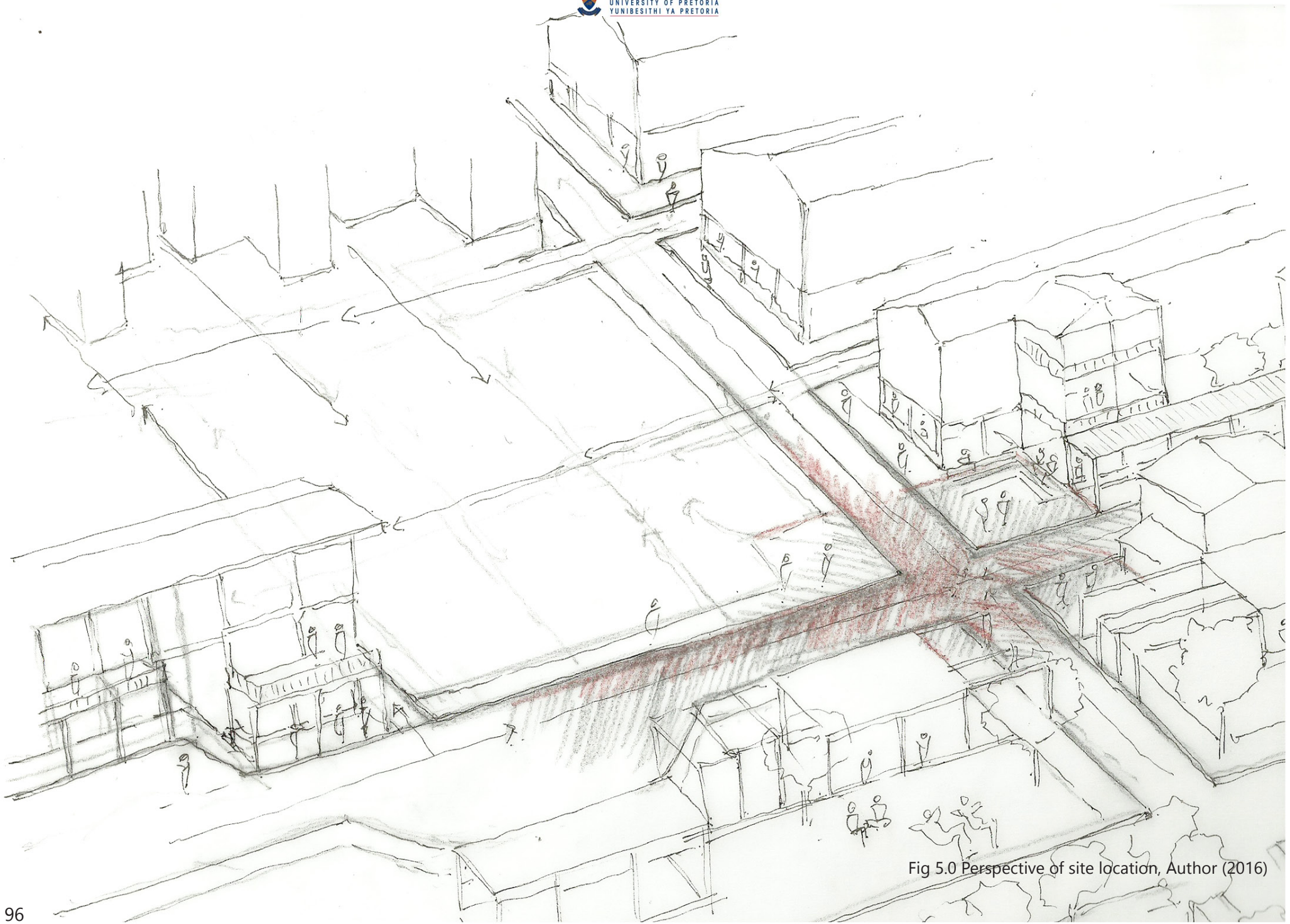


Fig 5.0 Perspective of site location, Author (2016)

# 5 Design proposal

# 5.1 Spatial patterns as an informant

Due to the lack of infrastructure and built fabric of the larger site, the conditions of the urban context were informed by the set of guidelines laid out in the urban vision, which created a number of informants for the design to respond to namley StudioMas's framework of the site, the urban groups's theoretical stand point which is influenced by Salat (2011) and Steyn (2005) as well as the groups analysis of spatial patterns found in Tshwane.

In order to enrich the design and research phase as well as inform the building footprints onsite, the study of spatial practices was done. This is an important tool which can be used to strengthen and build on existing structures rather than starting a new (Hamdi 2010). Salat (2011) emphasizes that in order to create a sustainable urban condition it is essential to consider and recognize existing site conditions.

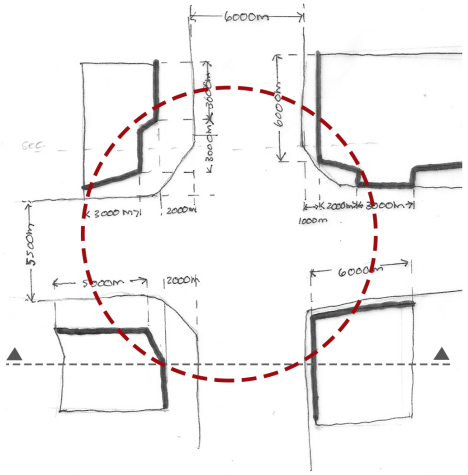
> *Change is integral to assuring a good fit between people and place over time. Places grow, adapt, transform in response to needs and circumstances, if allowed to do so and, if not, become a burden on the economy and on people who become captive in the absence of choice* (Hamdi 2010:xvi).

In support of Lefebvre's (1987) *Architecture of the everyday* as a theory by which local knowledge and the social dynamics of people is valued. Human practices including spatial patterns created by those that live and create informal spaces themselves can be used as an informant.

The diagrams illustrate spatial patterns found in Plastic View, Moreleta Park and considered how programmes informed the relationship between the street edge and building. These conditions where analysed both on plan and section and include:

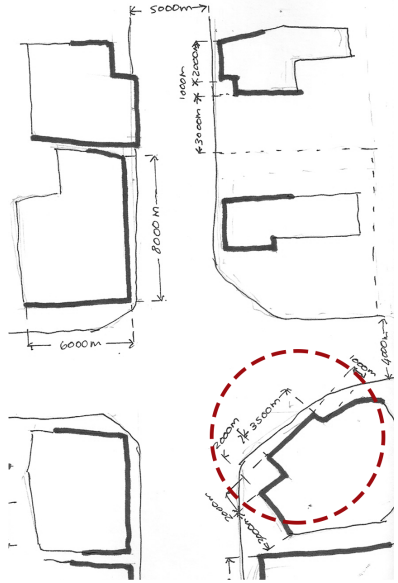
- Nodal intersections,
- Informal trade on a road accessed by vehicles and pedestrians,
- Private and public edges within relations to courtyards as a defining element.
- Multifunctional spaces

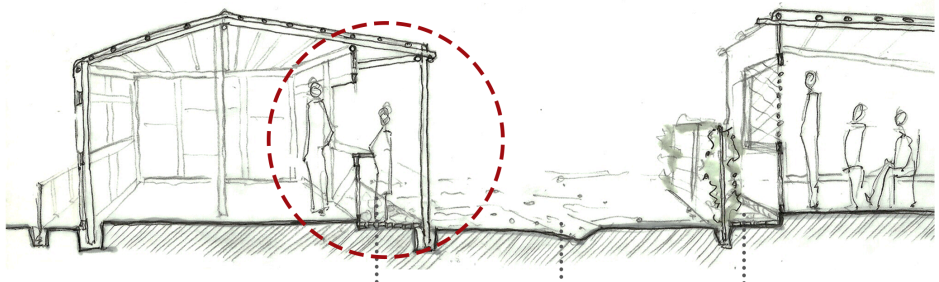
Nodal intersection



Plan

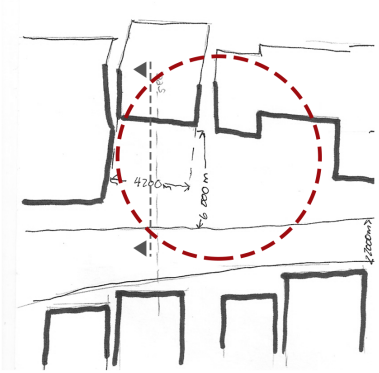
Multi functional residences
Informal trade (vehicular)



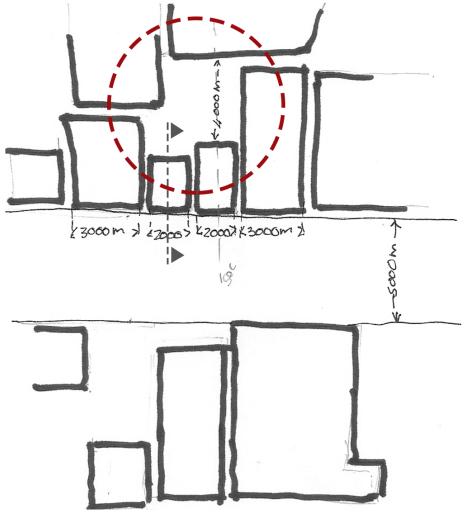



Section

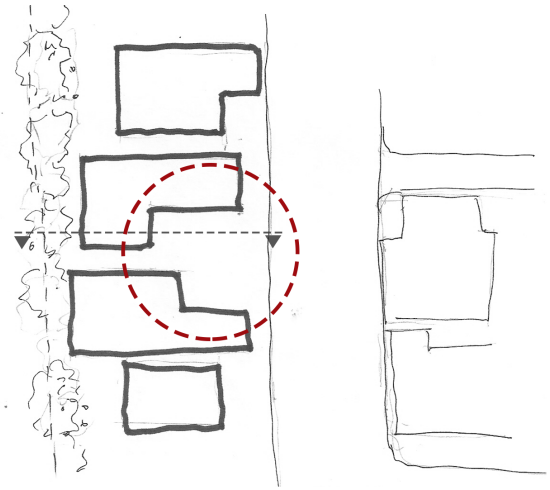
Multi functional residences:
Informal trade (pedestrian)



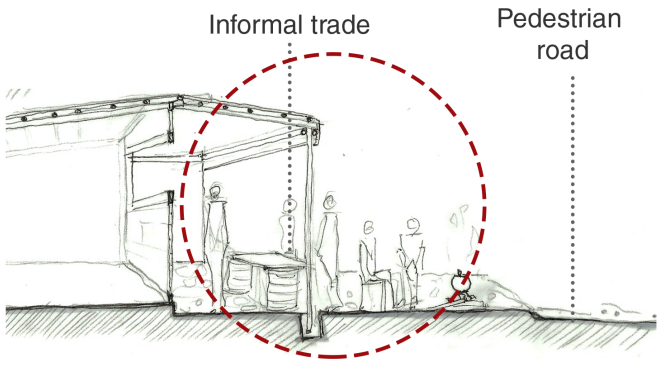
Private edge with relation to courtyard

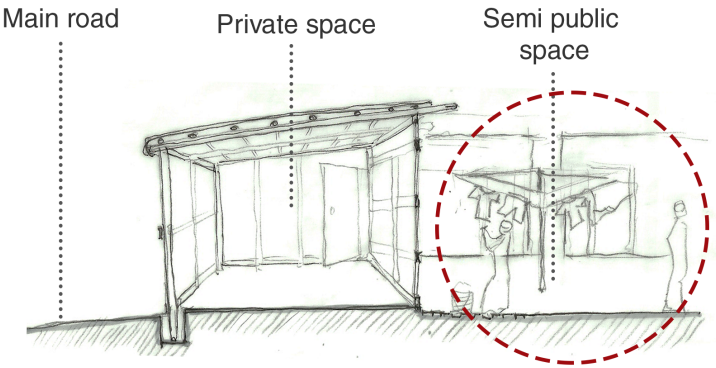


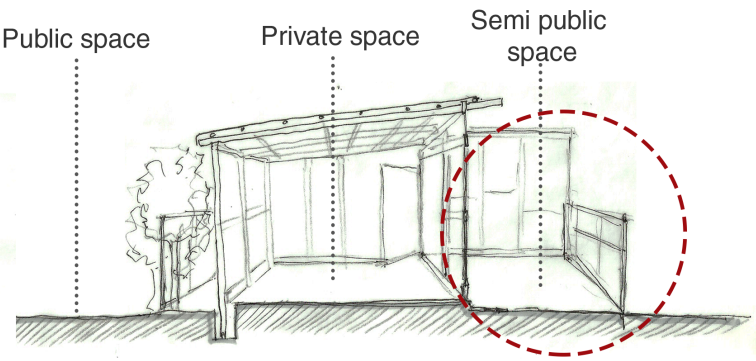
Public edge with relation to courtyard



Plan




Section

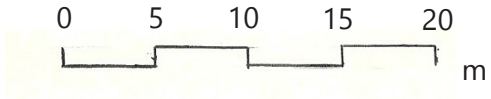



Fig 5.1 Analysis of spatial patterns, Diagrams, Author (2016)

These spatial arrangement patterns were then used as informants for the urban edges around the proposed site and extended urban framework. For example, retail based activity on the vehicular accessed boulevard is situated closer to the roads edge, as fast moving traffic can catch glimpses of the retail activity, while on the pedestrian boulevard retail activity is set further back from the roads edge. Often the case in these informal settlements, it is essential the buildings become multifunctional spaces which offer both housing and retail opportunity, evident in the live/ work units proposed in the urban framework. The retail aspect is situated on ground floor forming the public interface of the building where the residential unit is located above the retail space and the first floor, defining a more private realm. Entrances to residential buildings are set back from the main thoroughfare, where a public square or courtyard acts as an entrance to a number of residential blocks.

The analysis indicates that entrepreneurial activity is more or less evenly distributed through the settlement thus indicating a decentralised approach to planning. This idea of decentralising amenities is supported by theory discussed in chapter 2 as well as the urban framework and therefore informs the spatial intent of the project.

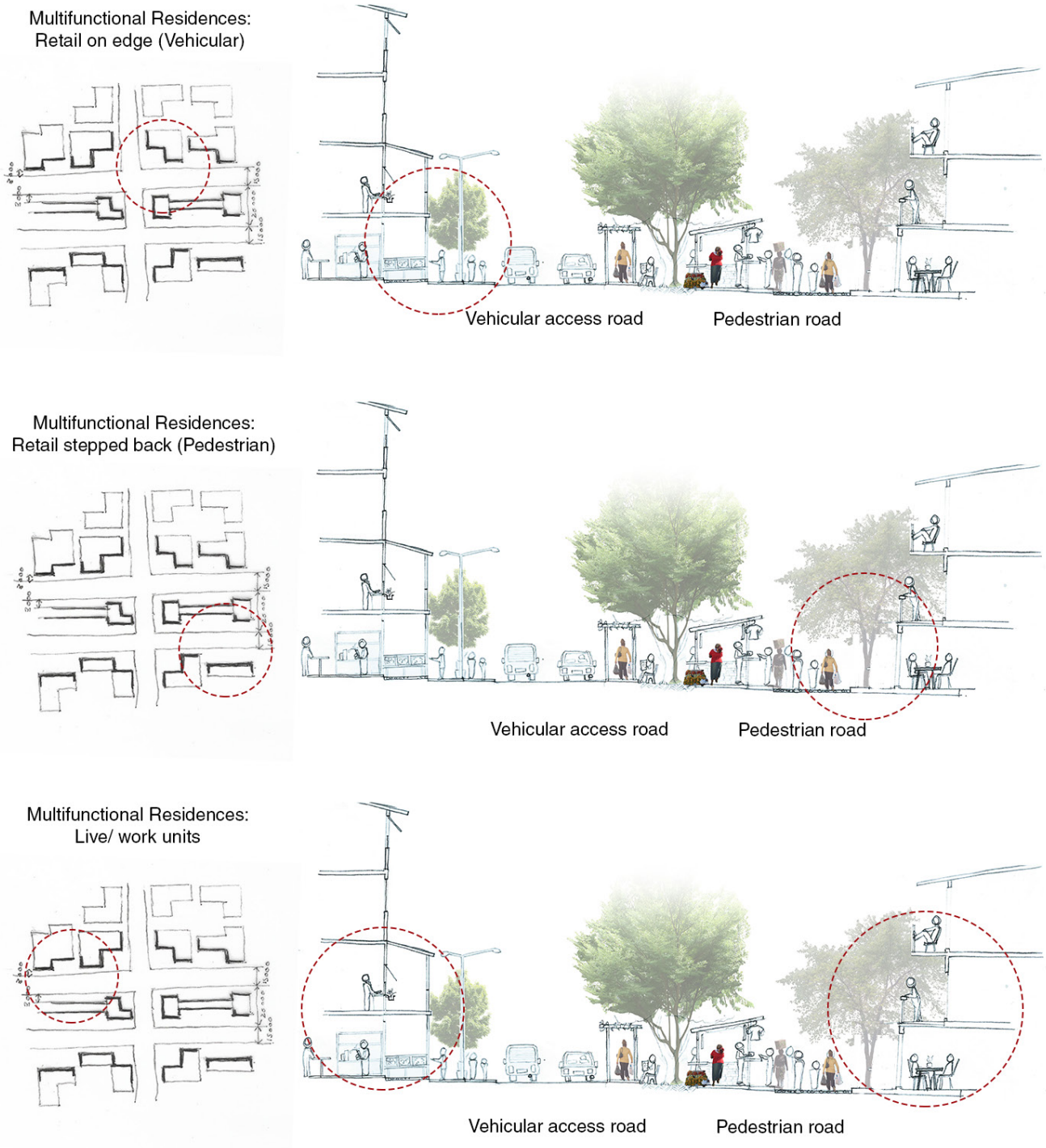



Fig 5.2 Urban framework spatial patterns, Diagrams, Author (2016)


Fig 5.3 Site plan, Mclagan (2016)


Fig 5.4 Perspectives of urban surroundings, Whitaker (2016)

Fig 5.5 Perspectives of the island and main vehicular road, Urban framework, Author (2016)

The analysis indicates that entrepreneurial activity is more or less evenly distributed through the settlement thus indicating a decentralised approach to planning. This idea of decentralising amenities is supported by theory discussed in chapter 2 as well as the urban framework and therefore informs the spatial intent of the project.

The footprint sizes of the surrounding retail and residential blocks needed to be specified in order to achieve the anticipated density on site. A document which specifies a number of principles regarding the spatial implications of low, medium and high density housing was used in order to guide this design decision (CSIR 2011:4). According to this document, an area of high density occupation, as is specified for the areas near the chosen site, would consist of 120 dwellings/ha (du/ha) with each unit covering the minimum living unit area of 50m² (CSIR 2011:4). Therefore, in order to achieve this figure at a floor area ratio of 0.6, the residential block footprint sizes would be at an area of 200m²/block (UP Arch MArch (Prof) 2016). This average footprint size would also then allow for larger unit sizes for larger families occupation as well as single units in the residential block design of the urban vision.

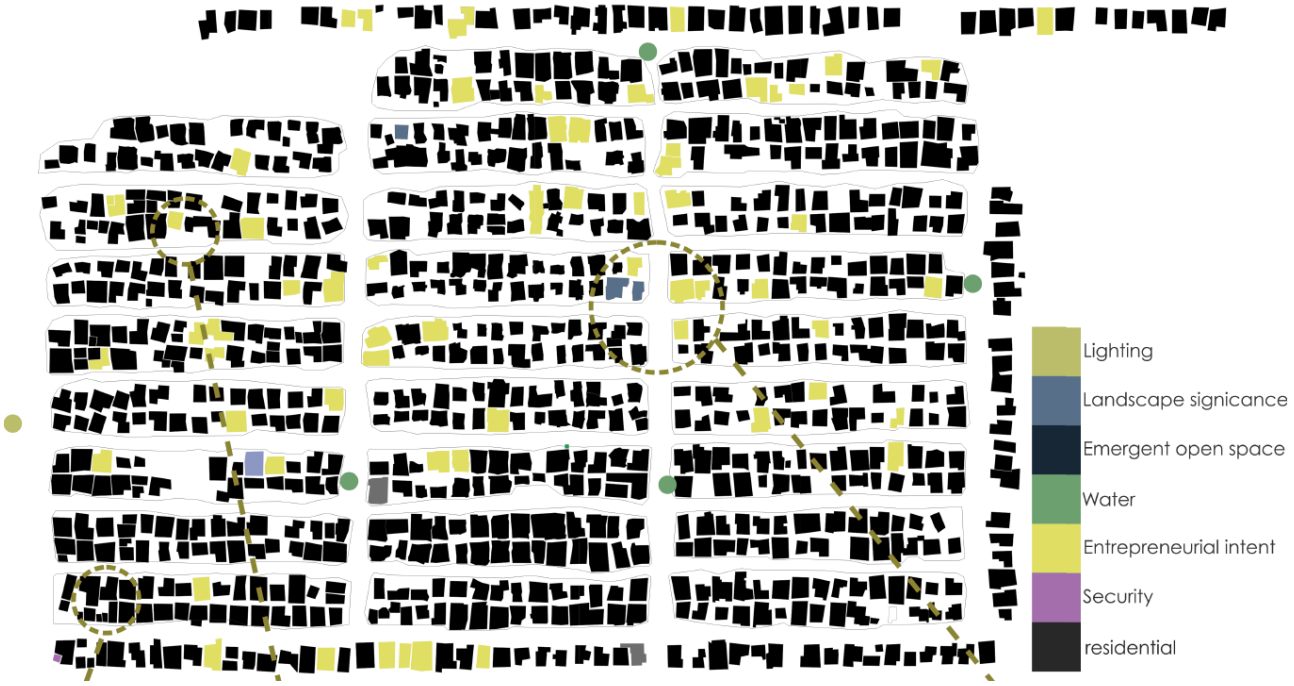



Fig 5.6 Plastic View decentralized approach to planning, (UP Arch Hons 2016)

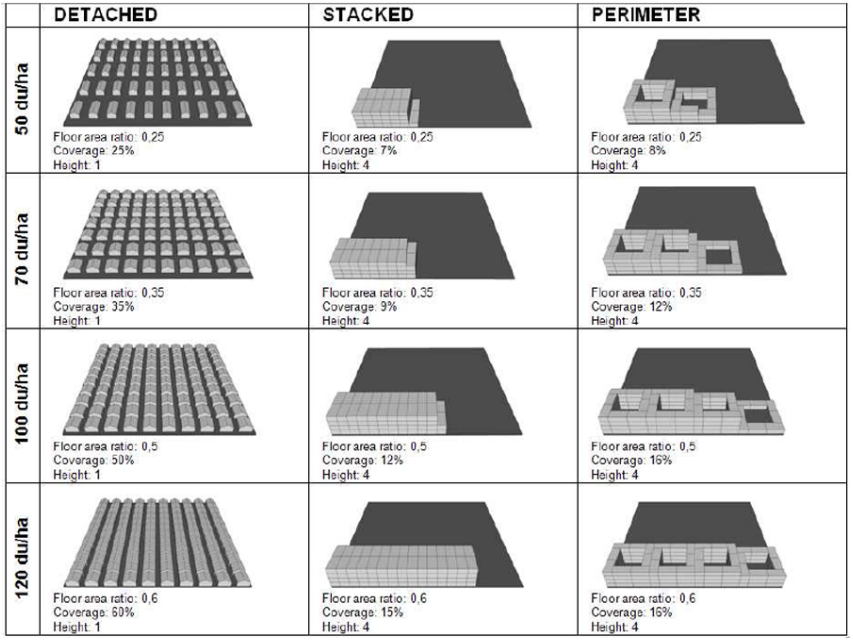



Fig 5.7 Foot print sizes, CSIR (2011)

# 5.2 Detail study area analysis

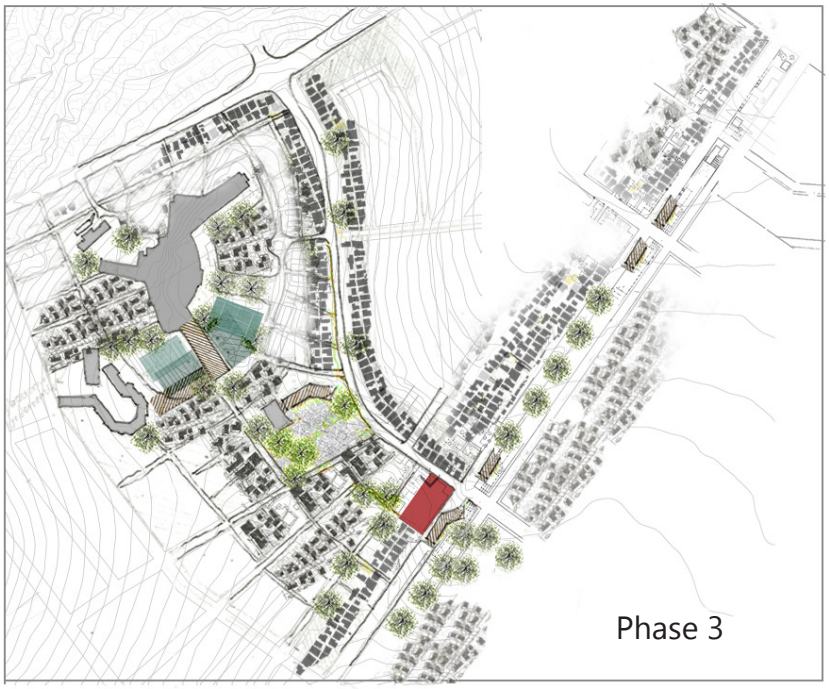


As highlighted in chapter 4, currently educational facilities are not easily accessed by the community of Plastic View. Therefore while considering the site with regard to the Pure Hope Foundation located at the Moreleta church, it is important that the choice of site is more easily accessible to all in the area.

The urban vision of this dissertation proposes that the individual research proposals on the Plastic View site branch off from the main access boulevard that extends across the site. This is done in order to support the urban framework which envisions the boulevard as a spine that draws energy onto the site. It is envisioned that the site develops incrementally thus supporting Salat's (2011) theory of an ecological approach to urban planning. The scenario played out suggests that urban growth begins along the main activity corridors and existing networks, namely the Moreleta Park Congregation site.

The existing learning networks on site that are located at the Moreleta Park Church play an important role in the dissertation and site location. An educational corridor is envisioned that connects the site to the Pure Hope Foundation by suggesting a number of educational facilities that are located along the corridor. It is suggested that the Moreleta Park Church cater for learners up to Grade 7 (primary school) and that a high school be built below the church.

Fig 5.8 Incremental phasing of development around the site, Author (2016)



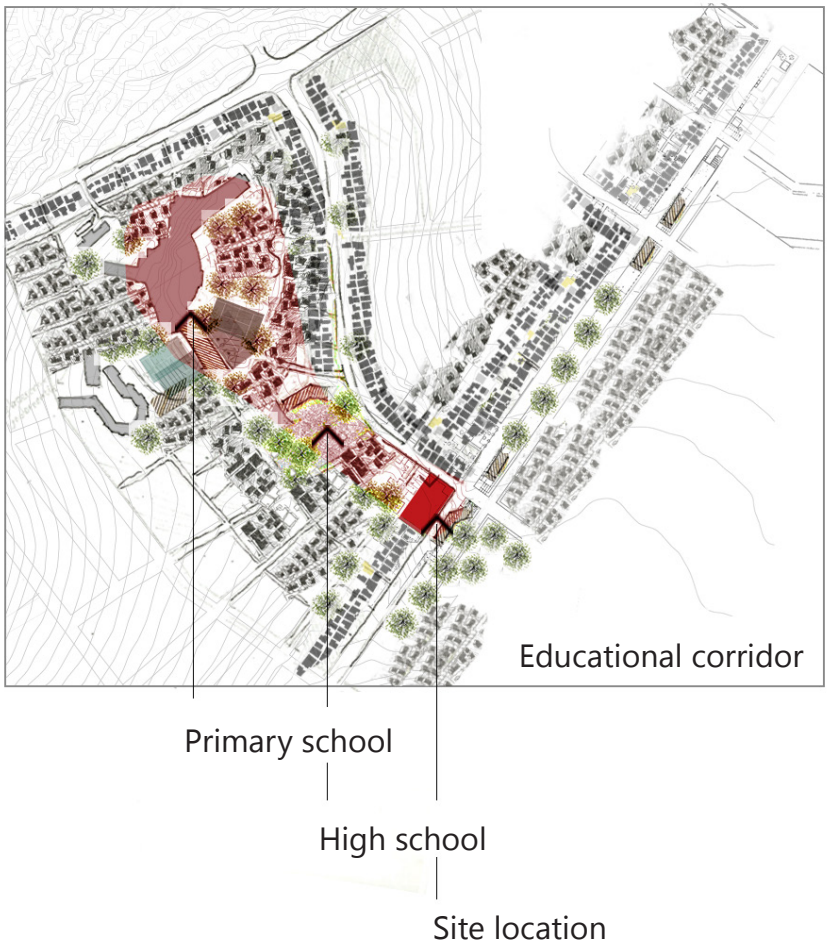





Fig 5.9 Incremental phasing of development around the site, Author (2016)

The programmatic and architectural intent of this dissertation highlights the importance of community interaction and exchange within a public space. Based on the urban framework, the site is located on a main intersection. The site sits on the main vehicular route which offers drop off points and bus stops at various intervals thus the site has the opportunity to engage with those who commute daily from work.

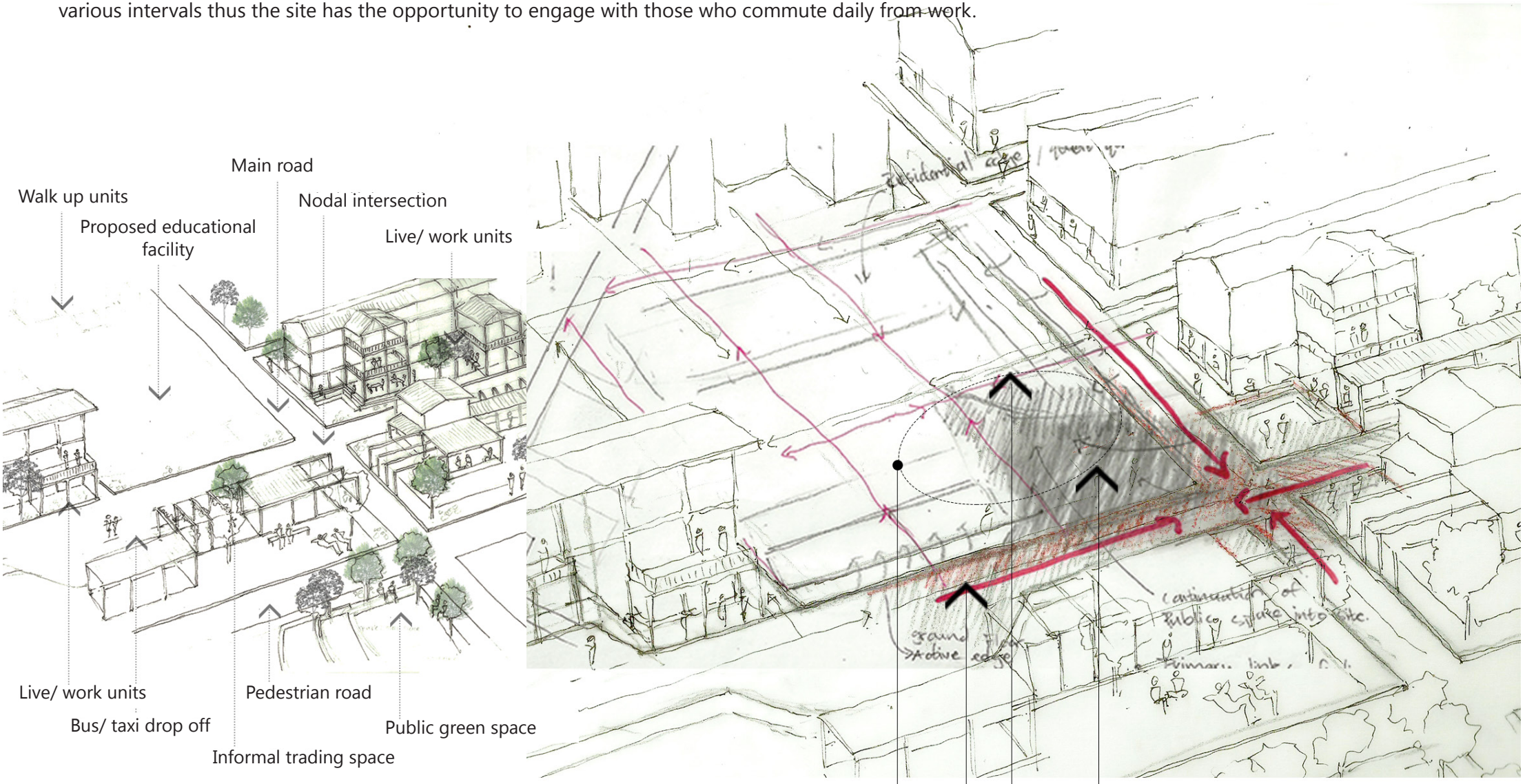



Fig 5.10 Activity around the site, Diagram, Author (2016)

The site becomes a space of transition between a retail/ commercially orientated streets edge and residentially orientated urban condition found behind the commercially oriented street edge. The architectural intent of creating a micro city that integrates into its urban fabric is able to occur on this site as it offers many city like conditions that one can respond to.

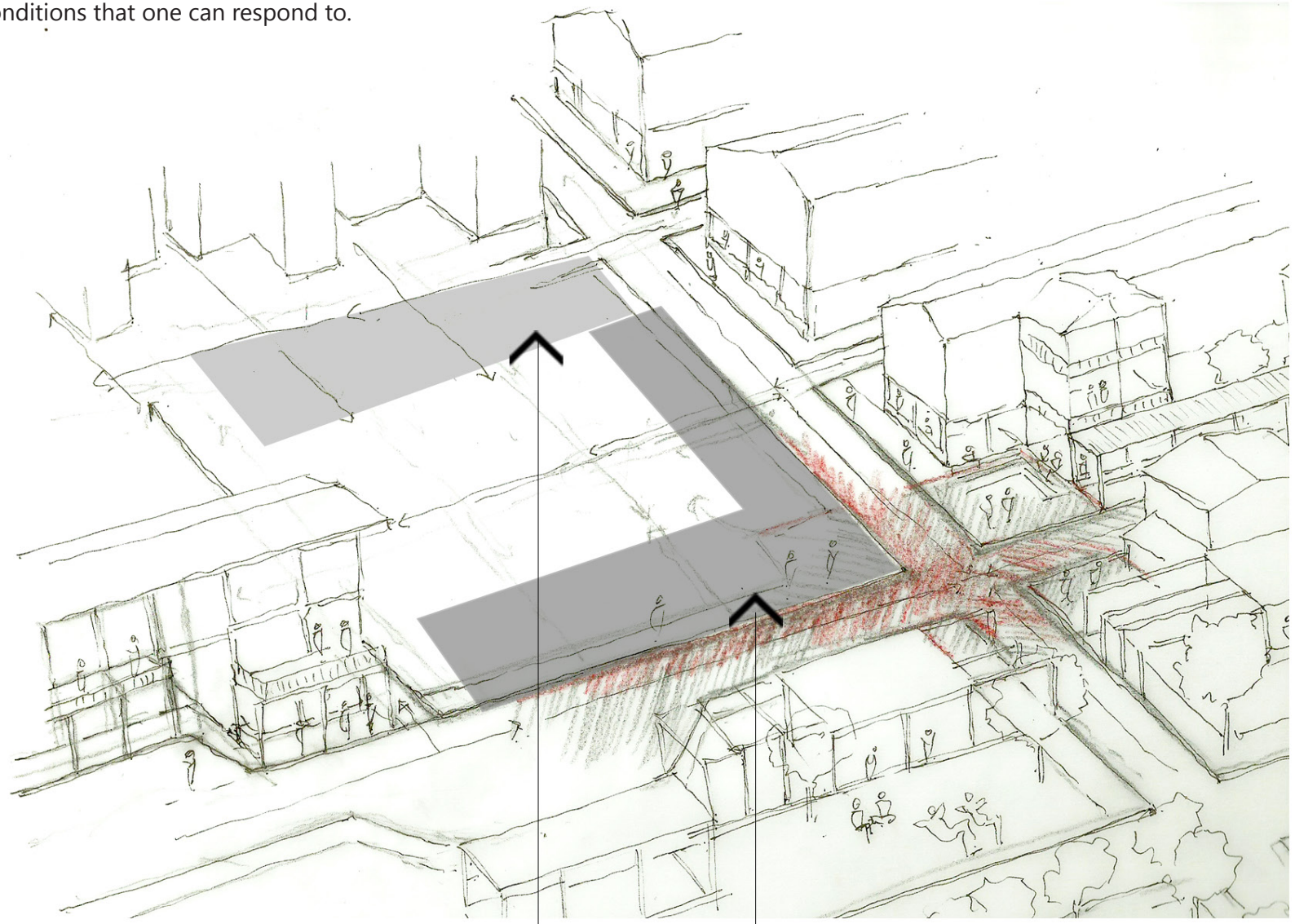



Fig 5.11 Edge conditions, Diagram, Author (2016)

# 5.3 Program development

The programmatic intention as discussed in Chapter 2 highlights that citizenship education can be used to encourage social cohesion and equality amongst people in a community. It is proposed that an integrated CVF be used to implement this notion of citizenship education by:

- Encouraging permeability and interaction between the community and educational facility.
- Establishing a variety of local amenities that are run by community members.
- Including a range of multi-functional and generational learning activities.

The intention developed in this dissertation is to focus on strengthening and supporting currently active learning networks, which is that of Pure Hope Foundation and skills training Programmes run from the Moreleta Park Church for members of Plastic View. The skills and development training programmes include:

- Sewing classes
- Training programme for domestic workers which consists of cooking classes, classes in washing, ironing and communication skills.

The field research conducted by the UP Department of Architecture ((UPArch(Honours)2016 & UPArch (MProf)2016) shows two forms of skills set in Plastic View are used to generate a form of income. These skills include;

- Carpentry
- Sewing

The above mentioned identifies that there are active learning and skills networks in Moreleta Park that can be facilitated for and strengthened. The CVF thus supports an integrative and participative approach to learning as the programme recognized existing training and skills networks used to appropriate the facility within its context.

Fig 5.12 A member of the cooking class at Moreleta Park Church, Photograph, Erasmus (2016)

# 5.4 Client

As suggested by Alexander (1971) and Salat (2011), the facility comprises of mixed use spaces and is intended to be a self sustaining entity in the community. The facility therefore needs to function as many things so that the community can use the facility as a resource to their needs. Therefore, following *community school* theory (Hertzberger 2008), the programme is flexible as the functions of the spaces change and adapt as the needs of the people adapt, becoming truly integrated into the community.

Community participation and volunteer work at the Moreleta Park church is essential and supports the urban vision, of conciliation, citizenship education and decentralised learning. Therefore it is essential that the CVF encourage and engage in socially integrating people from different races, classes and cultures. Programmatically this is done by:

- Encouraging that the facility be used by different organizations and learning networks such as POP UP or the University of Pretoria.
- Accommodating those who would like to volunteer their skills such as the Moreleta Park Church community.

It is to be noted, as highlighted in chapter 2, that the facility would cater for students who decide to further vocational education from grade 10 onwards. The facility would also cater for adult training after hours.

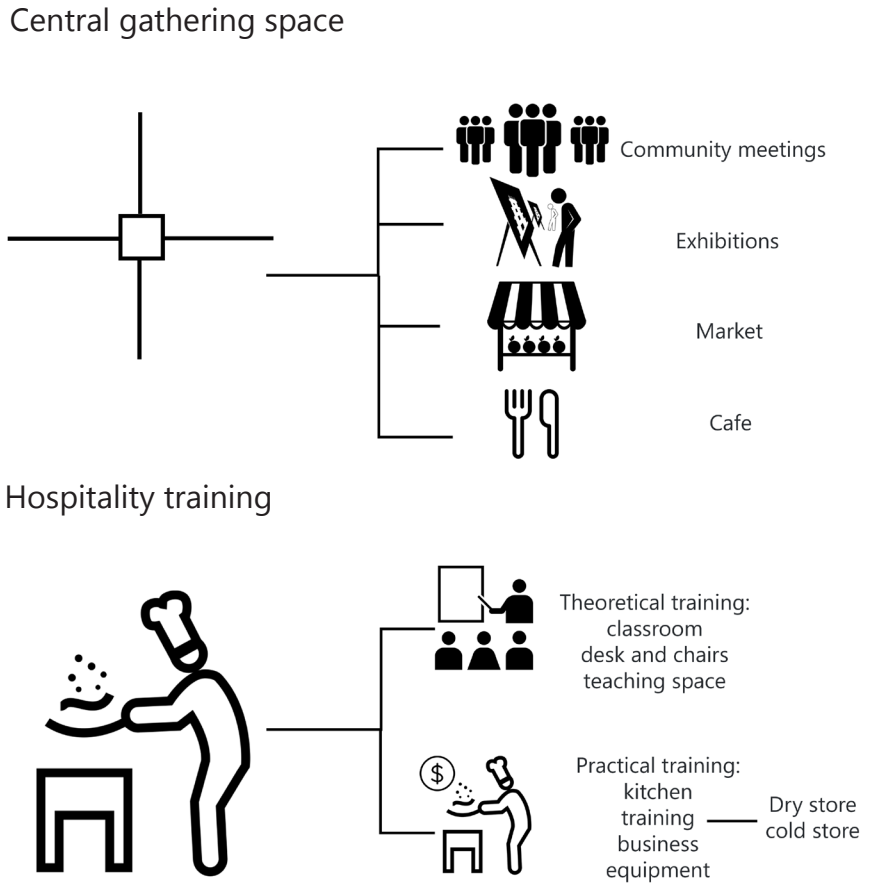



Fig 5.13 Diagrams of the programmatic requirements, Author (2016)

## The Community Vocational Facility consists of:

- A Central communal space

In terms of the architectural and programmatic intent proposed in this dissertation, the facility is seen as a micro-city which can be used as a community centre. The central communal space functions as a large gathering space where community meetings can take place and where exhibitions or markets can be held.

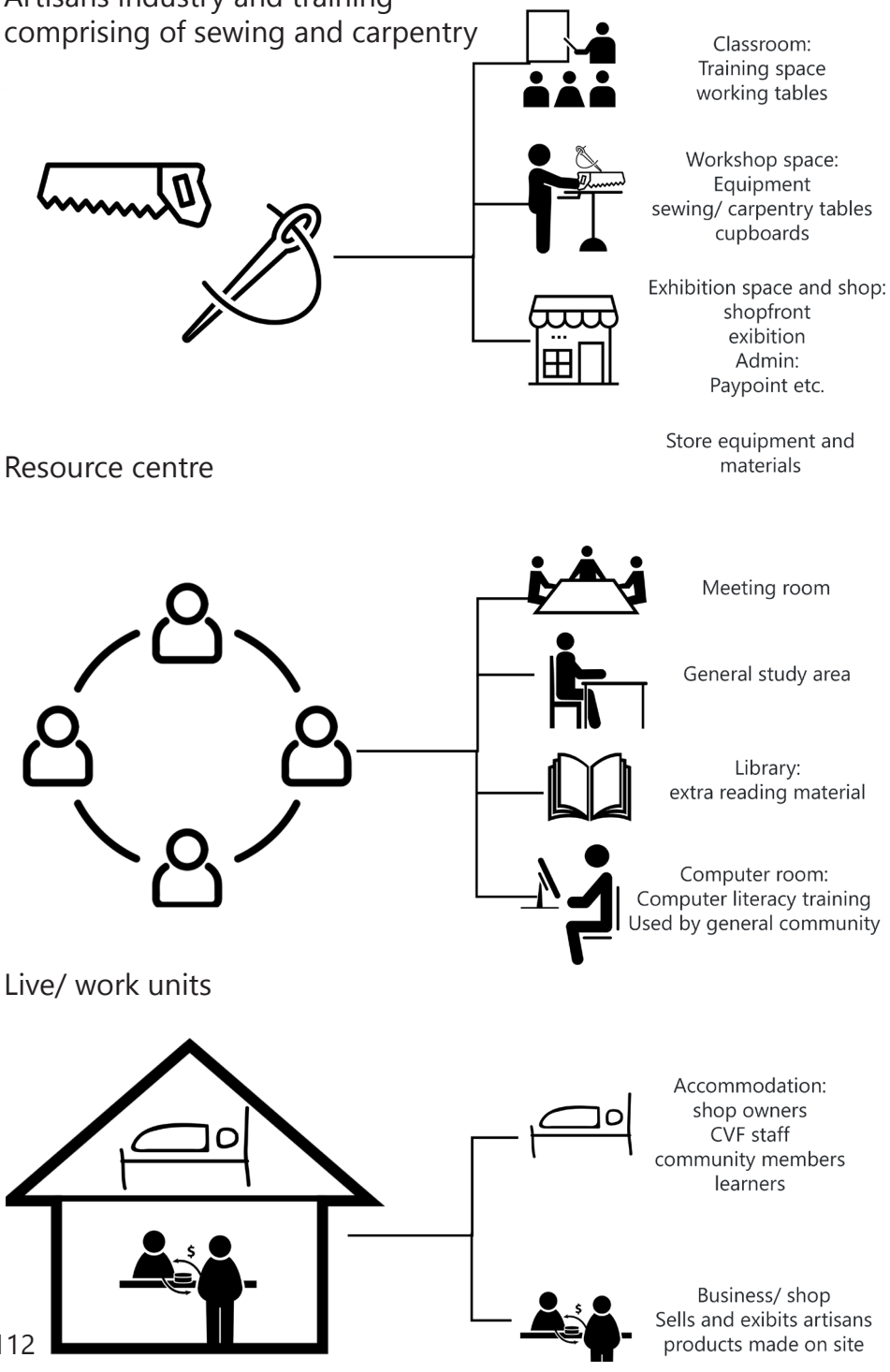
This space is seen as the heart of the facility as the arteries (streets) radiate from the main public space.

- A hospitality Training space

The skills training programmes that are run from the Moreleta Park church includes hospitality training. The course is offered by a professional chef, who lives in Moreleta Park (UP Arch (MProf)2016). It is suggested then that this learning network be supported and strengthened through the CVF and therefore hospitality training is offered as a programme.

It is suggested that the training programme is run by a member of the community who partook in the cooking course at the Moreleta Park Church, and that the member uses this facility to train others to cook thus expanding the learning network. The kitchen also functions as a business which caters for the learners and community as well as for events or markets that can be held. Therefore the learners that are being trained are also able to generate an income.

The programme requires facilities for theoretical training, such as meeting rooms, an area that can provide the learners with extra study material such as a resource centre, as well as kitchen with basic facilities for practical training.




- Artisans industry and training space which comprises of sewing and carpentry.

The practical training programmes consists of three parts:

Training: Students receive their theoretical training in spaces that comprise of seminar rooms, meeting rooms and general study spaces.
Production: Students receive practical training in workshop spaces. This space must also be able to accommodate theoretical training.
Enterprise: The products can be sold on site, if the students are hired by the business owner to produce goods for him. This provides an opportunity for the students to begin generating an income as well as ease their way into the working world.

- A resource centre

The resource centre is seen as a community centre as it offers resources that the whole community can benefit from:

A computer room is used for computer literacy activities and can be used by the general public.
A general study space can be used by the students and community.
A small library which offers extra reading material in the specific subjects is necessary.

- Live/ work units

In support of the urban vision it is proposed that live/work units are based off of the main Boulevard. This provides for people to run their businesses on ground floor and then live above the business. The business owners will have a direct relationship with the CVF suggesting either that they take courses themselves or complete a course and then teach others.

- Administration

An office is needed for the manager of the facility.

Fig 5.14 Diagrams of the programmatic requirements, Author (2016)

# 5.5 Conceptual development

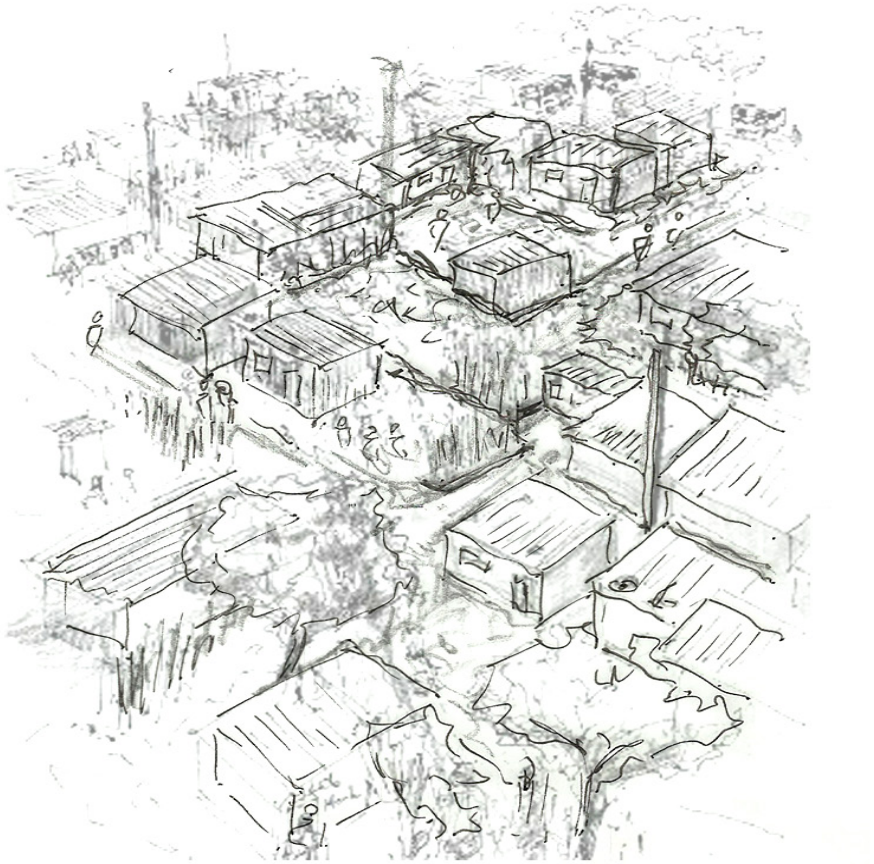
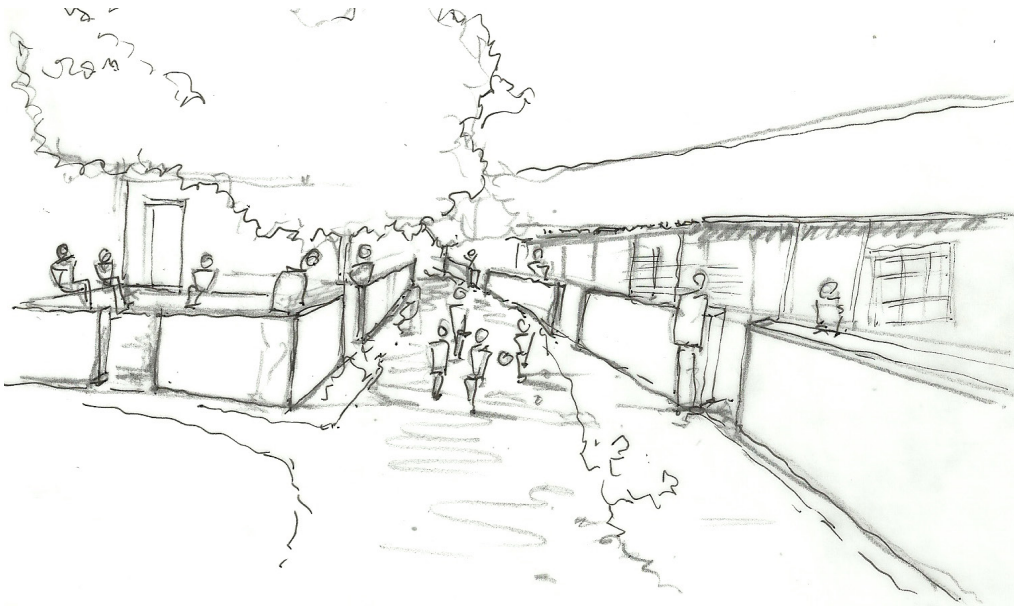


Fig 5.15 Sketch of urban condition in Alaska, Mamelodi, Author (2016)

Conceptually , the proposed facility aims to strengthen social exchange between the learners and community. This translates into a spatial relationship between the building and its surrounding urban fabric. The aim of the facility is to move away from the idea of an institutional layout which can be described as isolated, functionally dominant and intimidating, but rather suggesting a complex layout that integrates learning with its surrounding environment, thereby creating spatial networks.

Proposing that the CVF is a city in miniature, as discussed in Chapter 3, as well as using site specific informants such as that of spatial patterns identified in informal settlements. The dissertation explores the components that a city comprises of by which the design is interpreted and developed as a city in miniature.

The notion of learning streets as Hertzberger (2008:113) describes it is a space that offers the greatest variety of interaction to occur between people of a different age, race and class, becoming a training ground for how one would act in society. The notion of a learning street has a direct spatial implication on the policy needed to achieve citizenship education. In reality this idea of what a street can become is not far off from the role streets play within informal settlements which were analysed previously in the dissertation.



True to many informal settlements the street space, which is used as a means to move and access space is also used to socialize and congregate in, thus becomes a collective public space. The main market streets are used for business. This is typically where spaza shops (an informal convenience store) are found that sell fresh produce and cooked dishes, where one can find barbers and hair braiders or where minibus taxis are washed.

Steyn (2008) describes the streets of Mamelodi, adjacent to Alaska informal settlement, as vibrant and busy where people interact and socialise with one another while busy with daily activities. The street acts as a main artery from which
amenities and businesses are connected. Hertzberger (2008:123) suggests that a street allows the space to be experienced as a coherent whole which creates spatial unity and social cohesion amongst the community.

> *Spaza shops (makeshift kiosks) selling fresh produce, sweets and tobacco, mobile phone kiosks, barbers and hair braiders, stalls selling cooked mealies, shack factories, a spot for washing minibus taxis; all seemed to be doing brisk business. There was also a shop selling snacks and beverages, which was heavily frequented for socialising*
> (Steyn 2008).

One can then suggest that streets are used for a variety of things. Streets act as a means of moving through space in order to access other spaces as well as acting as a place where one can pause and learn indirectly. If people congregate around a stall where one prepares to cook a meal, the notion of learning streets (Hertzberger 2008:113) occur.

Therefore conceptually, the notion of a learning street is explored further that focuses on the educational and spatial journey one takes through space. The dialogue between movement into space which symbolises the increasing of educational knowledge through learning is contrasted with pause in space which is necessary at times to reflect, contemplate and interact with others on what one has learnt.

Fig 5.16 Sketches of urban conditions in Alaska, Mamelodi, Author (2016)


Fig 5.17 Urban surroundings in Plastic View, photographs, (UP Arch Hons 2016)