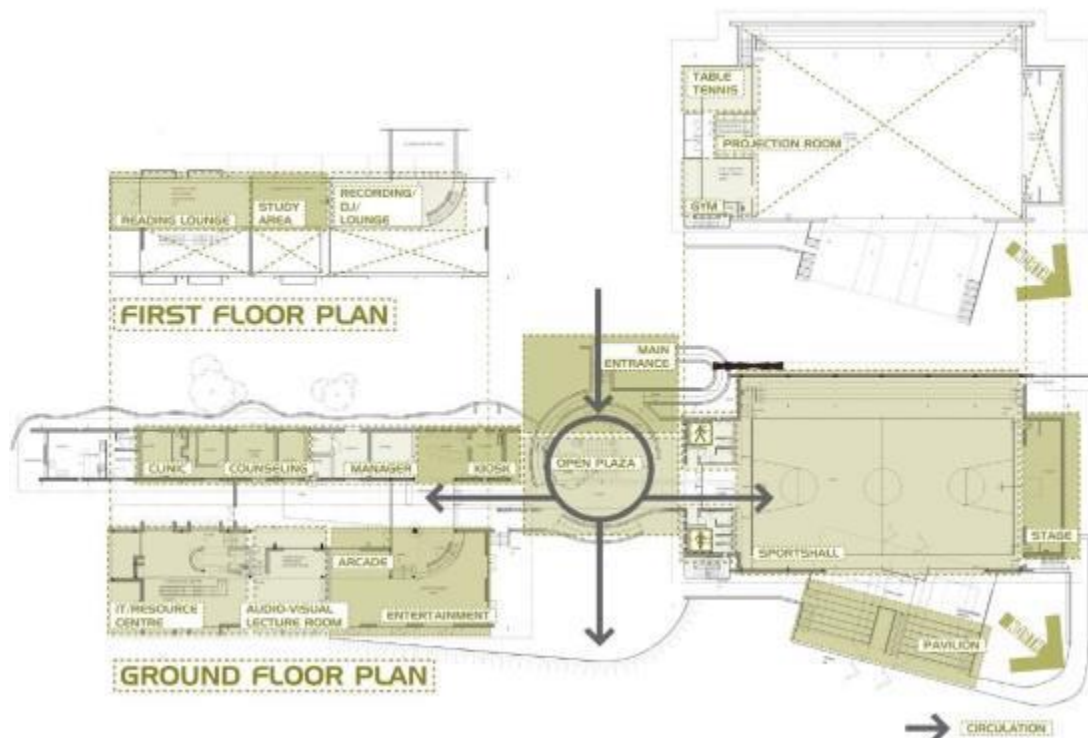**Figure 34**: *Image of the ground floor layout showing the main distribution area and how it simply relates to various functions (*http://www.equilibriumstudio.co.za/#!educationcommunity/c1se4)

The heart of this centre is the open plaza, which functions as the main circulation space to the various facilities that radiate off it. The various activities and functions are linked by covered walkways.

Figure 35: *Image showing covered walkways that link to various areas in the centre* (Source: http://www.equilibriumstudio.co.za/#!educationcommunity/c 1se4)

Figure 36: *Image showing the central open plaza which has a giant chessboard to encourage interaction between children and to keep them entertained (* Source: http://www.equilibriumstudio.co.za/#!educationcommunity/c 1se4)

- **Flexibility**

These spaces are designed for maximum flexibility. The multi-use hall can be just as easily utilized as a sports facility for basketball, volleyball, netball, table tennis or wrestling, as it could function as a performance theatre.

- **Internal Courtyard**

Integral to the design of the centre is an internal courtyard. This was included to enhance natural lighting and ventilation, and to apply a more green focus.

Figure 37: *Image showing the balcony next to the recreational room that acts a relaxation area for the young people* (Source: http://www.equilibriumstudio.co.za/#!educationcommunity/c 1se4)

Figure 38 : *Image evidencing that sustainable design was considered; heat loading will be minimised by double volume spaces and clerestory glazing (*Source: http://www.equilibriumstudio.co.za/#!educationcommunity/c 1se4)

Figure 39: *Section showing the structure of double volume spaces which reduces heat build-up and facilitates natural light and ventilation into the spaces (*http://www.equilibriumstudio.co.za/#!educationcommunity/c1se4*)*
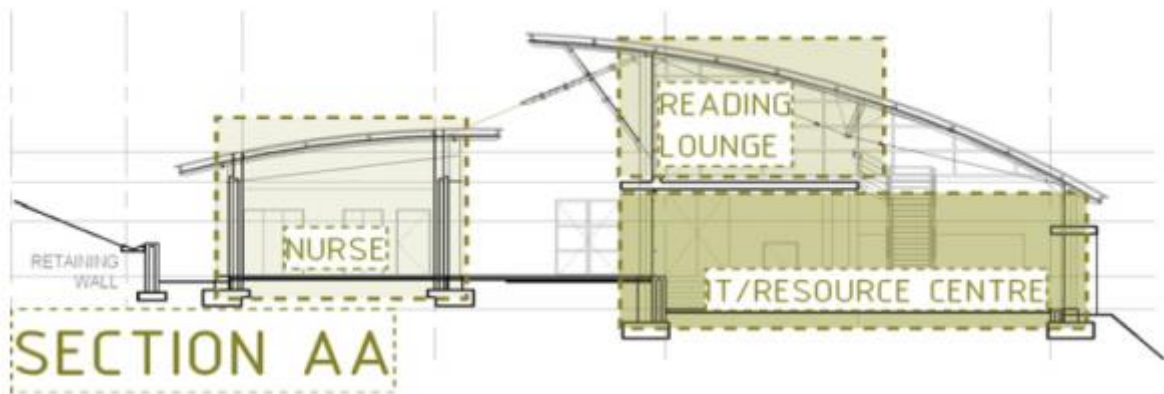
- **Safety**

Safety and security was a major concern in this facility. Due to its simple design and spatial organisation (see figure 29 & 34), it did not allow for too many hidden spaces. Gates and burglar-bars had to be installed around areas like the resource centre, which contains valuable

equipment. Although a sense of community and social interaction are determinants of health, the studies earlier advise that individuals will not interact within, or feel part of, a community that they consider to be unsafe (HBEP, 2011: 66).

6.1.7. Current shortcomings within the Centre

It is strongly evident that the design intentions of this youth centre does encompass the theories and concepts put forth earlier on strengthening the community through spaces that harness individual interactions. However, there are shortcomings that obstruct the realization of this ideal objective. The following list of shortcomings were documented from interviews with the current administrative staff of the Chatsworth Youth Centre:

- Initially a group of trustees headed up the centre, but soon absconded their duties. Since then, Clive Pillay has run the centre in a full-time voluntary capacity.
- Programs are being run by volunteers, but resources and funding is scarce.
- Disadvantaged children who live further away from the Centre, can only access its facilities during weekends, when transport might be more available to them. These underprivileged children have no accessible means of transport to travel to the centre on a daily basis. The centre is therefore busier on weekends. The plight of accessibility to disadvantaged children is the very demographic that this Centre was designed to reach out to. Community centres should therefore be decentralised. Every residential unit in Chatsworth should ideally have a youth centre servicing their neighbourhood.
- Having been constructed a decade ago, the centre faces the challenge of upkeep and a growing list of maintenance issues. The lack of funds keeps the centre under maintained.
- The centre needs more burglar proofing and tighter security measures, to curb the growing incidents of vandalism.
- There is a need for more meeting spaces, where club gatherings and group sessions can take place.

Figure 40: *Image of the centre, currently, showing the need for building maintenance or lack thereof. (*Photograph by author: 2015)

6.1.8. Conclusion

This typological precedent is relevant because of its setting and contextual problems similar to those of the target area. It gives an indication of the needs and wants of the young people in Chatsworth. The spatial relationship reveals how counselling and educational facilities that are connected to more vibrant and attractive spaces make them accessible and user friendly, without detracting from the informal and playful nature of the environment.

Chapter 7: Fieldwork Analysis and Discussion

7.1. Introduction

This chapter intends to explore the interviews and discussions undertaken with key personnel at The Chatsworth Youth Centre and the Anti-Drug Forum SA (ADF). The main members heading these programmes were interviewed, so as to provide insight into the drug and substance abuse problems in the area. This also led to casual engagement with other members involved in the Chatsworth Youth Centre and the ADF. Further interviews were carried out to substantiate the findings of this research. The perceptions and opinions of the social, economic and political environment has led to a better understanding of what design response could be put in place; one that will offer encouragement of drug and substance abuse prevention and awareness. The overall data received has been translated into a set of guidelines and solutions, so that an appropriate design brief can be generated for an awareness and skills development centre for the youth in Chatsworth. The research is purely focussed on primary prevention and awareness strategies, and not to rehabilitate sufferers of the post effects of drug and substance abuse. To this end, no interviews with drug users were undertaken.

The research within the literature review, as well as primary and secondary data, aims to address the problem statement of this dissertation and in turn answer the main question of this dissertation:

In Chatsworth the use of substances by young people is seen as a serious social and health problem. Due to the abuse of substances, young people are being robbed of their childhood. The risk of them having a healthy lifestyle in the future is very slim. The effects of drugs and substance abuse in the community are impacting on society, health, education and employment. Primary prevention should be part of a holistic approach in order to enhance the health and the future lifestyle of young people. This approach of engaging with the problem at its roots could prove to be beneficial to the prevention of substance abuse. There is a need for more support systems in the community of Chatsworth to help prevent the escalating numbers of addicts. Acting together can prove to be far more effective than by acting alone.

The aim of this research is therefore to explore and understand the problems of drug and substance abuse, and how this has broken down the community of Chatsworth. Together with this, to explore what the community needs in order to provide the platform for prevention strategies. This understanding can directly motivate and inform suitable design responses, which may be a step towards promoting a better community lifestyle for the youth within Chatsworth.

How can architecture be a contributing factor towards supporting primary prevention of drug and substance abuse in the community of Chatsworth?

7.2. Analysis of research findings

All valid research findings draw from the experiences of people who have been involved with community organisations as well as drug prevention and awareness programs. The existing drug prevention and awareness programmes in Chatsworth are being currently hosted at the Chatsworth Youth Centre and the Anti-Drug Forum South Africa. This information was obtained via conversational interviews with the main members as well as with a random selection of willing participants based on the research objectives and key questions.

7.2.1. Participants' attitude towards the effects of drug and substance abuse on the community

The community feels overwhelmed with the effects of drug and substance abuse. Community services like law enforcement, clinics and schools are all jointly dealing with the consequences of the drug abuse problems in the community. The Department of Social Development, for example, and the Child Welfare department are inundated with requests to intervene in matters relating to broken families. The numbers of young people truanting classes and dropping out of schools is escalating. According to members of the Anti-drug forum, the onset age at which young people begin drug experimentation is becoming increasingly younger. The youngest documented case of drug abuse was of a child of 10 years old. The majority of drug users range from the age of 13 to 16 years old. Once young people become addicted, they find it extremely difficult to fund their addiction. This has forced addicts to resort to criminal activities. Some even go to the extent of stealing from their own families. Many of these child-addicts will resort to becoming drug runners, and sell drugs on behalf of drug dealers. The overall response is that existing services, whether community organisations or the support of families is becoming extremely strained by the increasing numbers of drug and substance abuse amongst the youth. Families are disintegrating. The crime rate is on the increase. The relapse rate of addicts is high due to the ease of accessibility of drugs in the area.

7.2.2. Major risk factors that may cause young members of the community to use drugs

According to the ADF, there is a multiplicity of factors that influence young people to experiment and abuse drugs. These are some of the following common factors that have been recognised:

- There is an increase in the number of children affected by their parent's addiction. Families are being torn apart. Children are becoming abused, and are being used as pawns to get access to drugs. It is very common to see an adult with their child trying to obtain drugs from a dealer.

Inevitably the children who begin to view drug abuse as normative within the home, in turn also become addicts. They begin to live-out what they saw being modelled by their parents. To them, drug abuse is the norm within their household.

- Drug experimentation in schools is escalating. Young people are being influenced by peer pressure and dugs addicts. A few of the young people become runners for the drug dealers. In order to afford their addiction, more drugs needs to be sold.

- According to Clive Pillay (Chatsworth Youth Centre), there is a lack of social facilities. For example, the cinemas at The Chatsworth Centre have been closed down. In a community where fun recreational facilities do not exist, these movie theatres were the one form of leisure or the main recreational outlet for the community and youth in general.

- In most households, due to financial demands, both parents are away at their places of employment during the day. Their children are left largely unsupervised during the hours after school until their parents return from work. Children resort to hanging about on street corners with friends and peers. With the lack of constructive social activities and facilities, many of these young people can be easily influenced to experiment with drugs and substances for "fun." One of the most common local drugs circulating amongst the youth is known as "sugars." It is a mixture of both heroin and cocaine. Heroin is known as an easily addictive drug. Just one hit could become a lifelong addiction to the user.

7.2.3. Current community programmes addressing the drug epidemic

The Anti-Drug Forum was initiated at The Chatsworth Youth Centre, initially as a support group for families affected by drug abuse. The Forum later evolved to provide rehabilitation to the drug and substance abuse addicts themselves. The leaders of the project then realised the need for a far more proactive approach, and this resulted in the formulation and implementation of a drug awareness programme. The programme enlisted the help of volunteers, who provided drug awareness talks at various schools. The Anti-Drug Forum also assisted local police to identify known drug suppliers within the community. As the Forum continued to provide rehabilitation at The Chatsworth Youth Centre, the building was quickly becoming stigmatised as a rehabilitation centre. The Centre, which was initially utilized as a fun recreational zone purely for young people, was now becoming labelled as a drug rehabilitation centre. Young people who were using the Centre for recreational purposes, were now at a risk of being influenced by the addicts. The Forum then relocated itself from The Chatsworth Youth Centre.

Today, the Chatsworth Youth Centre still remains open to the public, and continues to offer a diverse range of social and educational programs. Whilst the Centre currently hosts many activities, the young people living beyond the immediate locality find it difficult to access the Centre's programmes. The young people who currently use the Centre, are very much involved in sporting activities like soccer, table tennis, volleyball and netball. Some young people are very involved in dance and cultural activities, ranging from classical Indian to hip-hop dancing. The youth centre hosts life-skills and orientation classes as a means of providing ongoing education to young people and adults.

The Anti-Drug Forum is the only experienced and litigable drug prevention and rehabilitation organisation now formally operating in Chatsworth. They are being funded by the government for their work in the community. The Anti-Drug Forum has been very involved in engaging people through various avenues and platforms. These include media campaigns, community talks, newspaper articles, radio talk shows, community plays, school projects, family support programmes, rehabilitation and counselling programs.

As part of their outreach, some cultural and religious organisations in the community are utilizing their platforms to provide support and assistance to youth and families afflicted by the drug pandemic.

7.2.4. Negative circumstances towards community programs and services

There are members of the community who have capitalized on the drug epidemic as a means of making money. Fake organisations have sprung up claiming to be able to help with drug rehabilitation and awareness, even though they lack proper knowledge, experience and qualifications. These organizations charge exorbitant fees in return for their services to help rehabilitate addicts. Families of addicts pay them excessive amounts out of their desperate need for help. These fake organizations have a zero success rate, and have tarnished the outreach efforts of the few dedicated and genuine organisations that are trying to address the seriousness of drug abuse in the community.

Whilst corruption needs to stop, these are not the only individuals abusing these circumstances for personal gain. Many policemen and law enforcement officers are being bribed with large sums of money to turn a blind eye to drug dealers' activities. There have been serious allegations of drug dealers offering bribes in order to keep supplying drugs on the streets. There are also reports of drug dealers manufacturing drugs in their own households, and supplying these to the surrounding neighbourhoods. This makes the manufacturing and distribution of drugs very easily accessible to the public.

7.2.5. Approach towards a positive way forward

With drug prevention and awareness, there is a great need to be more proactive in this community so that young people can become more aware of the devastating effects and consequences drugs can have. Families need to be educated, cautioned and made aware of behavioural changes they can flag as warning signs that their children are on drugs. Armed with this information, families can detect drug activity from the onset and thereby minimise the risk of exposure to drugs.

More support like the current youth centre is needed throughout different areas of Chatsworth. A youth centre does play a very crucial role in addressing the drug issue. By creating a facility where young people can use their time more wisely, young people can participate in fun and educational activities in a safe environment. The needs of young people must be addressed. If the youth can be gainfully occupied, then the risk of them turning to illegal drug activity could be curbed. The unfortunate shortcoming of The Chatsworth Youth Centre is its lack of accessibility to young people residing outside of its immediate location. Young people living in surrounding neighbourhoods find it difficult to commute to the centre. Therefore, the notion of decentralizing a single Youth Centre into local youth centres within each suburb, would perhaps create a viable resource venue for young people.

Law enforcement needs to be fully supportive of this, and anti-corruption measures must be introduced. The organisations currently involved in drug intervention, are of the opinion that much more support from government and policymakers is needed. Government should have better legislation in place, and adopt better policies and laws against drug dealers. Those supplying drugs needs to face greater deterrents, and find it far more difficult to engage in illegal activity. Our current laws are way too lenient and provides leeway for drug dealers to evade justice.

The efforts of religious organisations, local NGO's, schools and government all need to be harnessed together, so that may become role players in a more holistic approach.

7.2.6. Suggestions put forth for social and recreational facilities for the youth

The construction of a fun environment where young people can utilise their time more wisely, should include educational facilities, skills development, and drug prevention and awareness programmes. The following are suggestions made by the survey participants, as to what the young people need facilitated in their communities.

- Sporting facilities.

- Dance, music, drama and art facilities.

- Media facilities; computers, internet, printing and copying. Basic media amenities to support educational growth with the new generation and new technologies.

- Advocacy programs: life-skills, HIV/AIDS. Schools can be invited to participate in education and the creation of awareness.

- Skills development for young adults. Partner with government and organisations to program these classes.

- Social Clubs; Environmental club, dance, music, drama clubs, girls and boys scouts.

- A training facility to host and support continuous teaching and development of volunteers who feel a desire to help.

- A safe and conducive environment where all these activities can take place.

- Safer outdoor park areas for picnicking and outdoor events.

7.3. Conclusion

The primary data collected through interviews, discussions, precedents, case studies and visual observations is significant in understanding the key concepts and theories put forth in this dissertation, and serves as a way forward when designing for young people. A very simple yet possible way forward in addressing the young people in the area of Chatsworth is perhaps to provide them with suitable youth centres. The intention behind constructing these centres would be to help reduce the lure of drug and substance abuse. The importance of analysing architecture and social problems has shown how they impact and affect communities. Architecture needs to be a mediator between the drug and substance abuse epidemic and the community, so that there can be social upliftment.

Chapter 8: Conclusion and recommendations

8.1. Introduction

This dissertation set out to explore the approaches towards primary prevention of drugs and substance abuse, and how social theory informs architectural design. Prevention programs can be successful if they can connect with people in the community on matters of high priority to them. These include social relationships and individual capabilities. For conclusions to be made, it is essential to revisit the hypothesis of this dissertation:

"Community prevention is important because drug and substance abuse problems are embedded in our lifestyles, and it is having great effect on how our societies are being organised. Despite the fact that we all are responsible for the decisions we make about drug and substance abuse, community prevention recognises that our behaviour is influenced by our social environment. Acting together can prove to be far more effective than by acting alone. Therefore, by investigating more closely into the issues of drug and substance abuse in the community of Chatsworth together with an understanding of social theory and architecture, this study can perhaps lead to a more positive and stable community design intervention".

The information gathered for this dissertation has provided key insights into understanding the social, economic and political problems arising from drugs and substance abuse both in general and specifically in the community of Chatsworth. These insights are key to understanding the objectives of the research and to plot a way forward. The research applies most directly to the dynamics and trends of the community of Chatsworth. A prevention target should be defined by its place (locality) as well as by its personal characteristics (social, economic and political). The more a prevention strategy represents its community, the more powerful and respected it will be.

The key theories and concepts affirm that the relationship between architecture, society and theory is multifaceted. Architecture is a visible and real physical structure, and has a strong and everyday impact on people. Architecture is a permanent stage of men's events (Backovic & Masirevic, 2010:228). Architecture is not just a representation or an expression of a society, but rather it has an impact upon and within the social realm. Spaces are created for everyday living, and these spaces co-exist with the people who inhabit them. Spaces can facilitate affects, movements, activities, interactions, beliefs and views. Rather than just acting as an object (passively), architecture acts as an instrument for social interactions, emotions and subjective motivations. It is in creative architecture that a society can begin

to see itself through new eyes, and perhaps more positively. Architecture therefore, can be viewed as a societal medium to build stronger and more positive communities.

8.2. Recommendations

The primary and secondary data collected through the literature, theories, concepts, interviews, discussions, precedents, case studies and visual observations, have all directed a way forward towards the need for a youth-orientated facility that can support awareness and skills development. The process of analysing architecture and social problems has revealed how spaces and places can impact and affect communities.

The need for a youth orientated facility must be designed in consultation with concerned and credible youth organisations. The intention of these consultations is to develop an understanding of the key social theories and concepts, so as to establish a building brief for this much needed youth facility.

This dissertation is concerned with the design of an awareness and skills development centre, to address the drug and substance abuse epidemic that has permeated the youth of Chatsworth. The provision and design of a youth orientated facility may not provide an immediate solution to the crisis, but it sets in motion a process of social growth and development for the community of Chatsworth. This notion of providing more youth-orientated facilities could become a model for other such communities.

8.3. Evolution of the Brief

The academic nature of this project permits the hypothetical addressing of real issues; drug and substance abuse, and looks at providing a design response to deal with them. The building is not just to function as a youth-orientated facility, but to also integrate itself with the community. The project should engage a holistic approach in terms of the type of accommodation to be provided for young people. It must address the educational, recreational and cultural needs of the youth. The project must offer its users a secure and supportive environment; it can be enhanced by encouraging cultural and societal interaction, and by discouraging isolation.

Chapter 9: Design Framework and Approach

9.1. Site Location

Chatsworth is traditionally an Indian township. It is located in Durban about 14km south-west of the city centre, in the Umhlatuzana River Valley, north of Umlazi. Initially, Chatsworth comprised mostly of poor working-class Indian people, whose culture is significant to Durban's identity, and a direct result of the Group Areas Act.

Chatsworth was planned in stages and each development was referred to as a unit. The mixed development of housing consisted of sub-economic houses, which were to be occupied on a tenancy basis, and "economic" homes which could eventually be bought by its occupants (Rajab, 2014:72). Residents would be faced with row upon row of repetitious apartheid-style housing. Despite being a massive suburban area, streets remained unnamed for decades. Address descriptions such as "House 4, Road 8, Unit 11" became the norm. Even though Chatsworth was a religiously active and devout community, it was notable that only a few places of worship were built. Despite the central role that religion played in the lives of these residents, Chatsworth was, in the words of community leader P. R. Pather, a "ghetto" (Rajab, 2014:72).

Chatsworth's culture is now a strong and significant identity in Durban. It is a breathing landscape of people and their traditions and culture. The connections and disconnections in the lives of the people can be seen through their everyday experiences. This includes how the broader social practices and structural constraints affect them, as well as the internal divisions and conflicting interests (Desai & Vahed, 2013). Desai uses the metaphor of a container of limited utility to describe this township under apartheid. Residents had to travel to other parts of the city to earn a living, seek an education, or to access cultural and sporting facilities. These were sorely lacking in Chatsworth. Yet despite these disadvantages, Chatsworth remained unique (Desai & Vahed, 2013).

According to a study conducted by Anand Singh about substance abuse among the youth in Durban, the area of Chatsworth is somewhat a lower middle-class to mainly working class state subsidised housing complex, developed to accommodate at least 250 000 people. The problem of substance abuse in this area compared to wealthier middle class areas is considered to be broader and more visible. According to Singh's research, there was consensus among residents in Chatsworth that the problem is massive and increasing. If this problem is not acted upon with urgency, it could certainly lead to a catastrophe in time to come. (Singh, 2013: 204). In a random sample of individuals, Singh found that there was a positive unanimity to the question: "Do you think drugs and alcohol are a problem in Chatsworth?" The majority answered that the problem is either "very serious" or "beyond control" (Singh, 2013: 204).

9.3. Specific Site Choice

Through the interview process with various members involved in the Anti-Drug Forum, they pointed out that certain neighbourhoods in the Westcliff and Bayview area of Chatsworth were particularly rife with drug and substance abuse problems. Together with addressing this, the following is the preferred site criteria:

- The site needs to be located in close proximity to as many schools as possible. Young people travel on foot and do not have means of transport or funds to easily access such a facility.
- The site needs to be within a suitable context that relates well to this type of community facility. The site must not be in isolation within a dense residential community.
- Climatic conditions experienced in Durban are sub-tropical. Summers are warm-to-humid with many rainy days. Winters are mild with clear days. Appropriate site orientation will ensure adequate ventilation without too much solar control.

The figure below is an aerial image of the Westcliff neighbourhood that extends down to the Bayview neighbourhood of Chatsworth. The existing schools have been highlighted in red. Both neighbourhoods are very densely developed with residential properties. Schools have been located in-between these predominantly residential areas. A closer examination of the Bayview area showed no available and useable sites, per the abovementioned criteria. The Westcliff neighbourhood seemed to have more potential, for within this densely populated neighbourhood of residences and schools, is a commercial and religious hub.
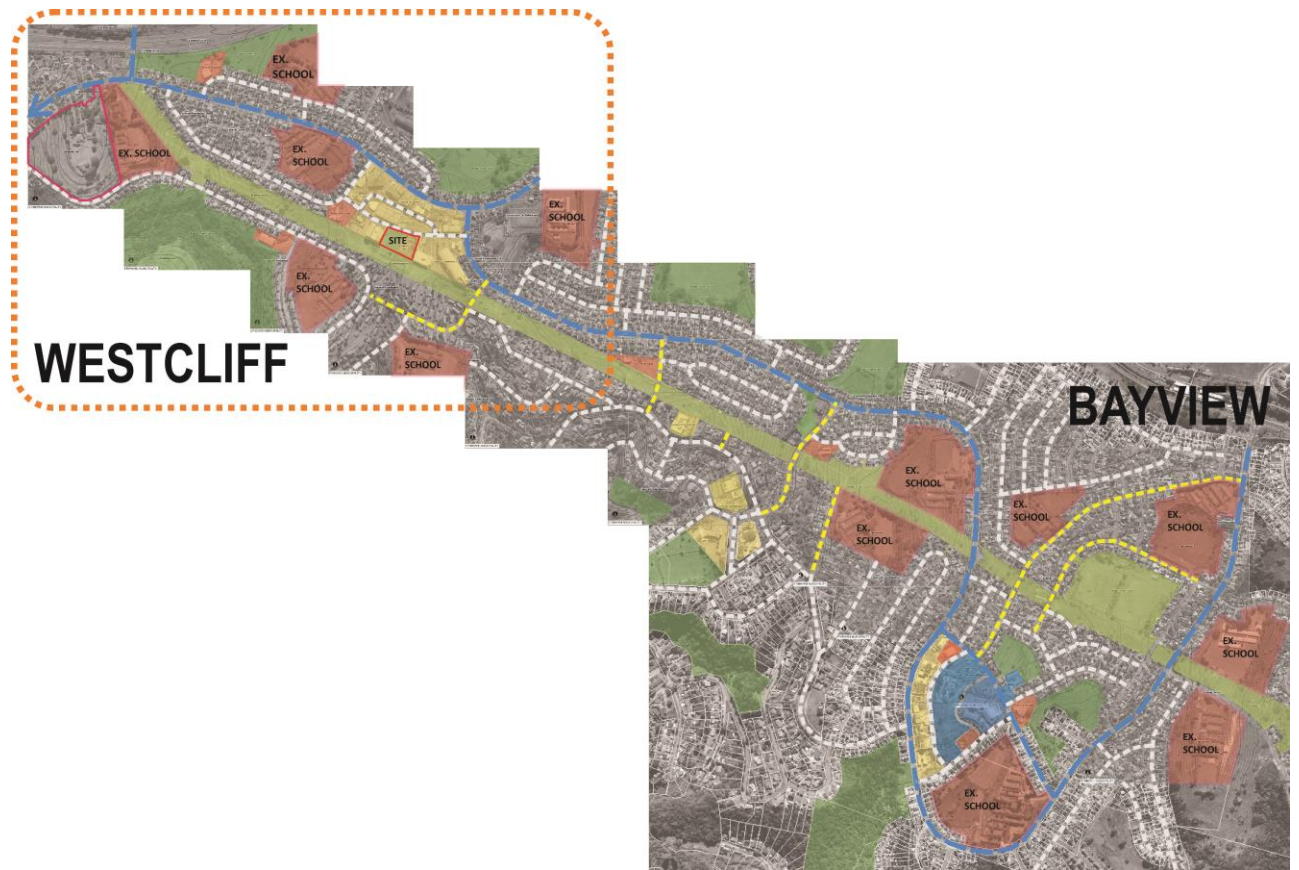
Figure 41: *Aerial image edited by author illustrating site locality (*Google earth edited by author)

Figure 42: *Aerial image edited by author illustrating site analysis (*Google earth edited by author)

The figure above shows the chosen location of Westcliff, Chatsworth. A site was identified between the commercial hub and an existing electrical servitude. The electrical servitude serves as an existing pedestrian route for school children and the community members who commute on foot. This highlighted the need to locate a site adjacent to or in close proximity of this existing servitude.

9.3. Proposed Client

The proposed client is the Nedbank Children's Affinity Trust. Nedbank has a programme in place since 1990 to provide funding to encourage upliftment of local communities through children's projects and organisations. The programme offers a continuous source of income to projects that play a strategic role in the lives of children and their future development in South Africa. Nedbank is an independent organisation that is contributing to the needs of children for the benefit of a brighter future in South Africa.

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List of Appendices:

Appendix 1 – Informed Consent Form

COLLEGE OF HUMANITIES: MASTERS/PHD RESEARCH

INFORMED CONSENT FORM
TO BE SIGNED BY THE PARTICIPANT AT THE START OF EACH INTERVIEW
(To be read out by researcher before the beginning of the interview).

One copy of the form to be left with the respondent; one copy to be signed by the respondent and kept by the researcher.

My name is Ronelle Chetty. (student number 202515391). I am currently doing a masters research document on the study of **"Drugs and substance abuse prevention through an awareness and skills development Centre for Chatsworth**."

Ultimately the research will guide the design of a proposed new awareness and prevention Centre for Chatsworth. This project is currently being supervised by Mr. Bonga Ntuli at the School of the Built Environment and Development Studies, University of KwaZulu-Natal.

Student Contact Details:

Ronelle Jeraldine Chetty. School of the Built Environment and Development Studies. University of KwaZulu-Natal, Durban. Cell: 0824902254 Email: chetty.ronelle@gmail.com

Supervisor Contact Details:

Bonga Ntuli. School of the Built Environment and Development Studies.

University of KwaZulu-Natal, Durban. Cell: 0786053322 Email: ntulib@ukzn.ac.za

HSSREC Contact Details:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus, Govan Mbeki Building. Private Bag X 54001, Durban, 4000, KwaZulu Natal, South Africa. Tel: +27 31 2604557 Fax: +27 31 2604609 Email: HSSREC@ukzn.ac.za

Firstly, I would like to thank you for agreeing to take part in the project, and I would like to emphasize that:

- Your participation is entirely voluntary and you are free to withdraw at any time.
- Your participation in the research is limited to this interview only, and there are no other expectations of you.
- You may be contacted for any possible follow- up queries, or to verify any interview transcripts.
- You are free to refuse to answer any question; or refuse to discuss a topic, without judgment or prejudice.
- You will be given access to all interview notes for verification, and all findings will be made available to you.

Please note:

- The interview will be kept strictly confidential and will be available only to members of the research team.
- However, excerpts from the interview may be made part of the final research report.
- To facilitate the interviewer's job, the interview will be audio recorded. However, the recording will be destroyed as soon as it has been transcribed.
- All interview data will be handled so as to protect the confidentiality of any victims involved - no names will be mentioned or included in the research transcripts, analysis or coding.
- All data will be destroyed at the end of the project.

Please sign this form if you agree to the above, and are willing to participate in the research:

I, _____ (name) have been informed about the study entitled "Drugs and substance abuse prevention through an awareness and skills development Centre for Chatsworth" by Ronelle Jeraldine Chetty.

I understand the purpose of the study. I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/ concerns or queries related to the study I understand that I may contact the researcher at:

Ronelle Jeraldine Chetty. School of the Built Environment and Development Studies. University of KwaZulu-Natal, Durban. Cell: 0824902254 Email: chetty.ronelle@gmail.com

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus, Govan Mbeki Building. Private Bag X 54001, Durban, 4000, KwaZulu Natal, South Africa. Tel: +27 31 2604557 Fax: +27 31 2604609 Email: HSSREC@ukzn.ac.za

Do you give your consent for the following: (please tick and initial the options below)

To have your organisation mentioned in the research	
To have your role within the organisation mentioned in the research	
To have your name mentioned in the research	
To have this interview audio-recorded	
To be contacted for any possible follow-up queries	

Participants' signature: --------------------------------------- (signed) ---------------- (date) --------------------------------- (print name).

Interviewer's signature: --------------------------------------- (signed) ---------------- (date) --------------------------------- (print name).

(Interviewer to keep signed copy and leave unsigned copy with respondent)

INTERVIEW SCHEDULE

This interview is to be conducted informally with open ended questions.

Thank you kindly for accepting to participate in this interview. I am currently a master's student at the

University of KwaZulu Natal and my research focus is on drug and substance abuse awareness and prevention strategies in your community of Chatsworth.

For the purposes of successfully carrying out my research I would like to record your responses. Please note that your responses will be kept strictly confidential and what you have to say will be of great value and importance to this research document; your opinions count. Should you not feel comfortable to answer any of the questions please let me know and we can skip to the next question.

I may also need to quote some of your responses. Please let me know if you do not feel comfortable with me using your name with the quote, if not, you can suggest a fake name to use now.

Can use my first name: yes / no
If not, I would prefer to use this fake name: _____

1. What are the major risk factors that may cause young members of the community to use drugs?
2. What affect has the drug and substance abuse had on the community?
3. What are the attitudes toward drug use in your community?
4. What strategies have been implemented to provide prevention and awareness of drug abuse in the community?
5. Are these prevention strategies providing a positive change?
6. If not, what could be done differently?
7. What kinds of social activities are available for community members (adults, teenagers and children)?
8. Are there enough resources to carry out the activities, (e.g. money, human, material and time)?
9. Does your community need to change or add to the social and recreational activities to help alleviate drug abuse amongst children and teenagers?
10. Do specific role players in the community get involved and participate in drug and substance abuse prevention programmes (e.g. schools, teachers, health workers, law enforcement officers, young people, family members, and politicians)?
11. Are there any other kinds of activities that can be provided for children and teenagers in the community?
12. Are there any other strategies that can be implemented to encourage the prevention and awareness of drugs and substance abuse in this community?

Thank you for taking time out to participate in my research. The information you have provided is truly valued.

Appendix 3 – Ethics Approval

UNIVERSITY OF KWAZULU-NATAL ™

INYUVESI YAKWAZULU-NATALI

06 October 2015

Ms Ronelle Jeraldine Chetty 202515391
School of Built Environment and Development Studies
Howard College Campus

Dear Ms Chetty

Protocol reference number: HSS/1169/015M
Project title: Drugs and substance abuse prevention through an Awareness and Skills Development Centre for Chatsworth

Full Approval – Expedited Application

In response to your application received on 28 August 2015, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisor: Bridget Horner , Bonga Ntuli & Mthembeni Mkhize
Cc Academic Leader Research: Dr Cathy Sutherland
Cc School Administrator: Miss Lindile Danisa

1910 - 2010
100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

Appendix 4 – Design Response

CHATSWORTH IS A LIVING, BREATHING LANDSCAPE OF PEOPLE, FULL OF CULTURAL RICHNESS AND COMPLEXITY. HOWEVER, DRUGS AND SUBSTANCE ABUSE IN CHATSWORTH IS ESCALATING DUE TO SOCIAL PROBLEMS AND LACK OF SUPPORT IN THE COMMUNITY.

RESEARCH QUESTION:
How can architecture be a contributing factor towards promoting early prevention and awareness of drugs?

WHO:
Vulnerable school children.

WHAT:
This building is **a social catalyst for change** in a drug infested community.

WHY:
The youth have fallen prey to drug abuse.

HOW:
By providing **platforms for social interaction and community building**.

THEORETICAL FRAMEWORK:

Architecture and social theory - Georges Bataille
• Architecture is the expression of the very being of societies.
Social Theory of Space - John Archer
• The built space becomes the reference system within to which people establish
    and discipline their lives.
Sense of Place - Fritz Steele
• Settings can obviously have an impact on people.
Placemaking - William H. Whyte
• Creating public spaces that promote people's health, happiness, and well being.

SUMMARY OF LITERATURE RESEARCH

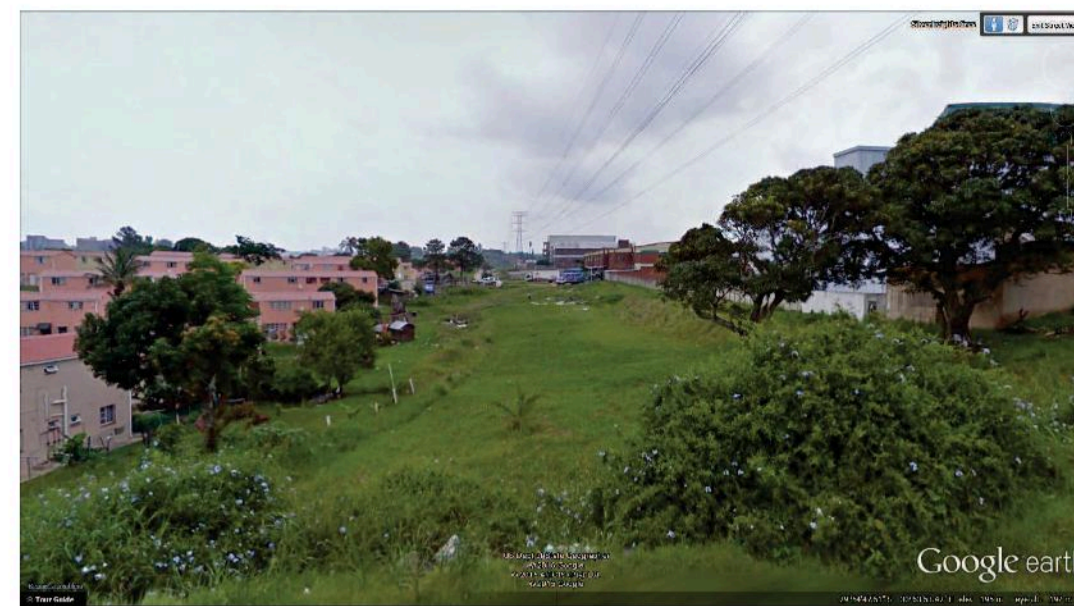| RISK FACTORS	PROTECTIVE FACTORS
▪ Chaotic home environment	▪ Strong family bonds
▪ Ineffective parenting	▪ Parental engagement in child's life
▪ Little mutual attachment and nurturing	▪ Clear parental expectations and consequences
▪ Inappropriate, shy, or aggressive classroom behavior	▪ Academic success
▪ Academic failure	▪ Strong bonds with pro-social institutions (school, community, church)
▪ Low academic aspirations	▪ Conventional norms about drugs and alcohol
▪ Poor social coping skills	
▪ Affiliations with deviant peers	
▪ Perceived external approval of drug use (peer, family, community)	
▪ Parental substance abuse or mental illness	

SOURCE: US Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, (1997) Preventing drug use among children and adolescents: A research-based guide. NIH Publication No. 97 - 4212.

westcliff youth hub
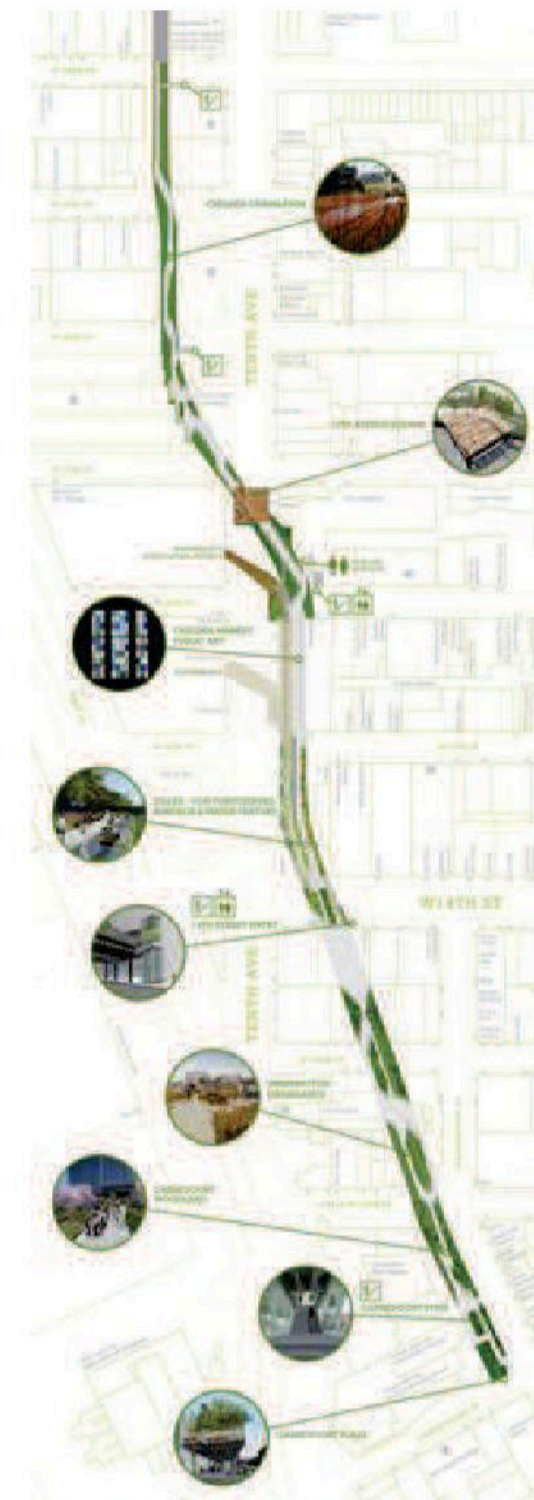**Drugs and Substance Abuse Prevention through an Awareness and Skills Development Centre for Chatsworth.**

ronelle chetty
202515391
design dissertation
december 2015

urban framework

LOCALITY PLAN

WESTCLIFF

URBAN ANALYSIS

- - - - EXISTING BUSY STREET

EXISTING SCHOOL

EXISTING SERVICE CORRIDOR

········ CONCEPTUAL CONNECTION
TO SURROUNDING SCHOOLS

EXISTING
RESIDENTIAL

EX. MOSQUE

EX. CHURCH

BANGLADESH MARKET

EXISTING RETAIL

SITE

EXISTING RETAIL

TAKE N' PAY

EXISTING
ELECTRICAL
SERVITUDE

EXISTING
RESIDENTIAL
FLATS

## IMAGES OF SERVICE STRIP

URBAN PRECEDENT

New York Skyline
Diller Scofidio + Renfro

- Revitalisation and upliftment of an abandoned railway track.

- Its success has led to a rash of proposals for similar schemes, reclaiming abandoned infrastructure in an attempt to revitalise neighbourhoods in cities around the world.

- There are several key nodes that attract users to spend time and explore the complete linear park e.g: chilling areas, vegetation & viewing decks.
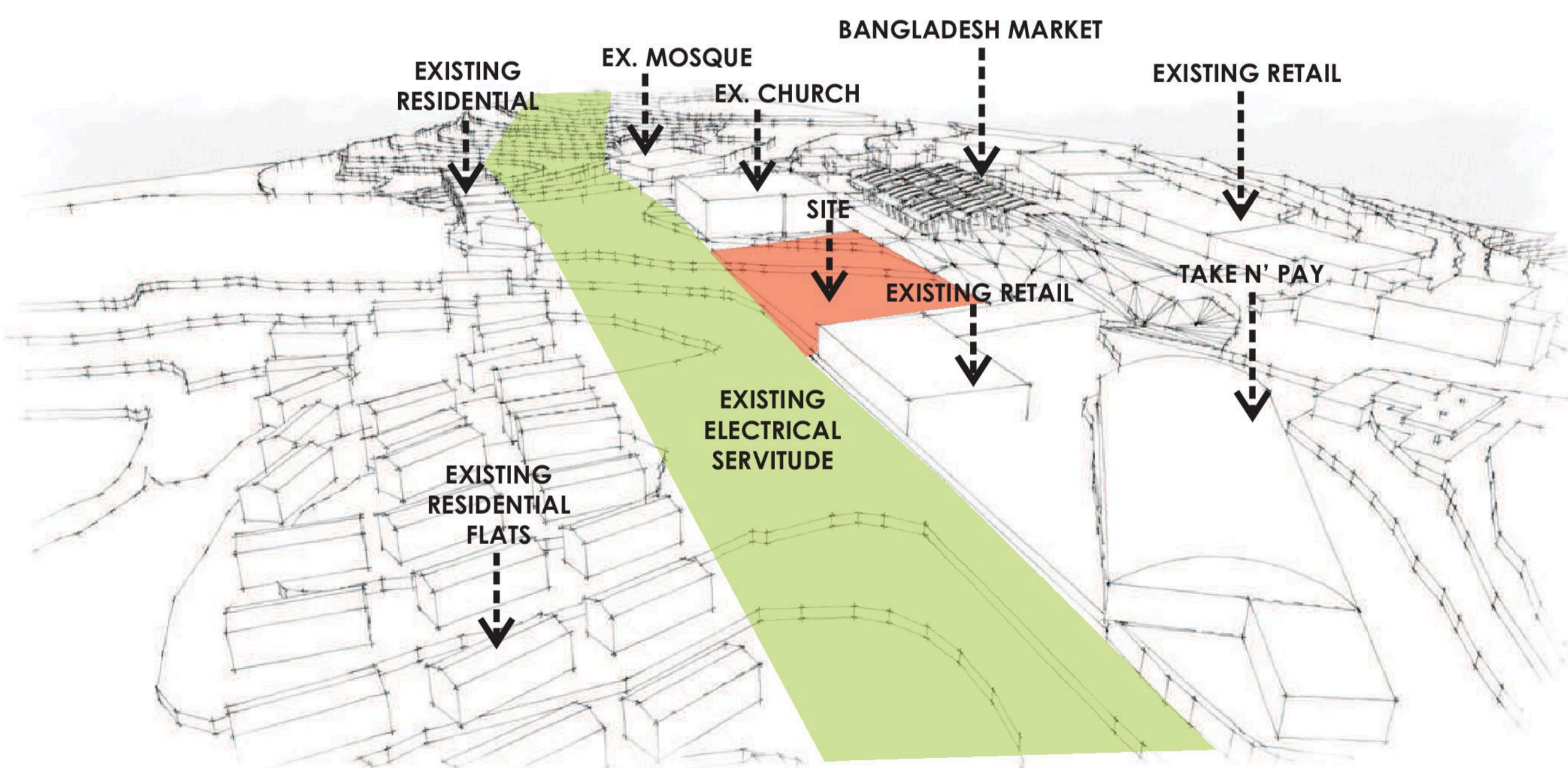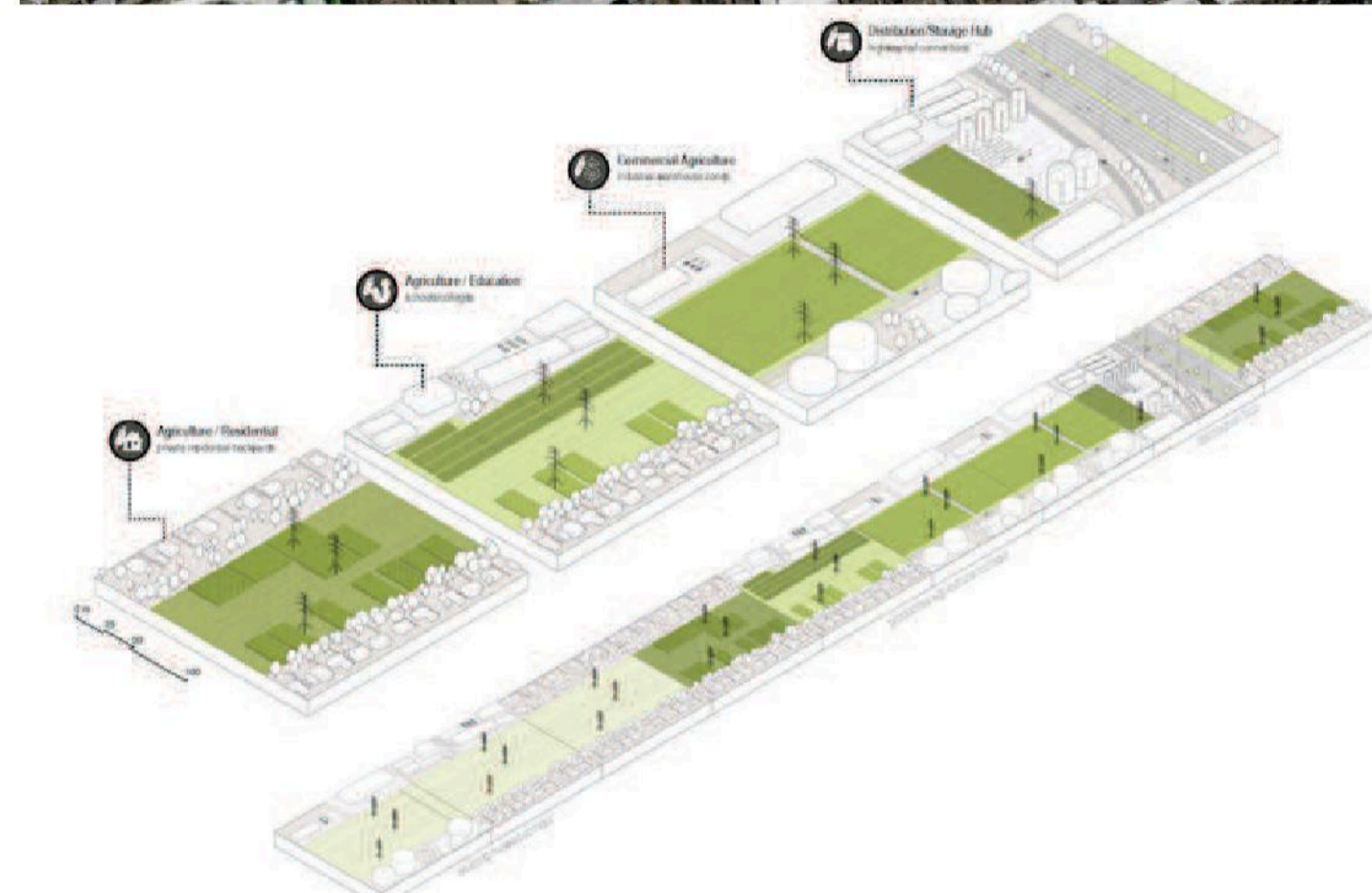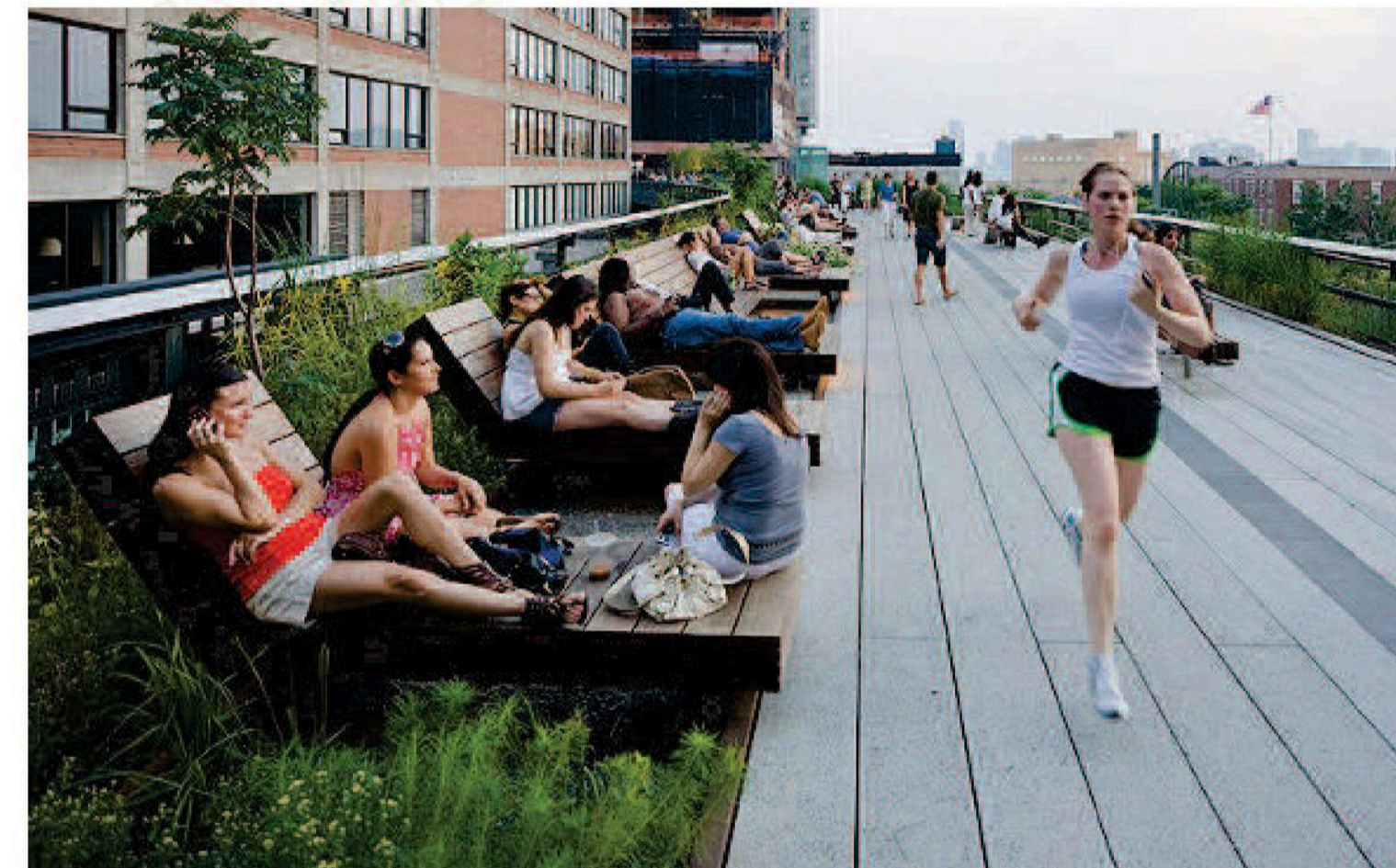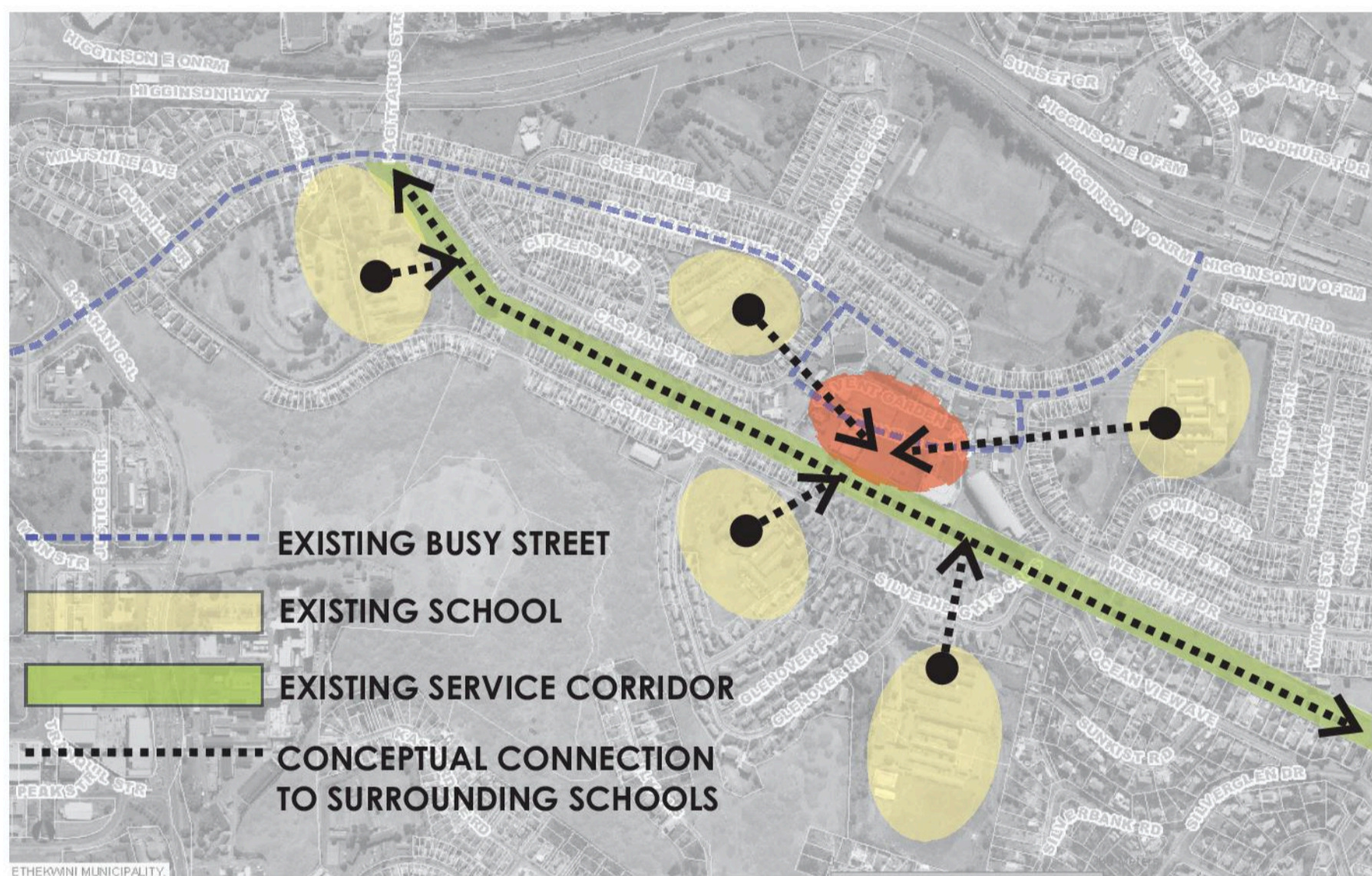

STUDENT WORKS UNIVERSITY OF TORONTO: EDIBLE CORRIDORS

Growing the Hydro Fields appropriates hydro-corridors as cultivatable public lands.

The proposal re-considered publicly-owned electricity corridors cutting through urban infrastructures. They identified its potential as a food line - turning a land-use detractor (powerlines) into a land-use amenity (agriculture).

(sourced from:
http://infranetlab.org/blogfeed#sthash.CkehD27Z.dpuf)

westcliff youth hub
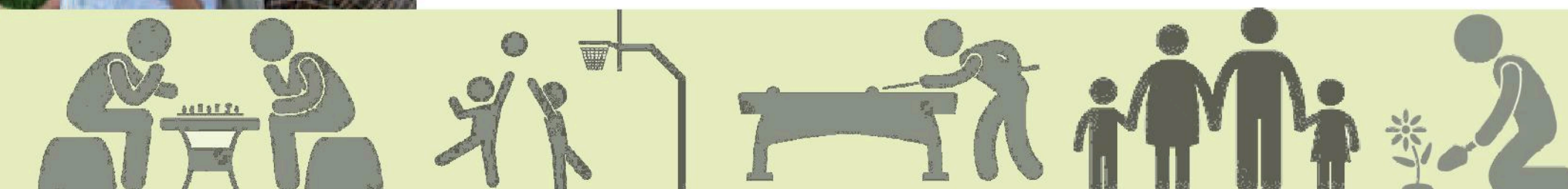
urban framework

relaxing nodes

play nodes cycling nodes picnicking nodes relaxing nodes community farming

community farming

INFILLING LOST SPACE:
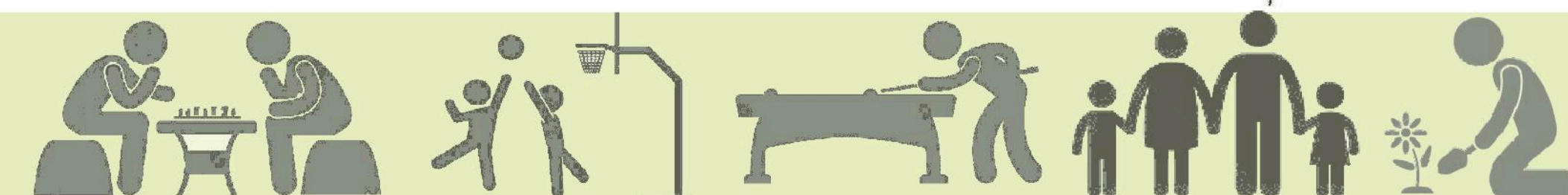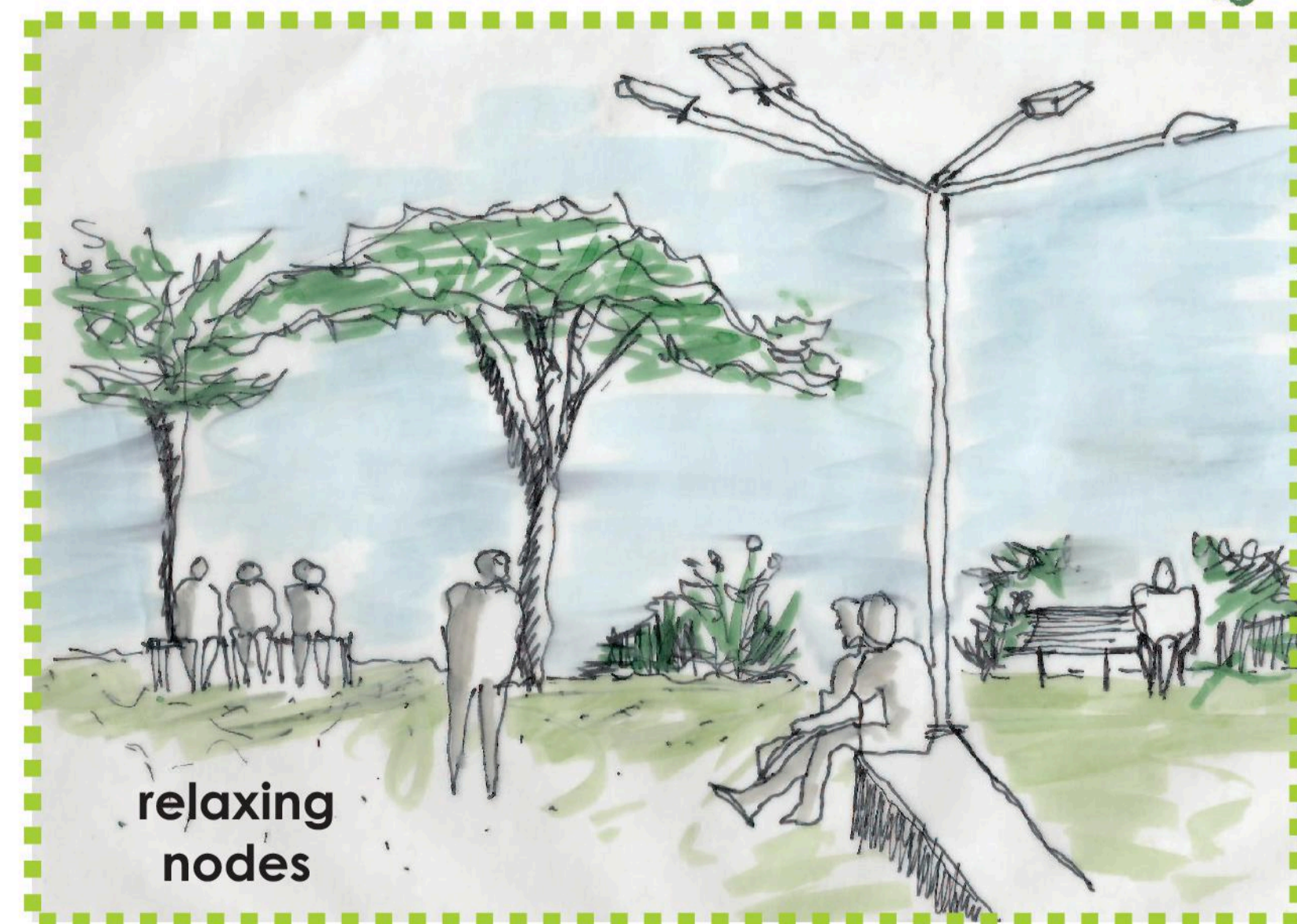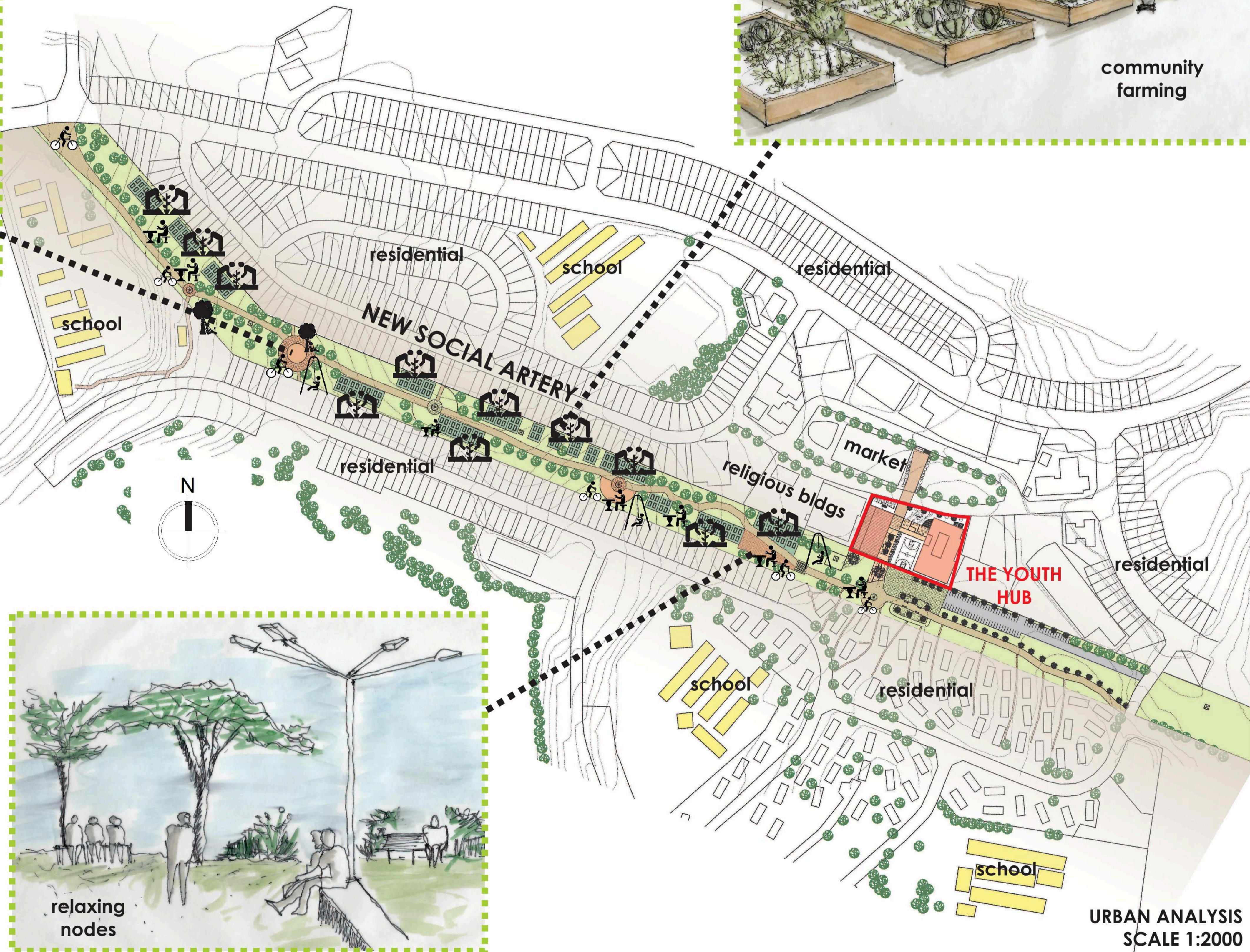**CREATING AND ENHANCING PEDESTRIAN LINKAGES**

The existing electrical servitude sits as a massive divide inbetween a very densely developed community. The aim is to unify the disconnected and left-over spaces, and integrate it back into the urban fabric.

Objectives:

1. A potential to improve accessibility and enhance this strip as a public realm.

2. Revitalisation of this corridor can encourage a safer pedestrian orientated community.

3. Create holistic environments for walking, recreational park facilities and cycling routes that are inviting spaces in which to travel, meet and build communities.
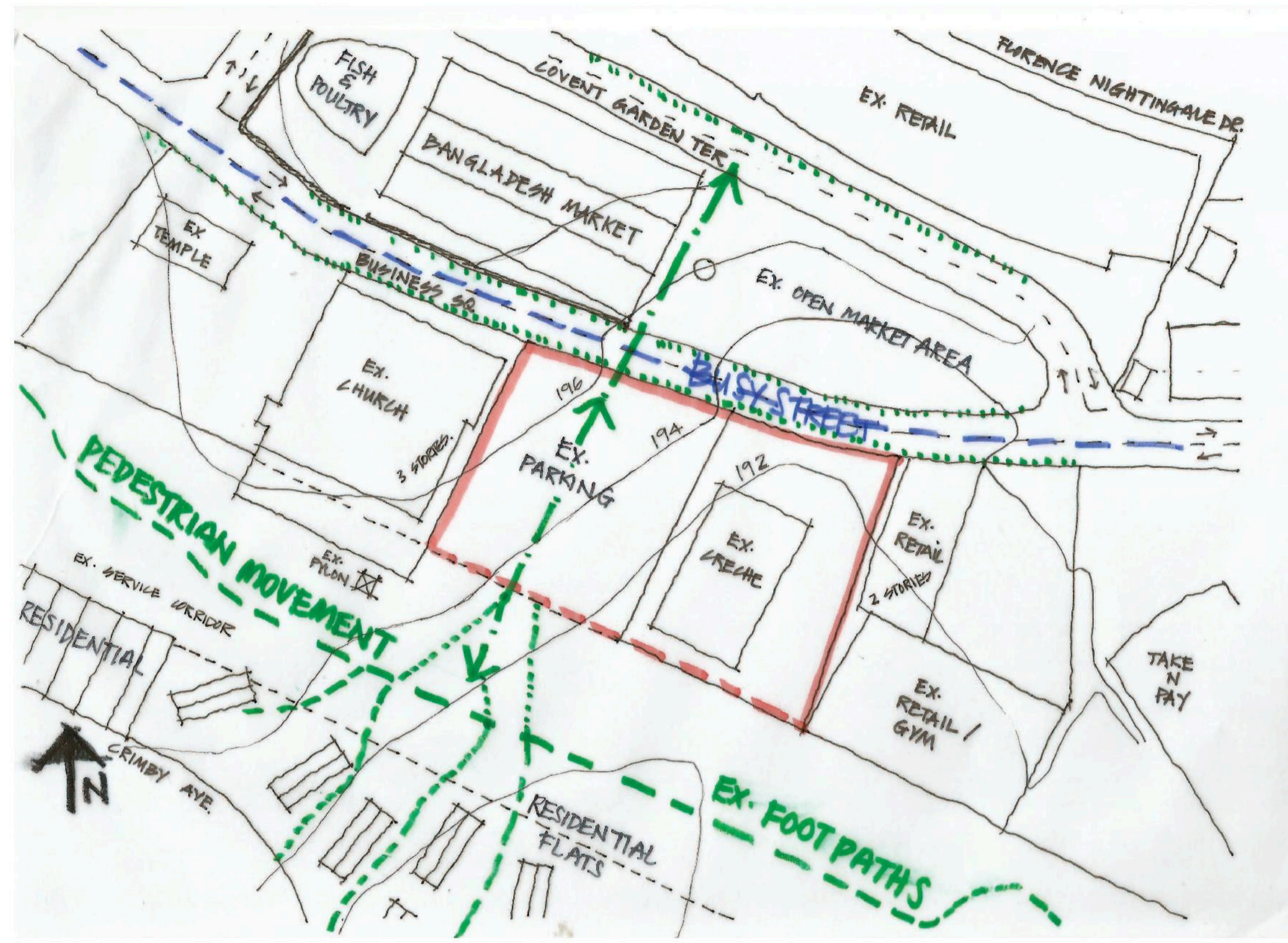
CREATING OPPORTUNITY FOR COMMUNITY SUSTAINABILITY

Through urban farming and urban design this will create community driven spaces and public spaces that will build bonds and enhance core values that will change the mindset and perceptions of the community moving forward.

NEW SOCIAL ARTERY

residential
school
school
residential
residential
market
religious bldgs
THE YOUTH HUB
residential
school
residential
school
N

relaxing nodes

URBAN ANALYSIS
SCALE 1:2000

westcliff youth hub

design approach

SITE ANALYSIS

CONCEPT
An oasis for kids between school and home.

AIM:
To create a refreshing and spirited place for kids in the midst of a deprived community.

OBJECTIVES:
• **Encourage exchange of knowledge and social interaction:** to support substance abuse prevention and awareness.
• **Build on community gathering and interaction:** building community bonds.
• **Provide more recreational and social facilities for kids:** to be able to use their free time more wisely.
• **Uplift the existing electrical service strip as a new social artery for the neighbourhood:** safer environment for school kids.

PROPOSED CLIENT:
The Nedbank Children's Affinity Trust provides funding to encourage upliftment of local communities through children's projects and organisations. The programme offers a continuous source of income to projects that play a strategic role in the lives of children and their future development. It is an independent organisation that is contributing to the needs of children for the benefit of a brighter future in South Africa.

PROPOSED ACCOMODATION:
• Junior play zone & library area
• Teen play zone & library area
• Dance, drama & art studios
• Skills development classrooms
• Volunteers Recruitment Offices
• Multipurpose hall for indoor sports, functions & fundraisers
• Restaurant
• Ablutions & service areas
• Outdoor recreational spaces: outdoor sports court & outdoor stage for open public performances or talks

DESIGN COMPOSITIONAL ANALYSIS

SPATIAL ORGANISATION

westcliff youth hub
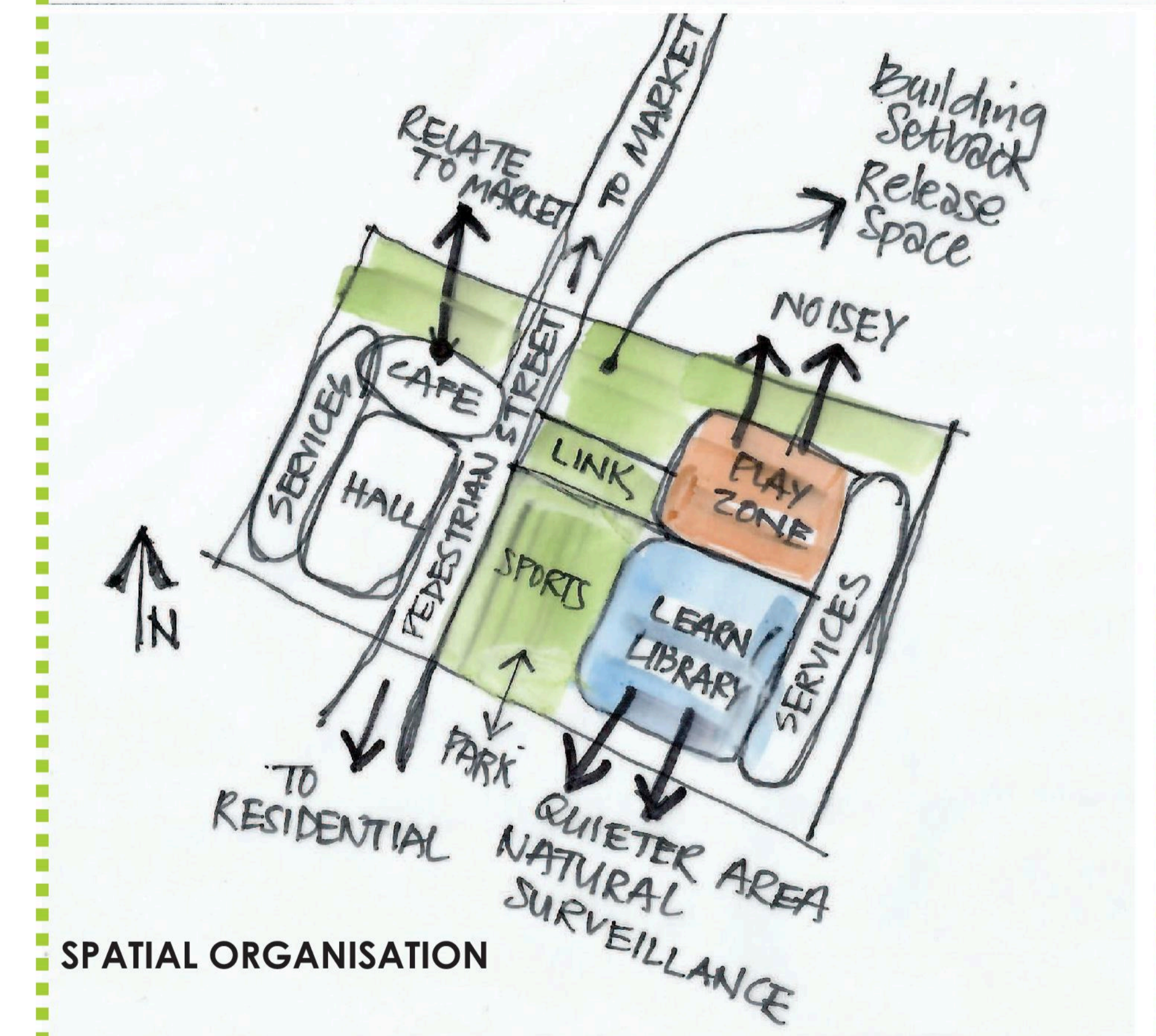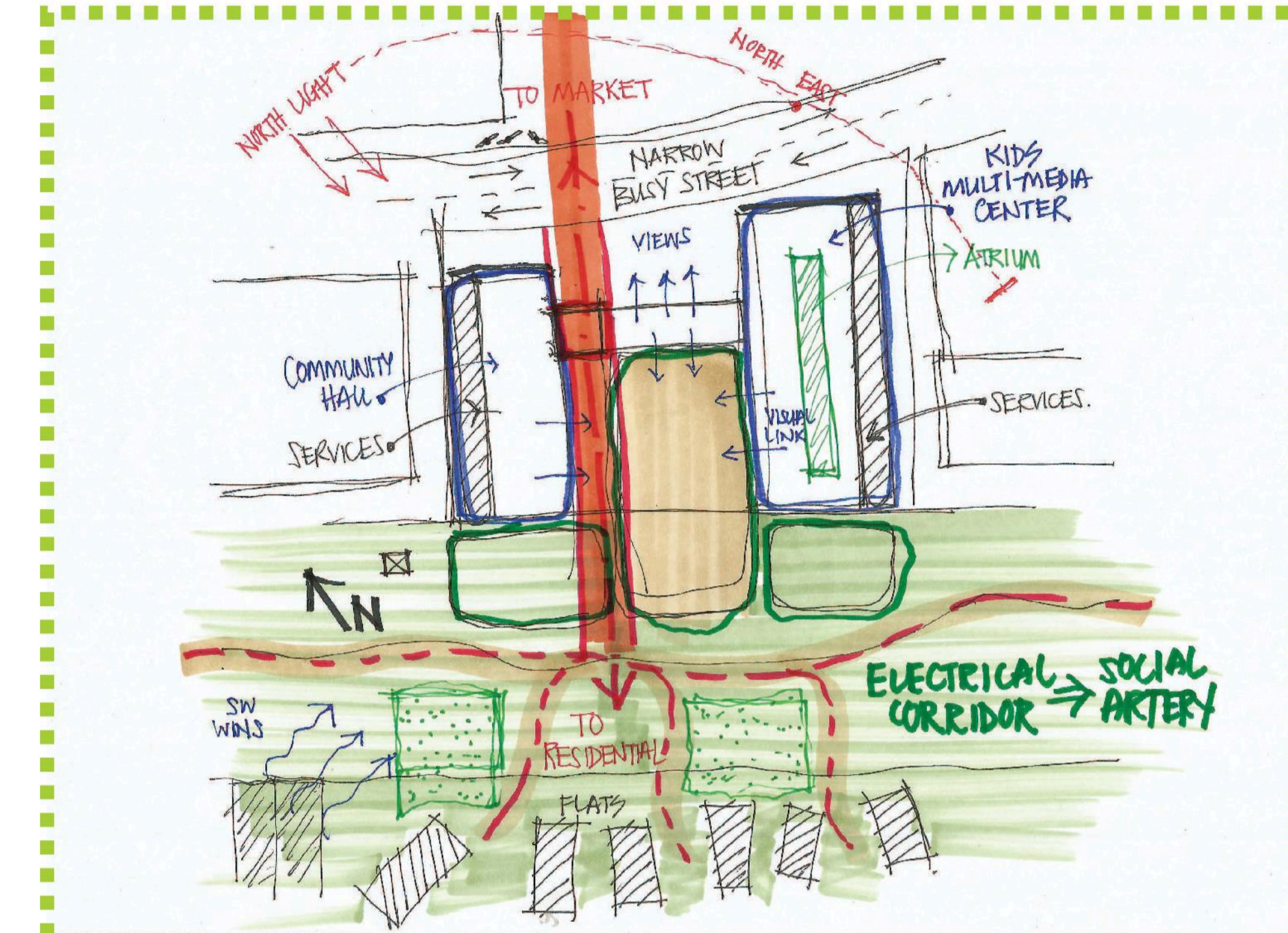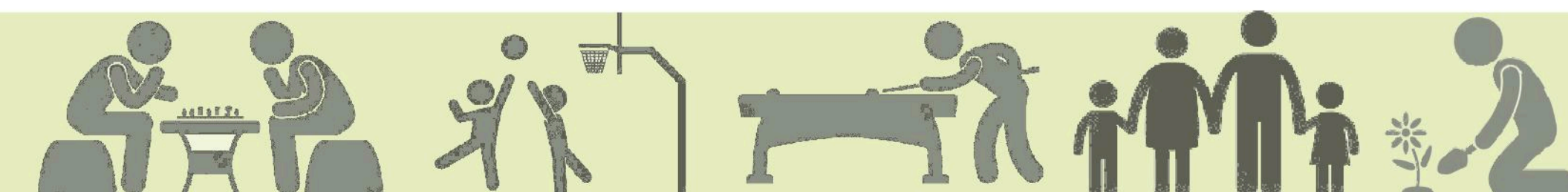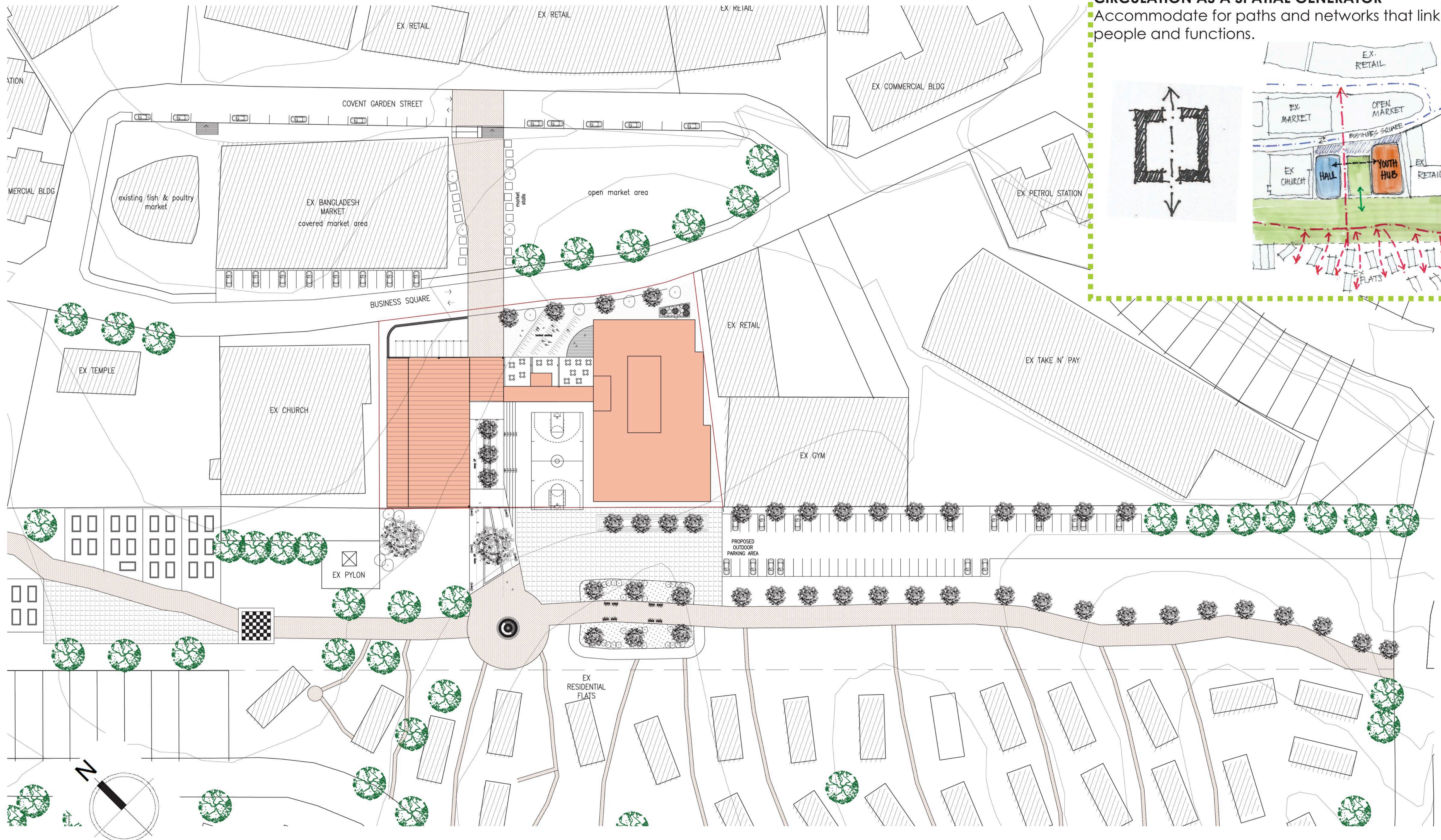
CIRCULATION AS A SPATIAL GENERATOR
Accommodate for paths and networks that link people and functions.

EX RETAIL

EX RETAIL

EX RETAIL

EX COMMERCIAL BLDG

COVENT GARDEN STREET

existing fish & poultry market

EX BANGLADESH MARKET
covered market area

open market area

market stalls

EX PETROL STATION

COMMERCIAL BLDG

BUSINESS SQUARE

EX TEMPLE

EX CHURCH

EX RETAIL

EX GYM

EX TAKE N' PAY

EX PYLON

PROPOSED OUTDOOR PARKING AREA

EX RESIDENTIAL FLATS

N

BUSINESS SQUARE

EX RETAIL

EX CHURCH

EX GYM

OUTDOOR STAGE
community talks, bands, shows

outdoor seating
pergola above

banked seating

ENTRANCE

COFFEE SHOP

kitchen

office

RESTAURANT

service corridor

service yard

admin office

showers

female toilet

male toilet

showers

store room

MULTIPURPOSE HALL
sports, community functions & charity fundraisers

ramp up

ramp down 1:12

ramp up 1:12

entrance lobby

JUNIOR PLAY ZONE

play area

arts & crafts area

nap area

internet & printing area

store room

female WC

server room

male WC

staff lounge

admin office

archives

managers office

WAITING LOUNGE

ramp 1:12

JUNIOR LIBRARY & LEARNING AREA

story-telling area

book stacks

study desk area

line of slab above

OUTDOOR MULTIPURPOSE SPORTS COURT

EXISTING ELECTRICAL PYLON

PROPOSED OUTDOOR PARKING AREA

190

N

MERGING OF ACTIVITIES ON COMMON GROUND
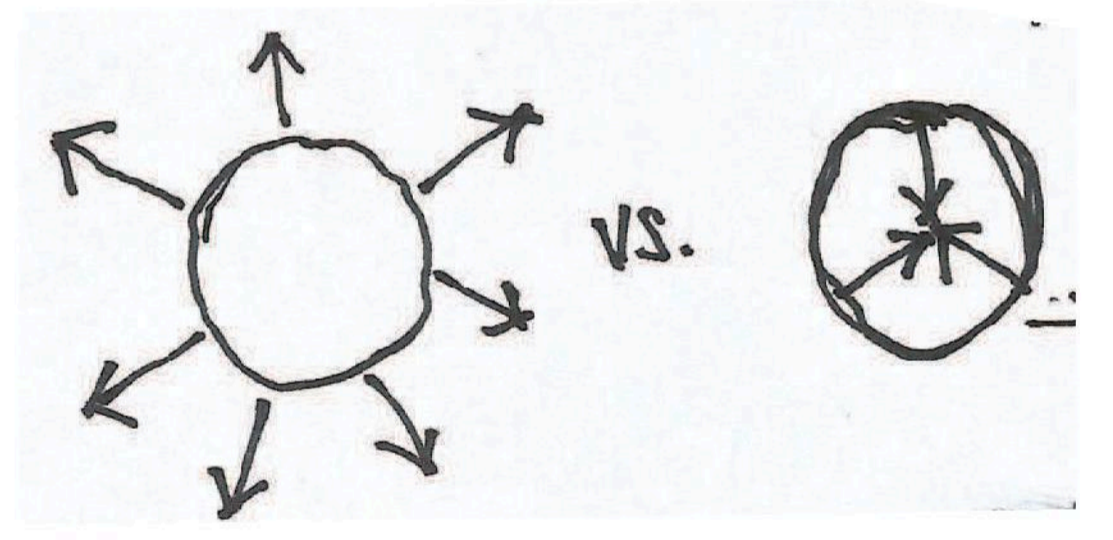
Different functions and activities link to common areas allowing for social interaction and gathering.
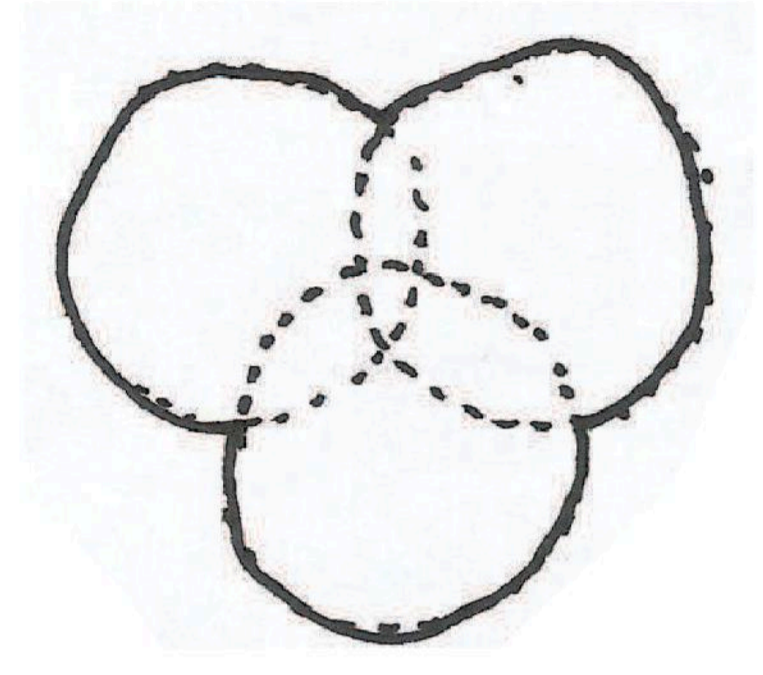
INTROVERTED VS. EXTROVERTED

Exposed activities to its surroundings allowing for strong visual connections and natural surveillance to occur. A transparent organism that translates into a social building.

VS.

OPEN SPACE AND NATURE

Allowing for atrium courtyard spaces and double volumes for light and ventilation in deep spaces. Spaces allow for interaction and engagement both visually and physically.

VENTILATION + LIGHTING   VISUAL LINK

westcliff youth hub
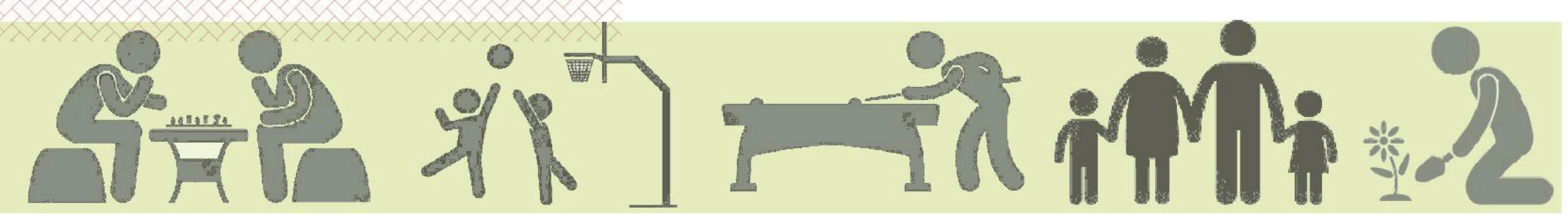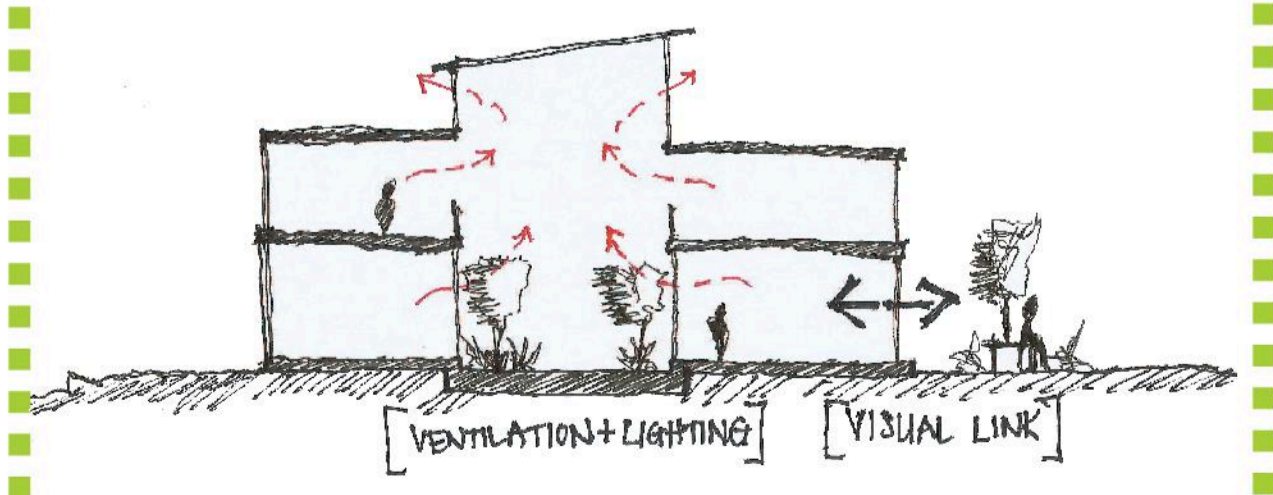
design approach

FIRST FLOOR PLAN
SCALE 1:200

pool tables
tennis tables
chess/ card games
video gaming
teen play zone
void
void
ENTRANCE LOBBY
ramp up 1:12
WAITING LOUNGE
store room
female WC
male WC
server room
staff lounge
admin office
archives
managers office
group study
group study
TEEN LIBRARY / LEARNING AREA
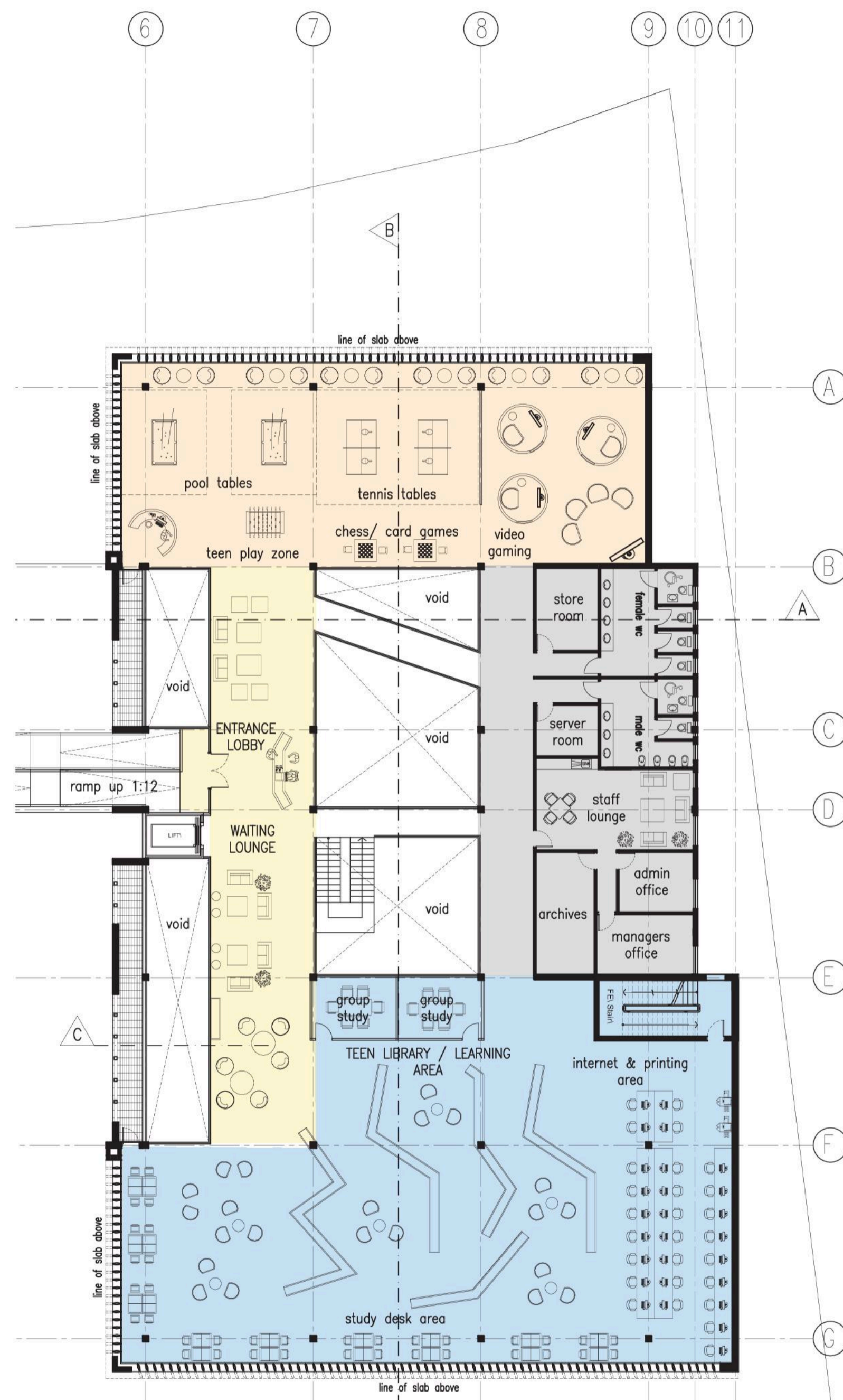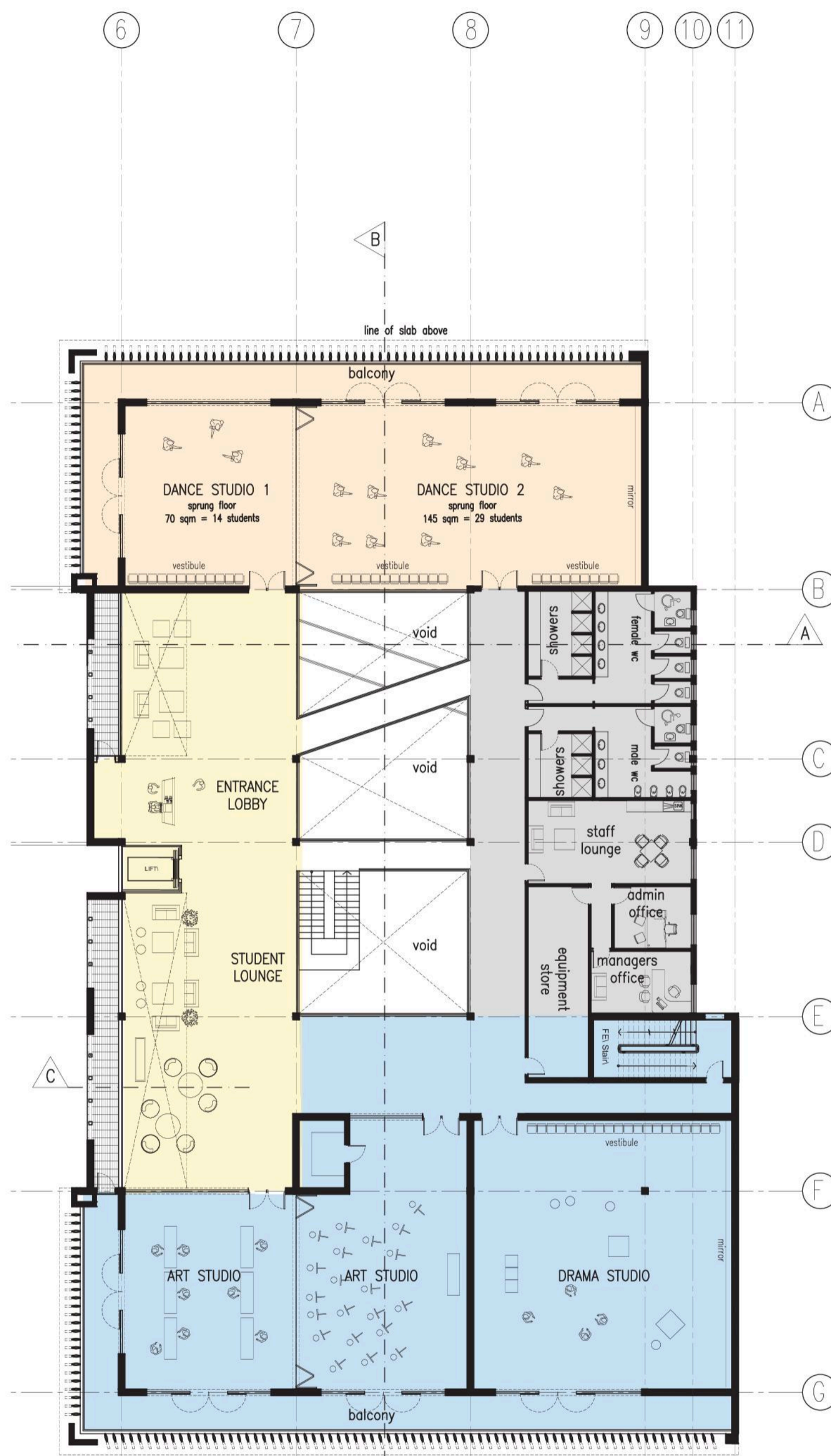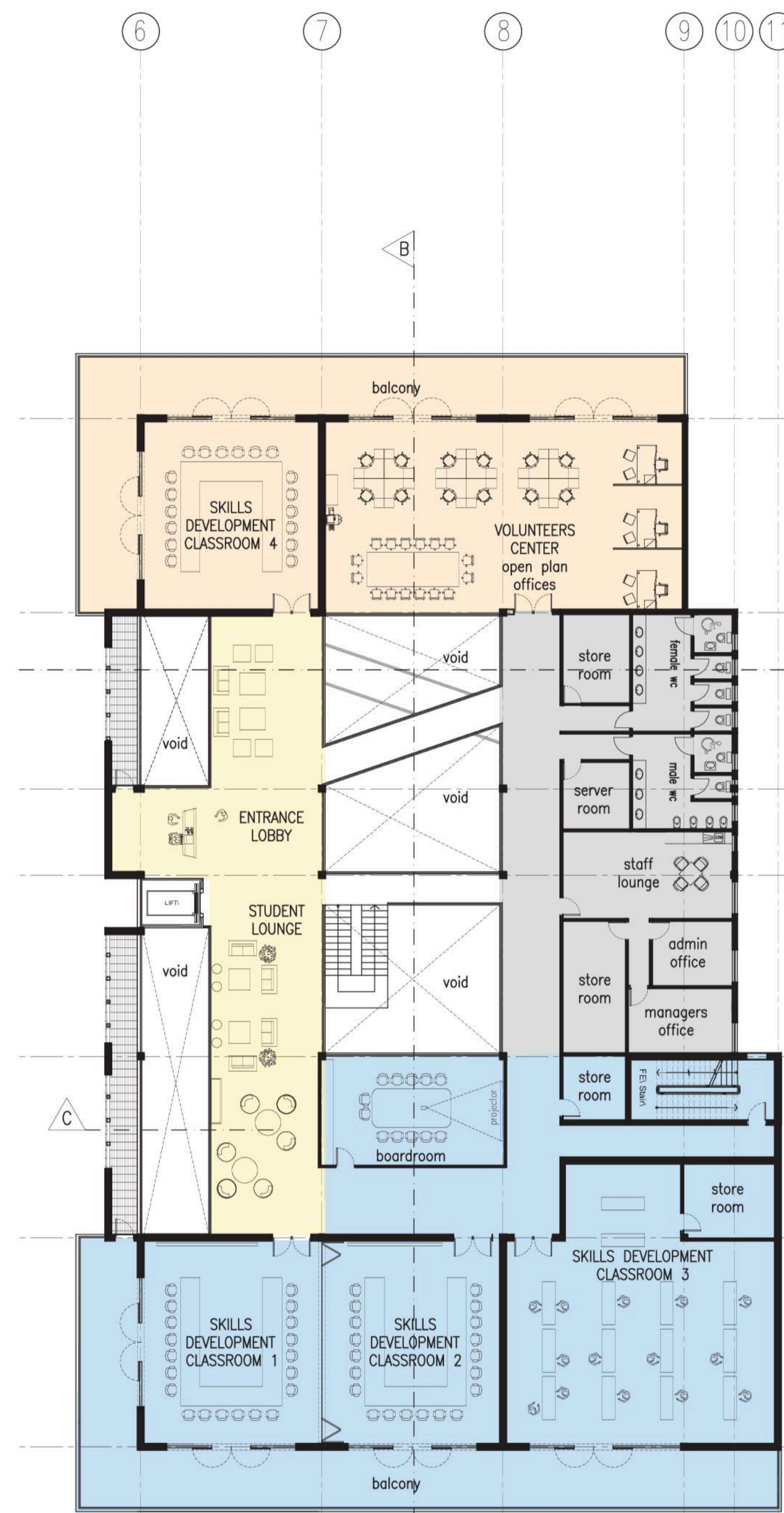internet & printing area
study desk area
line of slab above

SECOND FLOOR PLAN
SCALE 1:200

balcony
DANCE STUDIO 1
sprung floor
70 sqm = 14 students
DANCE STUDIO 2
sprung floor
145 sqm = 29 students
vestibule
void
ENTRANCE LOBBY
STUDENT LOUNGE
void
store room
female WC
male WC
staff lounge
admin office
equipment store
managers office
ART STUDIO
ART STUDIO
DRAMA STUDIO
vestibule
balcony
line of slab above

THIRD FLOOR PLAN
SCALE 1:200

balcony
SKILLS DEVELOPMENT CLASSROOM 4
VOLUNTEERS CENTER
open plan offices
void
ENTRANCE LOBBY
STUDENT LOUNGE
void
store room
server room
staff lounge
admin office
store room
managers office
boardroom
store room
SKILLS DEVELOPMENT CLASSROOM 1
SKILLS DEVELOPMENT CLASSROOM 2
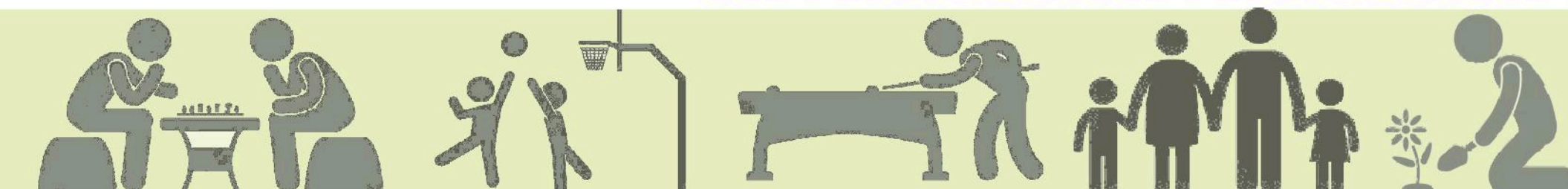SKILLS DEVELOPMENT CLASSROOM 3
balcony

The Hunt Library, North Carolina State University
Pearce Brinkley Cease + Lee
• Glazed activity spaces overlook the double-height space.
• Strong visual links to main social gathering areas like the reading lounge.
• Quiet reading rooms glazed but still maintains visual connection.

Michael Faraday Community School London
SMC Alsop
• Large open-plan flexible learning environment. Continuous external balcony provides external teaching spaces to the upper classrooms and also provides cover to the outdoor learning spaces at ground level.
• The main building creates a strong visual impact by virtue of its coloured facade and balcony cladding of black and white vertical fins.

westcliff youth hub

design approach

① ② ③ ④ ⑤　　　　⑥ ⑦ ⑧ ⑨ ⑩

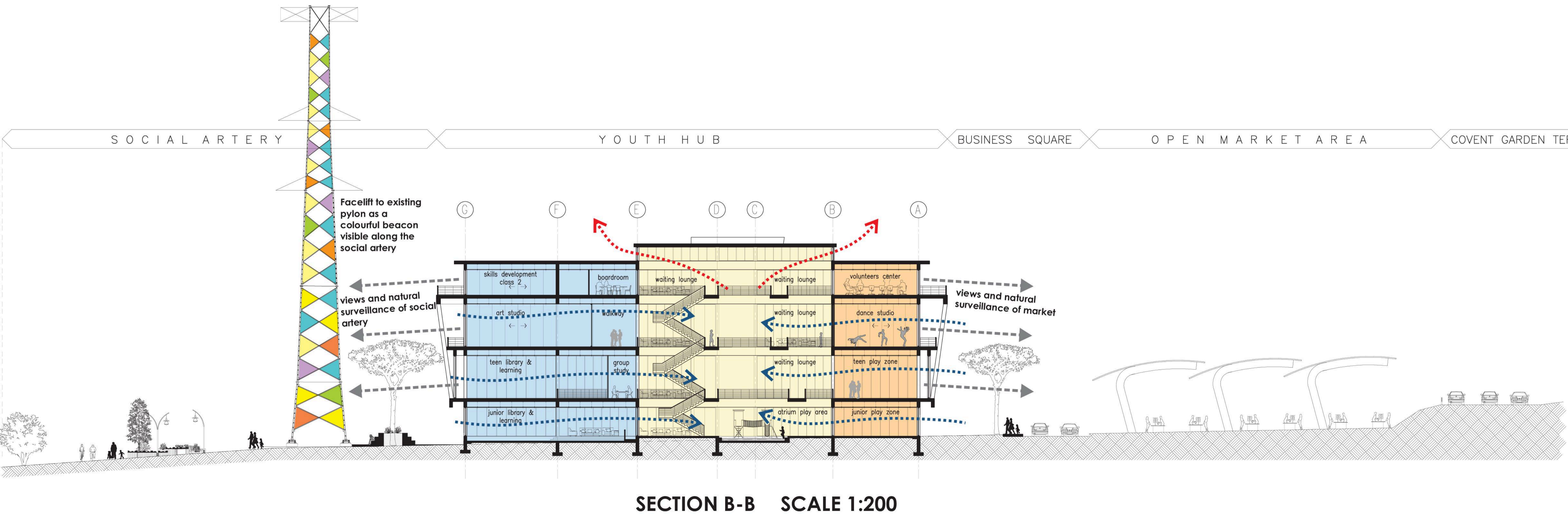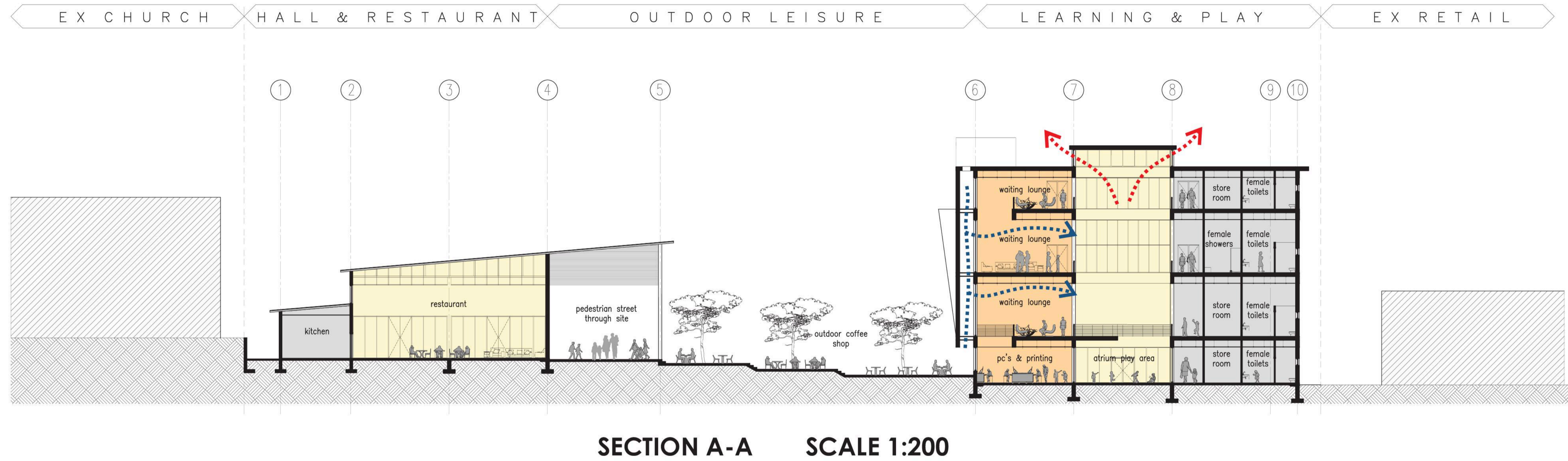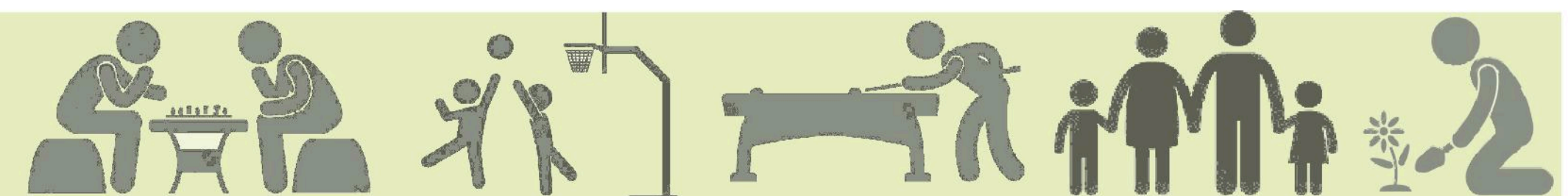waiting lounge | store room | female toilets

waiting lounge | female showers | female toilets

waiting lounge | store room | female toilets

pc's & printing | atrium play area | store room | female toilets

kitchen

restaurant

pedestrian street through site

outdoor coffee shop

SECTION A-A   SCALE 1:200

SOCIAL ARTERY | YOUTH HUB | BUSINESS SQUARE | OPEN MARKET AREA | COVENT GARDEN TER

Facelift to existing pylon as a colourful beacon visible along the social artery

views and natural surveillance of social artery

Ⓖ Ⓕ Ⓔ Ⓓ Ⓒ Ⓑ Ⓐ

skills development class 2 | boardroom | waiting lounge | waiting lounge | volunteers center

art studio | walkway | waiting lounge | dance studio

teen library & learning | group study | waiting lounge | teen play zone

junior library & learning | atrium play area | junior play zone

views and natural surveillance of market

SECTION B-B   SCALE 1:200

westcliff youth hub

SECTION C-C

Flat concrete roof with stone chip roof dressing laid over insulation and on Derbigum SP4 on Derbigum CG3. 1:60 fall to fullbore outlet. outlet housed in column.

DETAIL 1

ENVIRONMENTAL STRATEGY
Green skin allows a modulation of light and cool air through the building.

External steel grating walkway for maintenance of vertical creeper wall.

Steel stud wall for vertical creeper wall. vegetation layer of indigenous creeper plant to horticulturists details.

Aluminium glazing with 6mm tinted toughened glass as per architects window schedule specifications.

Polished concrete flooring to architects spec by concrete laser flooring

DETAIL 2

LOUNGE

1200x600mm acoustic ceiling panels between aluminium coiling frame.

LOUNGE

LOUNGE

SECTION C-C   SCALE 1:50

FLAT CONCRETE ROOFS

R1.ROOF DRESSING: 19mm stone chip, depth 50 mm spread and raked over roof for even finish in areas as indicated on roof plan.
R2.PROTECTION LAYER: BIDIM geofabric (thickness......) laid over insulation, minimum 150 side lap and 250 end lap to protect insulation from exposure to the sun.
R3.INSULATION: 50mm isoboard butt jointed laid on top of waterproof membrane, with butt joints and cut outs at rainwater outlets.
R4.FREE FLOW DRAINAGE: 19mm stone chip in continuous band along the side of the upstand beam to assist free flow drainage to fullbore outlets.
R5.DERBIGUM WATERPROOFING SYSTEM COMPRISING: one layer DERBIGUM SP 4mm thick applied to primed surface fully sealed to concrete slab, side walls and parapets. min 75mm side laps 100mm end laps to be sealed together by torched on fusion. water proofing to be dressed up beam sides and tops with tilting fillets where neccessary. treatment to be finished with two coats bitumous aluminium paint applied in accordance with mnfr's specification. NOTE: water proofing to be undertaken by derbigum approved applicator and 20 year guarantee to be seeded to owner. prior to the installation of insulation and decking, roofs to 'ponded' to ensure watertight installation.
R6.ROOF SCREED: 50 to 25mm screed cast in panels not exceeding 3,0m in length, wet cured for min 7 days in accordance with spec. 30mm fillets to all internal and external angles
R7.OFF SHUTTER CONCRETE SOFFITS: Concrete soffits to be smooth off shutter.

DETAIL 1   SCALE 1:20

GMS I-beam bolted to wall as per Engineers specification

GMS grating to Engineers specification

GMS I-beam to Engineers specification

GMS column to Engineers specification

vegetation layer of indigenous creeper plant to horticulturists details.

**DETAIL 2   SCALE 1:20**

## PRECEDENTS

KMC Corporate Office, India
Rahul Mehrotra

• The building employs the idea of a double skin as a visually dynamic façade, as well as a screen that humidifies the air entering the building – to create evaporative cooling for the interiors. The inner skin of the building is a reinforced concrete frame with standard aluminum windows.
• The principal of the facade is inspired by the idea of a double skin that allows a modulation of light and air through the building.
• The screen also takes on the aesthetic function of a dynamic façade.
• The company employs 20 gardeners who tend to the façade and can access it though a system of catwalks on all five levels.
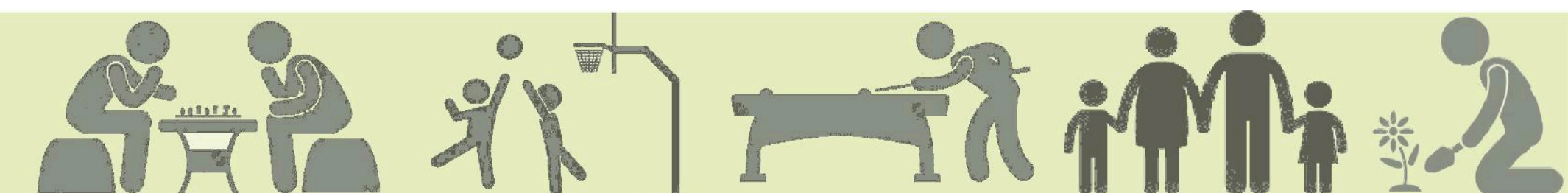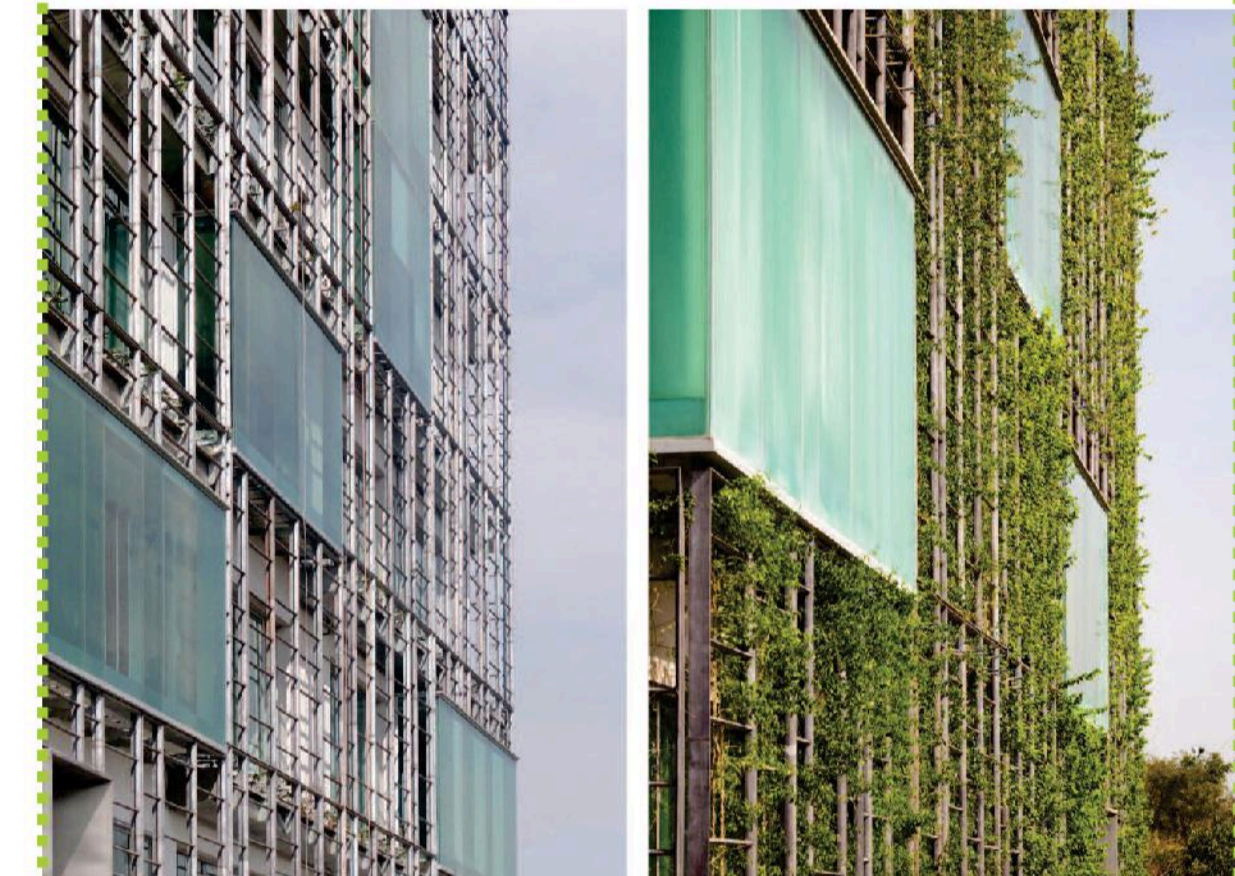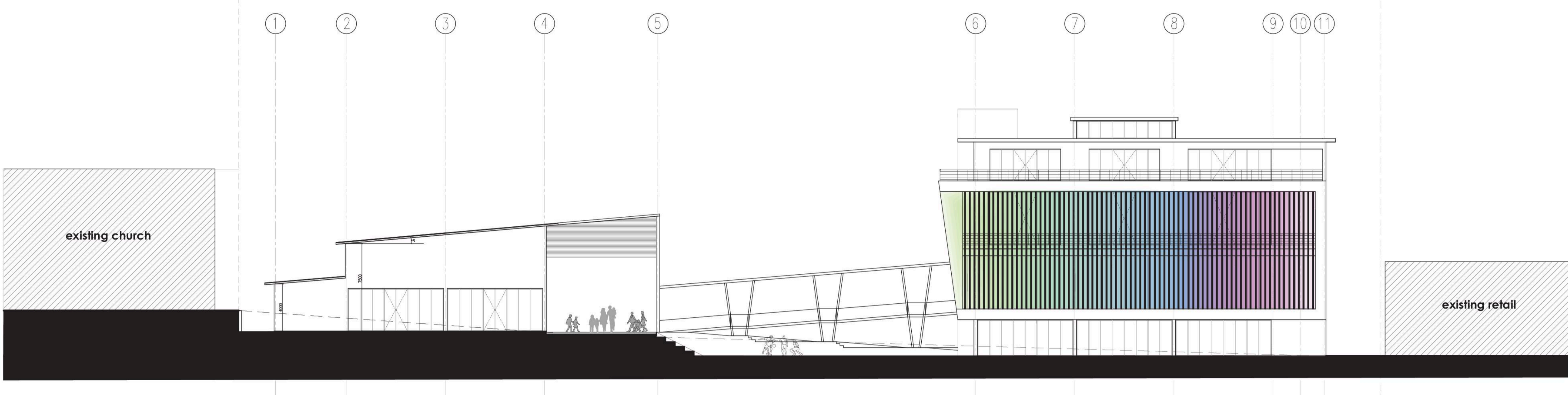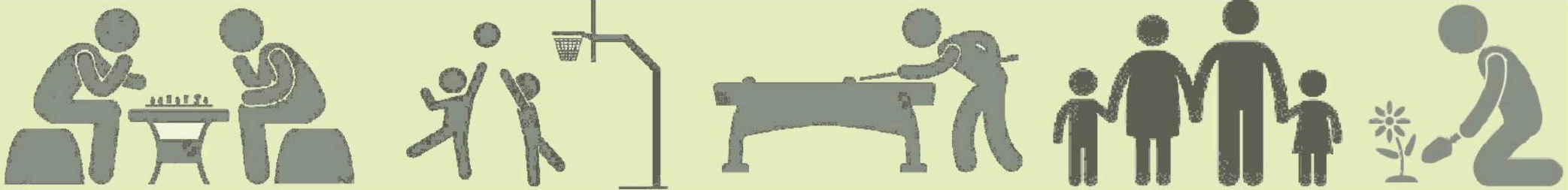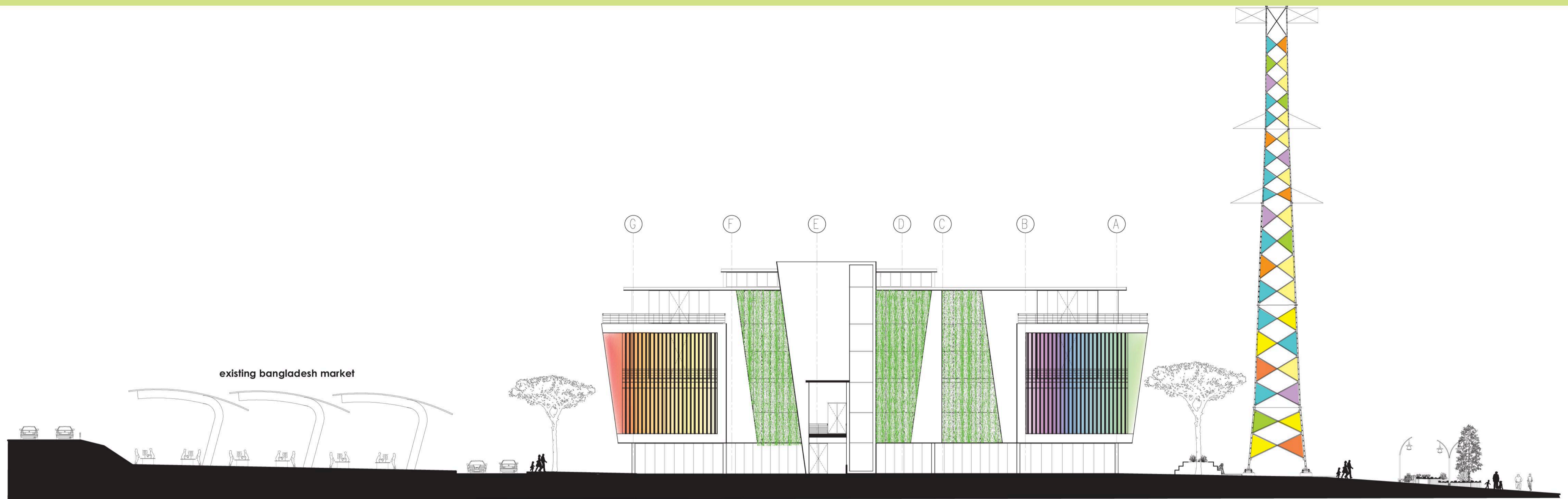
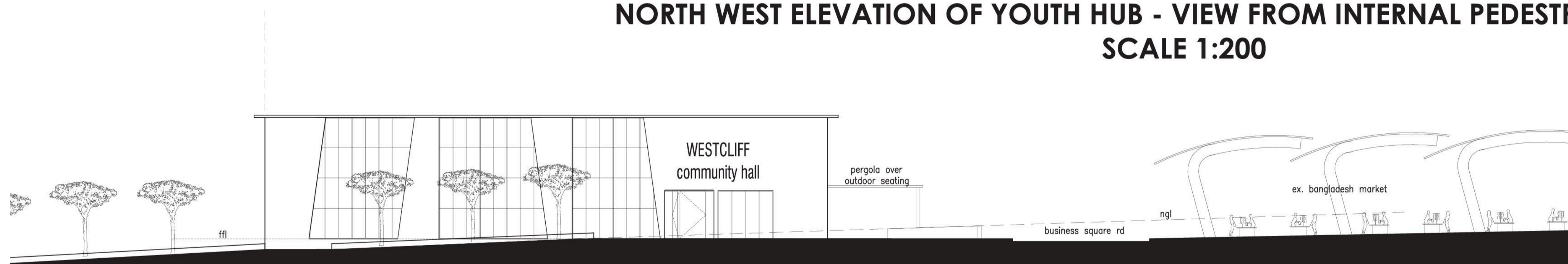**SOUTH WEST ELEVATION - VIEW FROM THE URBAN STRIP (SOCIAL ARTERY)**
SCALE 1:200

existing church

existing retail
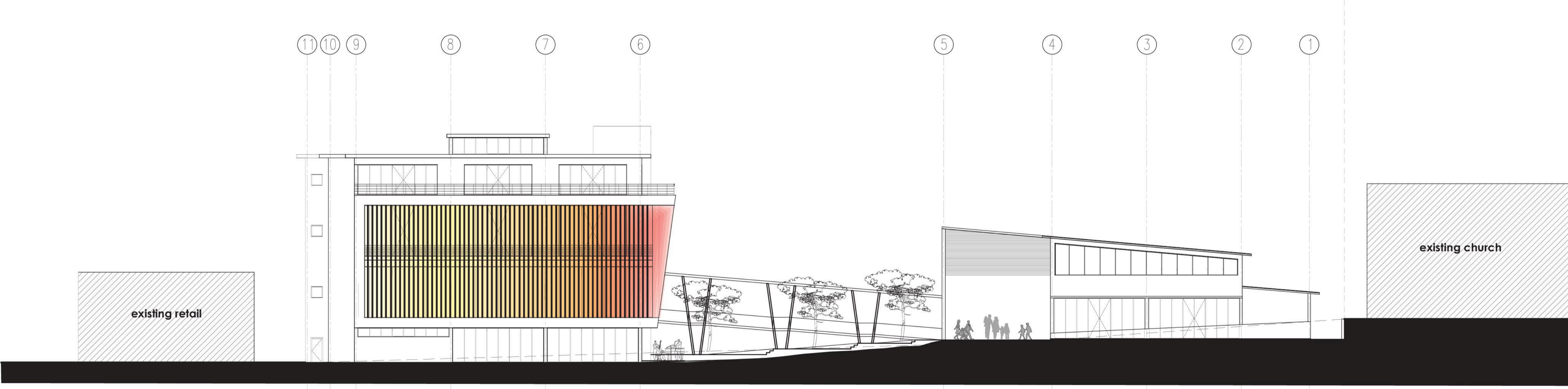
NORTH EAST ELEVATION - VIEW FROM BUSINESS SQUARE STREET
SCALE 1:200

existing retail

existing church

NORTH WEST ELEVATION OF YOUTH HUB - VIEW FROM INTERNAL PEDESTRIAN STREET
SCALE 1:200

existing bangladesh market

WESTCLIFF
community hall

pergola over
outdoor seating

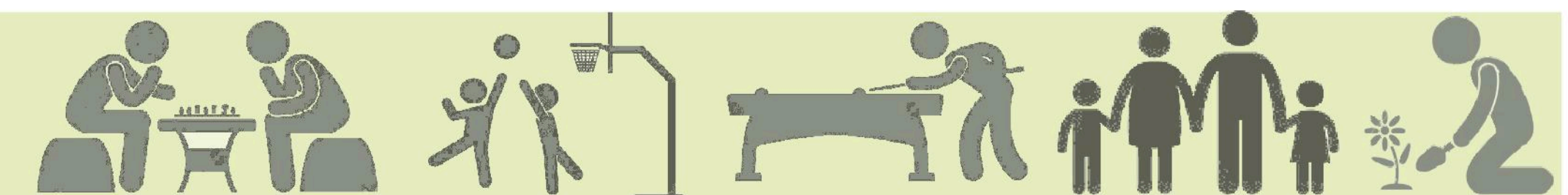ex. bangladesh market

business square rd

ffl

ngl

SOUTH WEST ELEVATION OF COMMUNITY HALL - VIEW FROM INTERNAL PEDESTRIAN STREET
SCALE 1:200
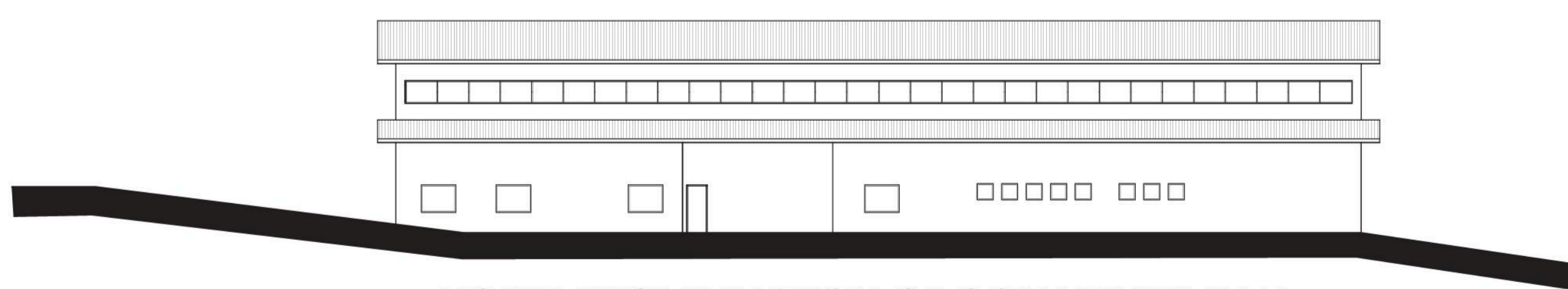
NORTH WEST ELEVATION OF COMMUNITY HALL
SCALE 1:200
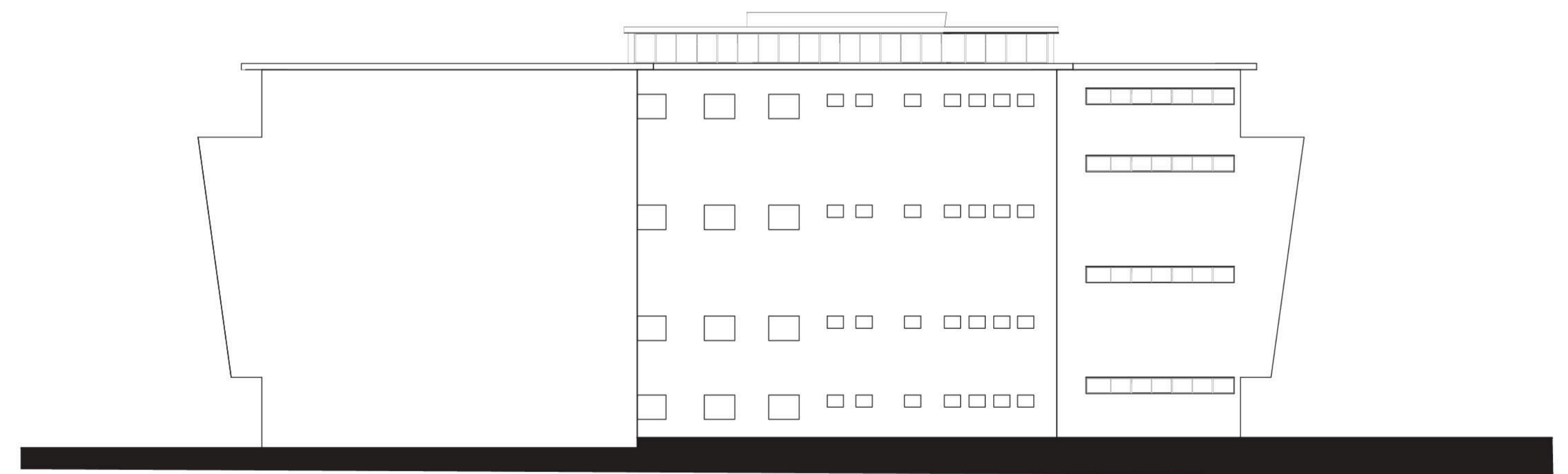
SOUTH EAST ELEVATION OF YOUTH HUB   SCALE 1:200
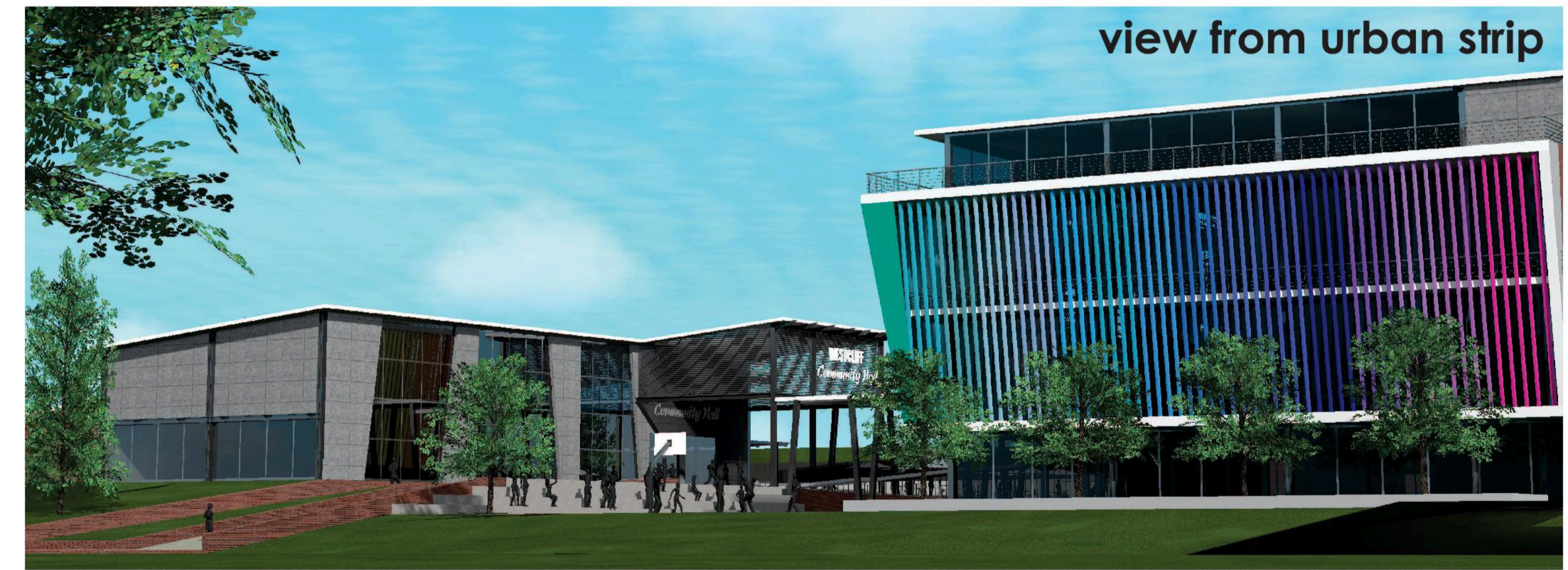
westcliff youth hub

design approach

north west perspective of youth hub

view of youth hub from the urban strip

view from urban strip

north east perspective of business square street

view of outdoor recreational space

view of community hall

westcliff youth hub