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[Embodying Space]

CAPTURE IMAGE GALLERY

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The city of Pretoria has a diverse mix of people moving in and around it. This dynamic, ever-changing movement, combined with the city's cultural diversity, renders it ideal for an investigation into the relationship (or lack thereof) that exists between the moving body and architectural space.

The city and its architectural spaces are viewed as static. The human body and its movement is dynamic. These static spaces can not always accommodate the dynamic movement taking place within and around them. This leads to a lack of dialogue or interaction between the two, causing a tension which is further aggravated by the fact that they are situated within a constantly changing environment. The aim of this thesis is not only to examine the relationship between the city and the human body moving through its architectural spaces, but also to provide the platform for an investigation into the establishment of an active dialogue between the two.

CAPTURE is envisaged as an experimental laboratory in the city of Pretoria. It aims to rejuvenate the city's CBD, as well as to develop and promote arts and culture through the creation of a public exhibition space. It is a design intervention intended to create a space which captures and navigates its users through it, by exposing them to the different functions facilitated within it, as well as to the space and to each other. The introduction of this spatial intervention, informed by the existing pedestrian movement through an identified public thoroughfare, will encourage an active dialogue between the user and the space. Public art, in the form of the photographic image, has been identified as a possible means of communicating the user's surroundings to him/her. This, in turn, may encourage interaction with, and interpretation of the space.

[ABSTRACT]

Die stad, Pretoria, het 'n diverse samevoeging van mense wat in en om dit beweeg. Hierdie dinamiese, altyd-veranderende beweging, gekombineer met die stad se kulturele diversitieit, het tot gevolg dat dit ideaal is vir 'n ondersoek in die verhouding (of gebrek daaraan) wat ontstaan tussen die bewegende liggaam en argitektoniese ruimtes.

Die stad en die argitektoniese ruimtes word gesien as staties. Die menslike liggaam en sy beweging is dinamies. Hierdie statiese ruimtes kan nie altyd die dinamiese beweging wat in aan om dit plaasvind, akkomodeer nie. Dit het tot gevolg dat daar 'n afwesigheid van dialoog of interaksie tussen die twee ontstaan, wat wrywing veroorsaak. Hierdie wrywing word verder vererger deur die feit dat hulle hulself in 'n konstant veranderende omgewing bevind. Die doel van hierdie skripsie is nie net om die verhouding tussen die stad en die menslike liggaam, wat deur sy argitektoniese ruimtes beweeg, te ondersoek nie; maar ook om 'n platform te skep vir 'n ondersoek na die totstandkoming van 'n dinamiese dialoog tussen die twee.

CAPTURE word gesien as 'n eksperimentele toetsgrond in die stad, Pretoria. Die doelwit is om die stad se Sentrale Besigheids Kern te re-aktiveer, asook om kuns en kultuur te ontwikkel en te bevorder deur die skepping van 'n publieke uitstal ruimte. Dit is 'n ontwerp ingryping met die doel om 'n ruimte te skep wat die gebruikers daarvan vasvang en daardeur lei, deur hulle bloot te stel aan die verskillende funksies binne die ruimte asook aan die ruimte en aan mekaar. Die ruimtelike ingryping wat hier geskep word, is beïnvloed deur die bestaande voetganger-beweging deur 'n geidentifiseerde publieke deurgang; en sal 'n dinamiese dialoog tussen die gebruiker en die ruimte aanmoedig. Publieke kuns, in die vorm van die fotografiese medium, is geidentifiseer as 'n moontlike manier om aan die gebruiker sy direkte omgewing te kommunikeer. Op sy beurt mag hierdie dalk interaksie met, en interpretasie van die ruimte aanmoedig.

[SAMEVATTING]

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YUNIBESITHI YA PRETORIA

[INDEX]

[INDEX]

[LIST OF FIGURES]

[LIST OF FIGURES]

[LIST OF FIGURES]

[LIST OF FIGURES]

[INTRODUCTION]

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

[Background and context]

The city and its architectural spaces are viewed as static. The human body and its movement is dynamic. These static spaces can not always accommodate the dynamic movement taking place within and around them. This leads to a lack of dialogue or interaction between the two, causing a tension which is further aggravated by the fact that they are situated within a constantly changing environment. The South African city is an example of such an environment. It is in a constant state of flux due to the continuously changing and developing state of the country. Pretoria, as a South African city, has a diverse mix of people moving in and around it. This dynamic, ever-changing movement, combined with the city's cultural diversity, renders it ideal for an investigation into the relationship (or lack thereof) that exists between the moving body and architectural space.

The aim is not only to examine the relationship between the city and the human body moving through its architectural spaces, but also provides the platform for an investigation into the foundations for an active dialogue between the two.

[Research Goal]

The design of a space that interacts with the user and which subsequently encourages interaction and participation of the user with the space, leading to interpretation and a renewed understanding(perceptions); a space that creates time to pause in a society that is constantly moving; a space that considers its context and makes use of all available resources.

[Problem Statement]

Architecture is perceived as a static object in space, whilst movement is dynamic. The static object cannot always facilitate the dynamic movement occurring in and around it. One such example of a dynamic entity is the user of the space; this user is inextricably linked to the space - one cannot function without the other (they are not mutually exclusive). Now more than ever, our environment is in a constant state of flux due to the continuously changing and developing state of our country. The effect this has on both the static and dynamic entities within a space needs to be acknowledged. The interaction between the space and the user within this changing environment is therefore of the utmost importance, and it has become pertinent that we investigate how spaces can better accommodate the needs of the user within this ever changing environment.

[Research Questions]

How can one create a space which interacts with, responds to and supports the user? Can space be used as an instigator for human interaction and participation, either with the space or with fellow users?

How can space influence and evoke the movement of a user?

What effects can space have on a user, both physically and psychologically?

[Aims and Objectives]

The use of movement as a catalyst and guideline in the creation of dynamic space which is both responsive and supportive.

The creation of an 'active' dialogue between the user and the space.

The creation of a space which influences the movement of the user thereby altering not only the physical experience, but also the psychological experience of the user.

[Definitions]

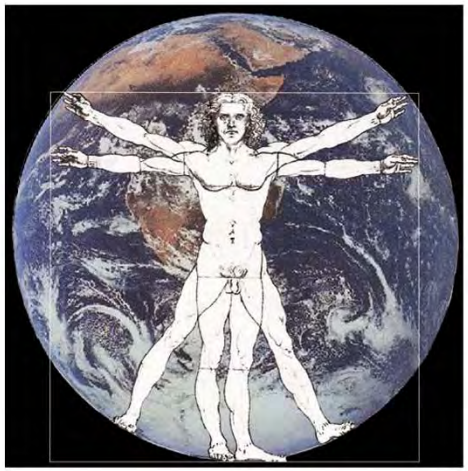
Environment - "the physical surroundings, conditions, circumstances in which a person lives" (Thompson, 1996: 452).
- "A physical milieu, but one which actively and significantly surrounds, so that the environed thing is in some way aware of, or affected by, its 'environment'. A surrounding thing which implies an experiencing subject at its centre" (Hillier, 1996: 380).

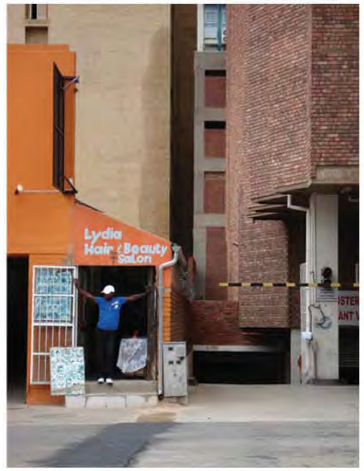
Move – "change one's position or posture; put or keep in motion" (Thompson, 1996: 890).

Movement – "the act or an instance of moving or being moved" (Thompson, 1996: 890).

Photograph – "a picture formed by means of the chemical action of light or other radiation on sensitive film" (Thompson, 1996: 1028).

[THEORETICAL DISCOURSE]





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[PART A - The body moving through architectural space within the South African city]

> "The body articulates the world. At the same time, the body is articulated by the world" - Tadao Ando (Crabtree, 2006).

1. [The Relationship]

1.1 [City spaces]

City spaces can be described as the environment within which individuals and collectives live, work, play and experience the everyday. The city reveals the actions and reflects the needs of these individuals and collectives. It acts as the backdrop that facilitates the physical encounters that occur every day. The city represents, regulates and structures the body, influencing the way in which people move from place to place, between occupations or in social standing (Bunschoten, 2000: 155). It is made up of various disjointed experiences, which together make up the whole, and functions as a place of communication between people themselves and between people and their environment (Grosz, 2001:49 and Morojele, 2006). The complex relationship between the city and the body encompasses both physical and psychological components. The physical components of a city can be expressed through the connectivity between specific places (Bunschoten, 2000:26), whereas the psychological components of a city refer to remains that were significant in the past, such as artefacts and the memories of people (Misra, 2008).

The city comprises various spaces - visible and invisible, tangible and intangible, natural and man-made. The spaces of interest to this investigation are the 'built spaces' of the city; in other words, the architectural spaces. For the purposes of this document, the focus is placed on the South African city.

TOP LEFT Fig 1 Articulation. Digitally manipulated images, indicating the world and the body articulating one another (Author, 2009).

BOTTOM LEFT Fig 2 City spaces in Pretoria CBD lends itself to a variety of activities not intended for existing building program (Author, 2009).

South African cities are rich in cultural diversity. They comprise many people of different ethnic backgrounds, ensuring a large range of various types of art - music, poetry, literature, painting and the performing arts. These art forms, together with everyday occurrences enhance the range for experience and broaden the possibility of encounters within city spaces (Hillier & Hanson, 1984 and Tschumi & Cheng, 2003: 112). Due to the exciting and dynamic nature of the South African city, the spaces within it provide the ideal setting for an investigation into the relationship (or lack thereof) that exists between the moving body and architectural space.

1.2 [The Configuration of Space]

1.2.1 [Society as creator]

Architecture is responsible for the configurations of space within which societies live, work and move. These spatial configurations can influence the movement of people within them, which in turn may influence the way in which the space is configured (Hillier, 1996: 31). The spaces that are created will have certain attributes and restrictions as a result of the activities taking place within them. These activities may include the acts of congregating in groups, individuals interacting with one another, as well as the acts of dwelling and occupying space (see page 19). The social relationships and information stemming from these activities will also place restrictions on the spaces (Hillier, 1996: 29 & 335). The identity of a society will therefore have a notable effect on the social relations occurring within these spaces, as well as the way in which the environment and its spaces are experienced (Morojele, 2006).

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The "Minutes Project" is a film and research project focusing on the daily life in the city of Johannesburg, co-founded by Theresa Collins and Mocke Jansen van Veuren. Architects from the sharpCITY group approached them to participate in the South African representation at the 7th Architecture Biennial held in Sao Paulo, November-December 2007. They were to produce a film installation around the Biennial theme 'Public and Private Space'. According to Mocke Jansen van Veuren, a lecturer in Multimedia at the University of Johannesburg, the city of Johannesburg is always in a "state of flux and has become a locus for research and engagement in many forms" (Jansen van Veuren. [S.a.]).

The occupation of everyday spaces was illustrated in the films, ranging from "potentially hostile urban spaces, transitory spaces, the spontaneous or orchestrated occupation of spaces, signs denoting desires for the ownership of space, the mingling of lives in public recreational spaces, and the simulation of public spaces within privatised enclosures". Jansen van Veuren states that these spaces are transformed in some way by the presence of humans within them, either by their gestures, or by their desires which can at times contradict the space and its pre-assigned function (Jansen van Veuren. [S.a]).

Time-lapse photography and experimental audio processes were incorporated to document the daily life in Johannesburg. The sounds and movements that are generated by the people, vehicles, goods and changes in light in and around these spaces and the structures within them leads to the development of a dialogue between the user and the space.

This communicates information regarding the use of space that can be analysed in socio-political and architectural terms. The time-factor is a constant theme throughout the documentation of the city and is measured by changes in light, as well as by the movement of people. Both of these factors contribute to the rhythms of the city that one would experience within these spaces over time (Jansen van Veuren. [S.a]). According to Jansen van Veuren the installation offered a contrasting reflection, "not on the planning and construction of public or private spaces, but on the transformation and appropriation of spaces and structures through their daily use, and through the presences and movements of people".

Fig 3 Images from the Minutes Project (Available from www.uj.ac.za/multimedia/NewsandEvents/)

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1.2.2 [Moving body as creator]

The environment determines the movement of a person through it, but simultaneously a person can also determine the movement of an environment by interacting with it. A space that responds to the user can be deemed an interactive space. Such spaces enhance the user's experience of his / her environment.

The environment is inhabited by the body. They share a particular dialogue caused by the body's movement through its environment and the interaction leading from this (Bloomer and Moore, 1977: 57). Human movement can be described as the ability to articulate the body, a multi-sensory experience and the intentions of the body to create a physical or emotional space (Moen, 2006: v).

Spaces emerge as the body's movements are revealed, thus movement is noted as the most dominant form of space use (Grosz, 2001: 116 and Hillier, 1996: 187). The body has the capacity to adapt to, and become integrated with its environment. It is able to achieve this due to its inherent openness and flexibility to and in its social context (Grosz, 2001:35). Space is a three dimensional entity. The body is also a three dimensional entity and can therefore create space through its movement. In this way the body becomes space, it reacts to the spaces around it and adapts to its environment. The spaces that are created are given rhythm and motion as a result of the gestures and movement within them. They are therefore transformed from static spaces into dynamic ones when imbued with human activity (Lefebvre. [S.a]).

The environment exposes itself to the possibility of spatial intervention as it is a dynamic entity that lends itself to change. The interaction of the body and its environment will change over time due to the fact that neither of them are static entities but are continuously changing, even if it's on a non-visible level. These changes will have an effect on the movement, interaction and experience of the body in its environment.

TOP Fig 4 The movement of the body within the city spaces of Pretoria CBD (Author, 2009)

BOTTOM Fig 5 Digitally manipulated images indicating static space and dynamic user (Author, 2009)

1.3 [Conclusion]

The city and its architectural spaces are static when compared to the dynamic movement of the human body within it. Even though movement possesses the ability to render space dynamic, there is a general lack of interaction between dynamic human movement and the spaces of the South African city. This lack of a dialogue between the two is augmented by the fact that we find ourselves within a constantly changing and evolving environment.

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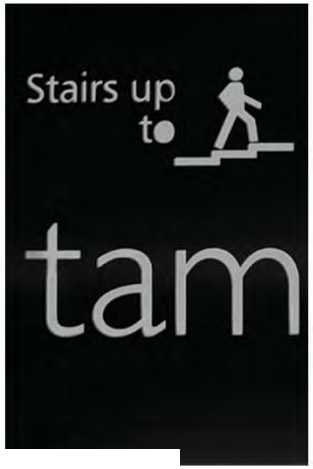

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2. [Spatial Experience]

2.1 [Introduction]

> "Movement, an activity which consumes time, is used to experience space" (Hillier, 1996: 233).

The physical environment and the social relationships within it will determine and influence the way in which the person will interact with, and experience, their environment. The environment cannot be experienced all at once, instead it is experienced in terms of the different spaces within it. The user needs to move through the individual spaces in order to experience the whole. Experience forms an integral part of the dialogue between architectural space and the body and is thus an important part of what must be investigated and addressed.

2.2 [Experience through movement]

> "Experience is never limited, and it is never complete"
> Henry James (Perkins, 1995)

People experience both public and private architectural spaces with their bodies as they are multi-sensory beings. By implication, they experience architecture with all their senses - hearing, touching, smelling and seeing. All these senses are specializations of the skin, which is essentially the organ with the sense of touch. The sense of sight is thus one of touch, as one 'feels' a space with one's eyes. A multi-sensory experience relates to the concept of tactility (touch) (Pallasmaa, 2000). This 'haptic experience of space' can be explained using the analogy of the dancer - the dancer is trained to 'feel' space, which leads to the dancer and the space animating one another (Bloomer and Moore, 1977: 58). The movement of a person through space is not only a sensory experience, but can be likened to movement through time and memory.

The user's experience and interpretation of space is influenced by their personal frames of reference in other words their memories of previous experiences and encounters (Bloomer and Moore, 1977: x). The encounters of people within space will lead to the experience of the space. This could give rise to possible participation as well as individual perceptions of the space, through personal memory. Movement triggers a kinaesthetic memory which flares in our moving muscles and thereby recalls other times of similar movement. This memory is caught in the preconscious, in the sensing organs, and in the muscles. This phenomenon is known as muscle memory and allows memory, images, and meaning to be encoded in our muscles (Moen, 2006:12). Certain images or memories of a previous action can trigger specific movements. The human body is able to perform an infinite range of movements, varying from defined to dynamically changing ones. This range of possible movements is informed and sometimes inhibited by the environment through which the body is moving (Bloomer and Moore, 1977: 59).

Architecture should respond to the body's movement and subsequent experience of its spaces. The body's spatial experience will influence the interpretation of the architectural characteristics (Bloomer and Moore, 1977: ix, and Crabtree, 2004). Architecture should immerse the body. This will encourage users to participate, engage and interact with the spaces they move through. Architecture can stimulate, evoke, manipulate, inhibit and capture the movement of the body through the environment. The influence of architecture may be to give pause in an environment based on movement and circulation (Tschumi and Cheng, 2003: 105). Architecture (and by implication design) can and should be used to create the dialogue between the body and space by manipulating the user's movement through space.

TOP Fig 6 A dancer "feeling" space (Available from www.artreview.com...cartwheel blue)
BOTTOM Fig 7 Architecture can stimulate, evoke, manipulate, inhibit and capture the movement of the body through the environment (Digitally manipulated images, indicating the influence of architecture on the body) (Author, 2009).

Haptic – "relating to the sense of touch" (Thompson, 1996: 618).

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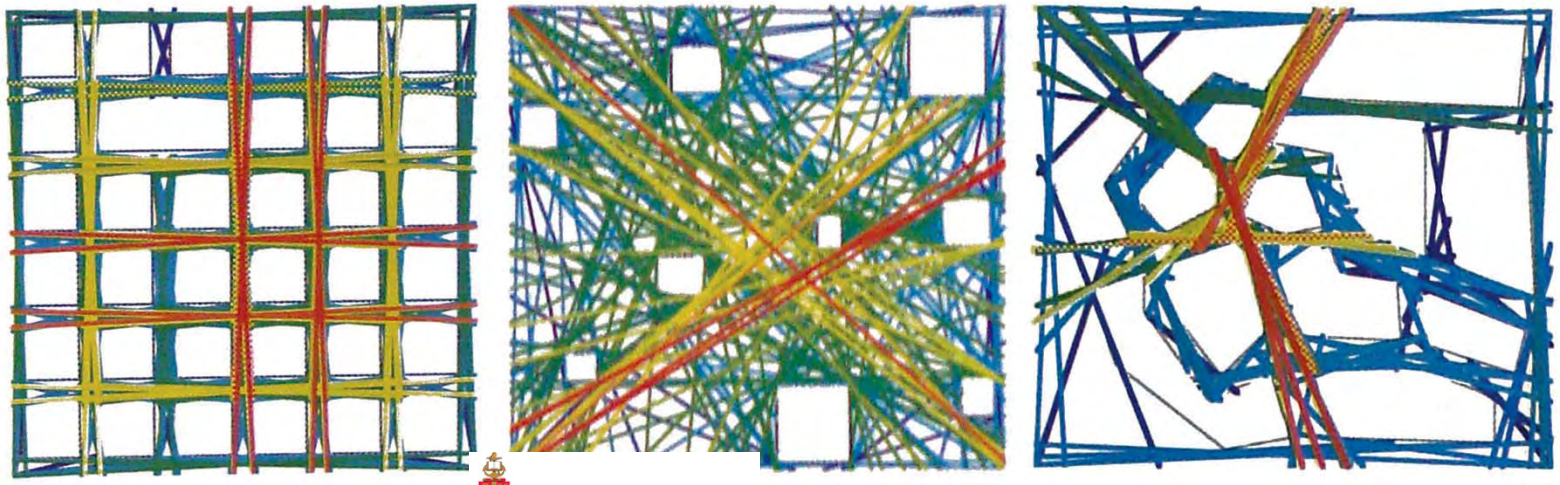

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2.3 [Affecting the users experience]

The majority of people moving in an environment pay little, if any attention to their surroundings. This is due to the fact that most of them have a pre-determined destination, which leads them to move specifically towards something, and allows for little exploration and experience of the environment they are moving through. The users' experience will be intensified if they become more aware of the spaces they move through. This heightened awareness will in turn lead to an increase in exploration and possible interaction with the space.

There exists a hierarchy of spaces within a city environment, ranging from the intimate and often private interiors of buildings to the very public streetscape. As a result of this hierarchy, different levels of movement through an environment exist, thereby defining relationships between the different spaces (Hillier, 1996: 174). There is also a well-defined relationship between the movement of inhabitants and visitors. The movements of inhabitants have been adapted to the environment, whereas visitors, entering and leaving, will experience new restrictions and limitations to their movements. The layout of buildings within the environment and the circulation between them, as well as the activities taking place within (which includes the circulation of money, goods and information), may influence the user's behaviour and movement (Bunschoten, 2000:422). If any of these factors are altered it will lead to a change in a person's movement pattern. These changes in movement can be spontaneous or more choreographed. Elements, such as shading devices, urban furniture and the like, may also have an influence on movement. A change in movement will in turn bring about a change in the perceptions and interpretations of the user.

Fig 8 Configurational Maps depicting change in movement patterns, with change in spatial configuration (Hillier: 1996)

The user's movements through space are inherently dynamic. The environment in which the space is situated consists of various rhythmic patterns which shift over time (Bloomer and Moore, 1977). The experience of the user will therefore alter as a result of the fact that the patterns of movement within an environment are dynamic and therefore invariably change direction and configuration (Hillier and Hanson, 1984: 144).

This notion is illustrated in Parenthesis, an installation that engages with the public and provokes reactions by influencing the existing movement pattern (Example see page 27). Another example of a public installation that enhances awareness and encourages participation is the "Cloud Gate" sculpture in Chicago. Its highly reflective surface captures and transforms the passers-by and their surroundings into a distorted panorama of reflections, which in turn challenge the perception of the surrounding space (Example see page 29)

2.4 [Conclusion]

It is clear that movement through space is linked to time and individual memory. Movement is also linked to spatial experience, which can be affected by altering spatial configurations. The ideal therefore, is to stimulate an active 'dialogue' between the user and space. This can be achieved by enhancing one's awareness of a space, and thereby stimulating engagement with space. This interaction does not necessarily need to be physical, but can play out on sensory level instead. The ultimate outcome of any interaction with space would be a moment of pause, a moment where one could consider the space... This is the beginning of the dialogue between space and the body.

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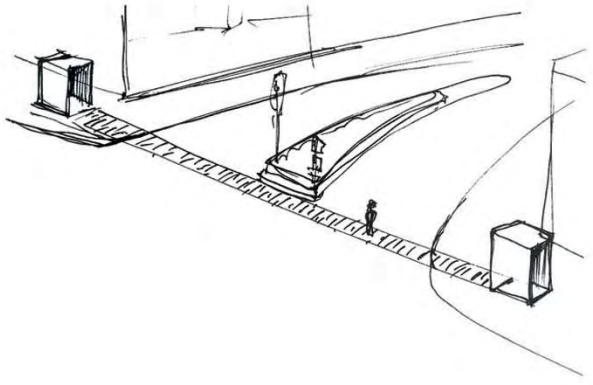

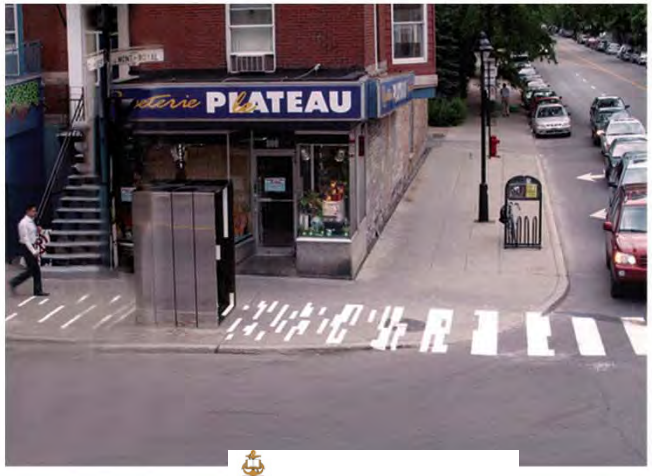

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Description

Parenthesis is an installation that engages a dialogue with the public. Vranckx (2006) notes that the designers wanted to "provoke reactions by upsetting the strict guidelines and regulations dictated by a large city, by placing two arches in people's trajectory. The people then had to decide whether to interact or not". Two arches were placed on a busy intersection. They graphically linked to the crosswalk markings on the ground, which slowly fragmented the closer they came to the arches. The exterior of the arches is made from polished stainless steel, giving a mirror like finish which causes the surrounding environment and the continuous movement to be reflected and multiplied. As pedestrians near these arches they need to decide to walk past or through them (Vranckx, 2006).

The project is explored with regards to human movement and the result of navigating through a space, where the user can decide on interaction or avoidance. The installation engages with the public and provokes reactions by influencing the existing movement pattern. Creating a dynamic space/object that has been informed by the dynamic movement of the public in a specific site.

Fig 9 Parenthesis, influencing the existing movement pattern (Vranckx, 2006).

[PARENTHESIS
BY JUSTIN DUBE-FAHMY AND HUBERT PELLETIER, MONT-ROYAL AVENUE AND ST.-HUBERT STREET

“Cloud Gate” is a public sculpture designed by Anish Kapoor for Millennium Park, Chicago, constructed between 2004 - 2006. The sculpture is shaped like an ellipse and was inspired by liquid mercury. It measures 10 m × 20 m × 13 m, weighs 110 tons and is forged of a seamless series of 168 highly polished stainless steel plates. A network of steel structures on the inside of the elliptical shell ensures that the sculpture stays standing. This steel network was designed to expand and contract with the sculpture seeing that the area experiences extreme temperature fluctuations (Wikipedia_Cloud Gate. [S.a]).
“What I wanted to do in Millennium Park is make something that would engage the Chicago skyline…so that one will see the clouds kind of floating in, with those very tall buildings reflected in the work. And then, since it is in the form of a gate, the participant, the viewer, will be able to enter into this very deep chamber that does, in a way, the same thing to one's reflection as the exterior of the piece is doing to the reflection of the city around”.
-Anish Kapoor (Millenniumpark. [S.a]).
The highly reflective surface of the elliptical shape captures and transforms the skyline, the surrounding cityscape as well as the passers-by into a distorted panorama of reflections which in turn challenge the perception of the surrounding space. The concave chamber beneath the sculpture, a 3.7m high arch, reflects images of visitors entering it from a wide range of angles. The artist, has referred to the sculpture as “a gate to Chicago, a poetic idea about the city it reflects”, with the name referring to the sculpture acting as some type of gateway that helps the viewer bridge the space between them and the sky above placing them in a state of “in-betweenness” (Wikipedia_Cloud Gate. [S.a]).

“Cloud Gate” has become a popular piece of public art, and attracts both locals as well as tourists from around the world. It has been described by tabloids “as an essential photo opportunity”, “more of a destination than a work of art”, an "extraordinary art object"(Wikipedia_Cloud Gate. [S.a]).

LEFT TO RIGHT
Fig 10 Cloud Gate (Available from http://mentalimage.co.uk)
Fig 11 Cloud Gate. Reflection from surrounding buildings (Available from http://www.soothbrush.com/cloud-gate-chicago-sculpture/)
Fig 12 Cloud gate. Inside the art work where people can see there warped reflections (Available from http://theloveumake.vox.com)

CLOUD GATE
BY ANISH KAPOOR AT AT&T PLAZA
MILLENNIUM PARK, CHICAGO, ILLINOIS

PART B – [Photography and Public Art]

1. [Photography – An analogy]

Architecture is used to create the dialogue between the body and space. However, as stated before, movement is dynamic and space is almost always static. To achieve a dialogue between the two, we need to view the moving body as a static element. We need to 'capture' movement in a moment. This process of capturing can be likened to the eye viewing a moment in time, or on a more practical level, to the process of capturing a moving element through photography.

2. [Overview of photography]

Photography can be divided into two groups, namely film and digital photography. Film photography can also be described as chemical photography, as the image is developed during a chemical process. Digital photography uses image sensors to record the image thereby creating an electronic data format. It is also a medium that can easily be manipulated and altered. Different types of photography include Architectural , Documentary, Fashion, Fine Art and Nature and Wildlife photography. Light is the chief resource and basis of photography, (Drew, 2005:110) and allows us to make the invisible visible.

According to the editors of Time-Life books (1970), the first known photograph, an image of a man leading a horse, was taken in 1825 by Joseph Nicephore Niepce. Eadweard Muybridge is one of the first scientists that applied photography to record and analyse the movements of humans and animals in 1887. It is stated that photography as an art form was not accepted into the art world easily as people argued that it was merely the reproduction of an already existing image (Wikipedia_Photography. [S.a]).

TOP LEFT Fig 13 Making the invisible visible on micro scale (The editors of Time-Life Books, 1970.)
TOP RIGHT Fig 14 making the invisible visible on macro scale (The editors of Time-Life Books, 1970.)
MIDDLE LEFT Fig 15 LIGHT PATTERN - A dramatic blend of movements that the camera held together to create a single pattern (Author, 2006).

Photography-based art in South Africa has been dominated in the last thirty years by the notion of documentary photography in the country's politically charged context, which in turn has informed the production of photography (Atkinson, 2000: 16 & 33). Documentary photography is the most prominent in the collective individual's mind. This is as a result of the images delivered to the public by the media to act as visualisations of the events and people involved in activities that are regarded as being suitable for public interest (Drew, 2005:64).

3. [Relevance of photography to the project]

Photography not only acts as a way of recording events and moments, but can also be viewed as the recorder of the soul. Drew (2005: 84) and Atkinson (2000: 15) state that the camera is the device which capture moments of the everyday and reveal an individual's psychological and emotional being. If the "eyes are considered to be the windows to the soul", then one can like the lens of the camera to the recorder of the soul.

In many instances, the photographic image is seen to determine and inform the everyday lives of individuals and collectives within an environment. It reveals, records and communicates the surroundings by means of commercial advertising on billboards that can be viewed by a variety of people at the same time. Not only does it reveal, but it captures a moving movement. In other words, it renders a truly dynamic action as a static element. In a society that is continuously moving, the eye is also constantly moving. It is as if the eye is scared to engage in a static encounter (Atkinson, 2000: 41). Photography will 'stop' something that's moving and suspend it in time (Drew, 2005:128). The photographic image allows the eye to engage with and experience a static encounter whilst moving through space, thereby making it possible to communicate happenings, the surroundings or even concepts to a constantly moving society.

MIDDLE RIGHT Fig 16 An illustration of an action captured and frozen in time (Available from http://weburbanist.com)
BOTTOM Fig 17. The Horse in Motion, analysed by Eadweard Muybridge (The ...rs of Time-Life Books, 1970

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These static moments have the ability to capture the attention of a user as they not only illustrate physical movement but also the expression, drama and meaning of an event or situation. They also provide visual records that will assist in shaping the memories of the users and their recollection of the past (Drew, 2005:70). The photographic image's intriguing nature engages the senses, thereby causing the viewer to pause. As stated before, this may lead to interaction and a heightened experience of the space and its surroundings.

IMAGE - HECTOR PETERSON
This iconic photograph shows Mbuyisa Makhubo carrying the body of 12-year-old Hector Pieterson, shot by police on June 16th 1976, during the Soweto uprising. This image is brought to the public's attention each year on Youth Day (June 16th), to act as a reminder of, and to commemorate the lives that were lost that day.

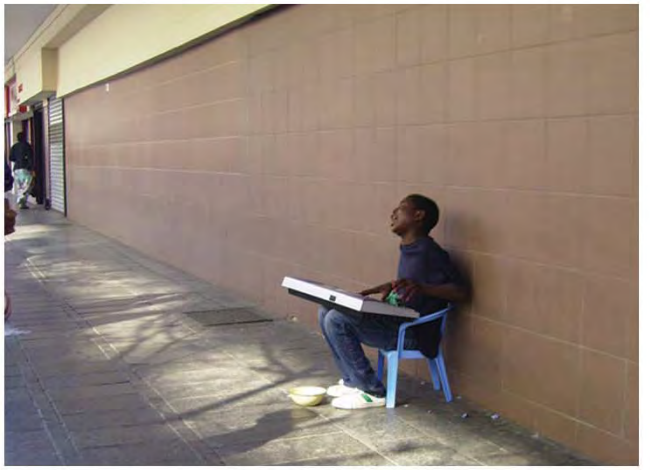
IMAGE - WORLD TRADE CENTRE
The terrorist attacks on the World Trade Centre (WTC) on 9th September 2001 (often referred to as "9/11"), filled the world with shock. These horrific images of aeroplanes flying into the twin towers of the WTC, which led to the collapse of both towers and the loss of thousands of lives, renders the event part of public and collective history. They also enable us to relive the tragic experience just by looking at them.

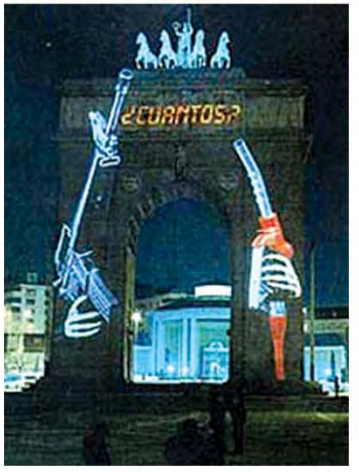
Such 'historic' images can facilitate a silent dialogue as they summarise a single moment or event which can support recollected memories of a time gone by. The passer-by (intended viewer) will interpret and experience images differently as a result of their individual frames of reference (Atkinson, 2000: 16). The narrative of each user's life is arrested and broken into fragments as they move through a space. All these different fragments are gathered to make up a whole comprising disjointed experiences (Atkinson, 2000: 32). These fragments form part of the narrative of the everyday, where every user will experience the spaces differently.

Photography is thus applicable to this project for two reasons:
1. It possesses the ability to capture a fleeting, dynamic moment as a static object. It translates the image into memory and provides clues as to how one can create a dialogue between 'the static and the dynamic'.
2. Photographic images have the ability to momentarily halt the user's movement, allowing them to analyse, assess and possibly even interact with the not only the image but also the space it is situated in.

One possible way of integrating photography into the fabric of architectural space, is by applying it in the form of public art.

Fig 18 Hector Pieterson on June 16th 1976 (Available from juicefriends.com/best-photos-in-history.html)
Fig 19 The World Trade Centre on 9th September 2001 (Available from http://ricelander.wordpress.com)




¿CUANTOS?

4. [Overview of public art]

According to (Public Art. [S.a]), public art refers to art produced in any media, which is viewed within the public domain. It should therefore be accessible to all the inhabitants within an environment. It should be specific to its context, and may encourage community involvement and participation. Contexts differ due to many factors, one being the diversity of the people (viewers) within it. The installation of art in the public domain can act as a catalyst for the improvement of the lives of individuals and collectives within an environment. It can also assist in the rejuvenation of spaces, and may provoke participation and interaction with its viewers. It may lead to the enhancement of the surroundings, making it more enticing to the inhabitants. Public art can also provide reference to the city and its specific socio-political, economic or environmental atmosphere at the time. It can create an awareness of art as a communicative tool, can address relevant topics and expose or inform the public about these issues. Conversations and debates may be evoked through public art, a process which can lead to the solving of problems (Wikipedia, Public Art, 2009). Different types of public art can be identified, the oldest being monuments, memorials and statues. Street furniture, lighting and more informal works like graffiti and murals, also form part of art in the public domain. Art forms such as dance and street theatre, and more ephemeral events, such as temporary installations and performances are also encapsulated under the umbrella of public art.

TOP Fig 20 Public Art in Church street, Pretoria CBD - Monument, Graphitti, Performance (Author, 2009)
BOTTOM LEFT Fig 21 Krzysztof Wodiczko – Projection in Madrid Spain (Available from http://www.art-for-a-change.com).
BOTTOM RIGHT Fig 22 Krzysztof Wodiczko – Projection on the Martin Luther Church in Germany (Available from http://www.art-for-a-change.com).

5. [Examples of public art installations in urban environments]

5.1 [Krzysztof Wodiczko – Animating public space through art]

Krzysztof Wodiczko, a Polish artist, generates art through the projection of images onto architectural facades thereby animating public space. Vallen (2005), states that Krysztof reinterprets public space and "the changes in space that often remain in the participant and observer as a fragment of their inner and social lives". His work intends to address miscommunication within society and to give suppressed individuals a space to voice their opinions and needs, and make themselves heard. The projections are ephemeral in nature and don't last longer than two days at most.

The importance of his work is that the projections essentially create democratic places that evoke discussions and debates amongst individuals and collectives. The simple act of projecting an image onto a 'dead' façade creates a new space of value to the resident community. Vallen (2005) notes that the "controversial projections transform buildings and structures into memory that matters".

Vallen (2005), states that this art work was produced in Madrid, Spain, just days after the outbreak of the first Gulf War in January 1991. The images were beamed onto the triumphal arch celebrating the victory of the fascist Generalissimo Francisco Franco in the Spanish Civil War. Wodiczko stated, "My work reveals the contradiction of the environment and the events actually taking place there. It has to do with the politics of space and the ideology of architecture. City centers are political art galleries" (Vallen, 2005).

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"In 1987 the artist projected a controversial image onto the Martin Luther Church in Kassel, Germany, one of the few buildings to have survived the allied bombings of World War II. The artwork is of a person praying in a hazardous materials protective suite" (Art for a Change, 2005).

5.2 [Clive van den Berg – Public art in the South African urban environment]

Koseff (2009:54) asserts that Clive van den Berg has established himself as a "multi-disciplined cultural practitioner with an affinity for creating new and inventive art forms". Van den Berg is part of the management team of the TRACE Group, which acknowledges the need for public art, and facilitates heritage and public art projects which focus on the political, social and natural heritage of the country. According to Koseff (2009:54), van den Berg wanted to escape from the notion of an enclosed gallery and saw the need to create work that could be viewed by a broader audience in a wider context. The only artworks that have been erected in the public domain in the past are the monuments and memorials honouring public figures from the colonial and apartheid eras. Van den Berg sees public art as something that should represent the entire nation and all its ethnic groups; communicating to them the rich history and heritage of the country, encouraging people to think about new possibilities in their future (Koseff, 2009: 54). One of van den Berg's public art projects is the Gateway Public Sculpture, entitled Eland, located on the corner of Bertha and Ameshoff streets in Braamfontein, Johannesburg. This 5,5m high work; that was facilitated by the Johannesburg Development Agency (JDA), is intended to respond to the immediate environment and announces the entrance to the city. It reminds the people passing through Braamfontein of the natural environment that was once there (Koseff, 2009: 56).

Fig 23 Eland (Koseff, 2009)

The Johannesburg Development Agency (JDA) was initiated by the City of Johannesburg to stimulate and support area-based economic development initiatives throughout the Johannesburg metropolitan area. The JDA co-ordinates and manages capital investment and other programmes involving both public - and private sector stakeholders. Developments include the Greater Newtown Development, which is a regeneration program in the Johannesburg City centre (Johannesburg Development Agency, 2009).

PART C – [Conclusion]

It is thus clear that the human body's ever changing movement through space can affect space, just as the configuration of the space can affect the human user. However, presently there is a lack of dialogue between the dynamic user and the static architectural environment. Movement through space is inherently linked to the user's spatial experience; an aspect that can be changed by morphing space. An adaptation of the environment will result in an increased awareness of space, thereby creating a moment where spatial interaction is possible.

Photography can be used as an analogy for the theoretical problem. It provides clues as to how the dialogue can be initiated. When used as an 'object' in space it can create a momentary pause in movement, thereby creating an opportunity for interaction. Photography can be applied as public art in the urban environment. Public art as a regeneration and communication tool has been applied successfully throughout the world and recently in South African cities, specifically in the Johannesburg CBD.

The use of public art in Pretoria has not yet reached the same level as it has in Johannesburg - an aspect which this investigation will attempt to address. The author believes that public art, and in particular photography, the visual image, has untapped potential for the inner city of Pretoria. The theoretical discourse of the human body moving through architectural space will inform the design investigation to

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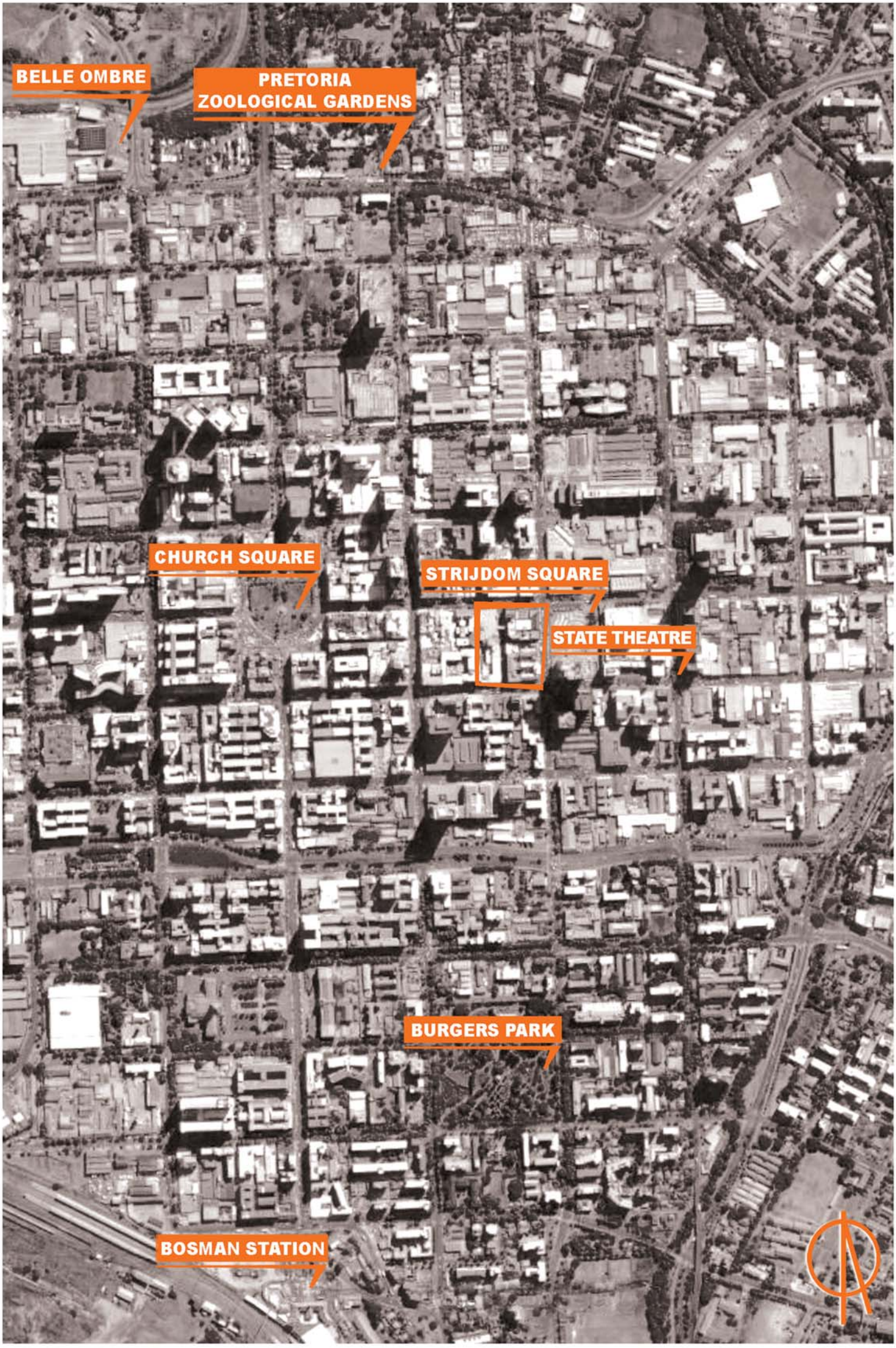
[SITE ANALYSIS]



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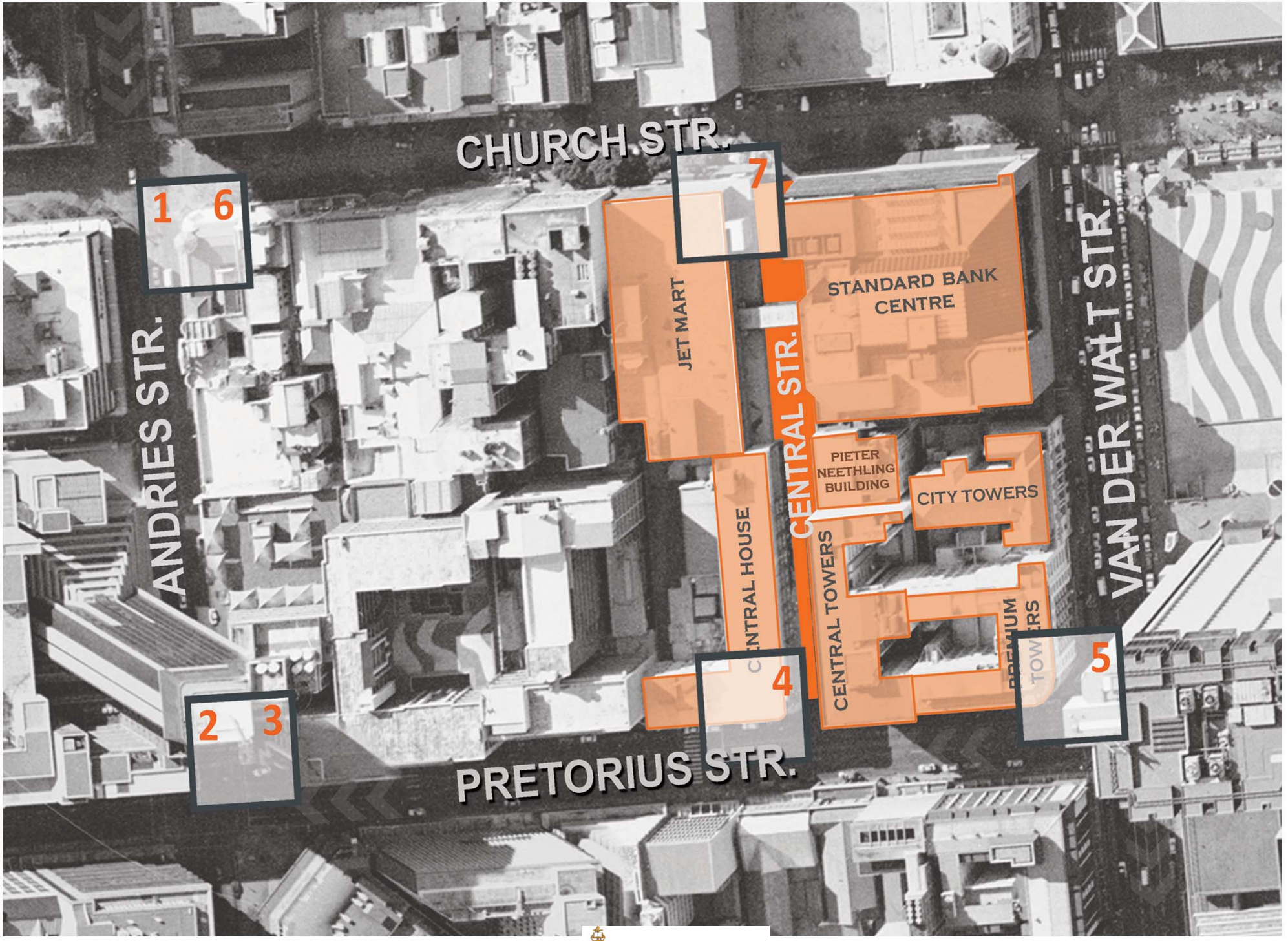
1. [Introduction]

Known as the administrative capital of South Africa, Pretoria forms part of the greater Tshwane. The buildings situated in the Pretoria Central Business District (CBD) are largely used to house government departments due to its role as administrative capital. These buildings include the Department of Home Affairs, the Department of Arts and Culture, the South African Reserve Bank and Statistics SA.

The vision of the city is to be "the leading African capital city of Excellence that empowers the community to prosper in a safe and healthy environment. To enhance the quality of life of all the people of Tshwane" (Tshwane, 2009). The people that move within this city environment are diverse as individuals and with regards to the functions they perform within it. There are a lot of people that travel into the CBD by day to work and visit. The migration of people into the city causes it to be a place bustling with dynamic movements as a result of this migration.

The city is divided into a grid that comprises of circulatory roads which frames well defined city blocks. Some of the city blocks that are framed by circulatory streets are spliced by arcades and pedestrian streets to facilitate the movement of people and to pull them into the blocks to perform and use certain functions. The selected site is located in the city block surrounded by Pretorius (S)-, Andries (W)-, Church (N)- and Van der Walt (E) Streets. The functions within this city block are predominantly occupied by commercial and retail functions with corporate activity as well as a small residential component.

Fig 24 Selected site, Central Street, in its context



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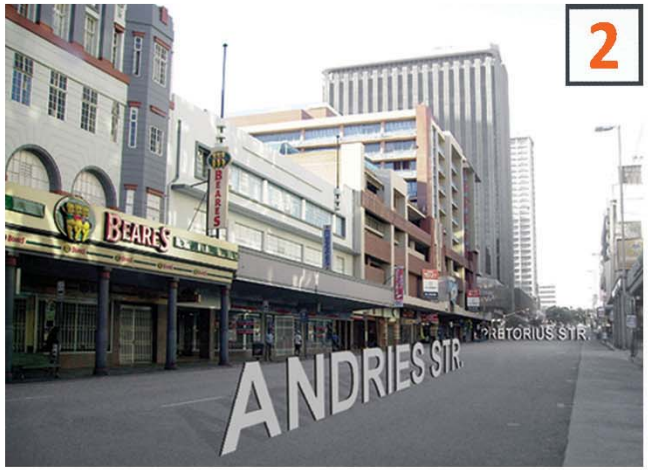

Fig 25 Indicating Selected site, Central Street, in City block, with views from particular points in and around the block

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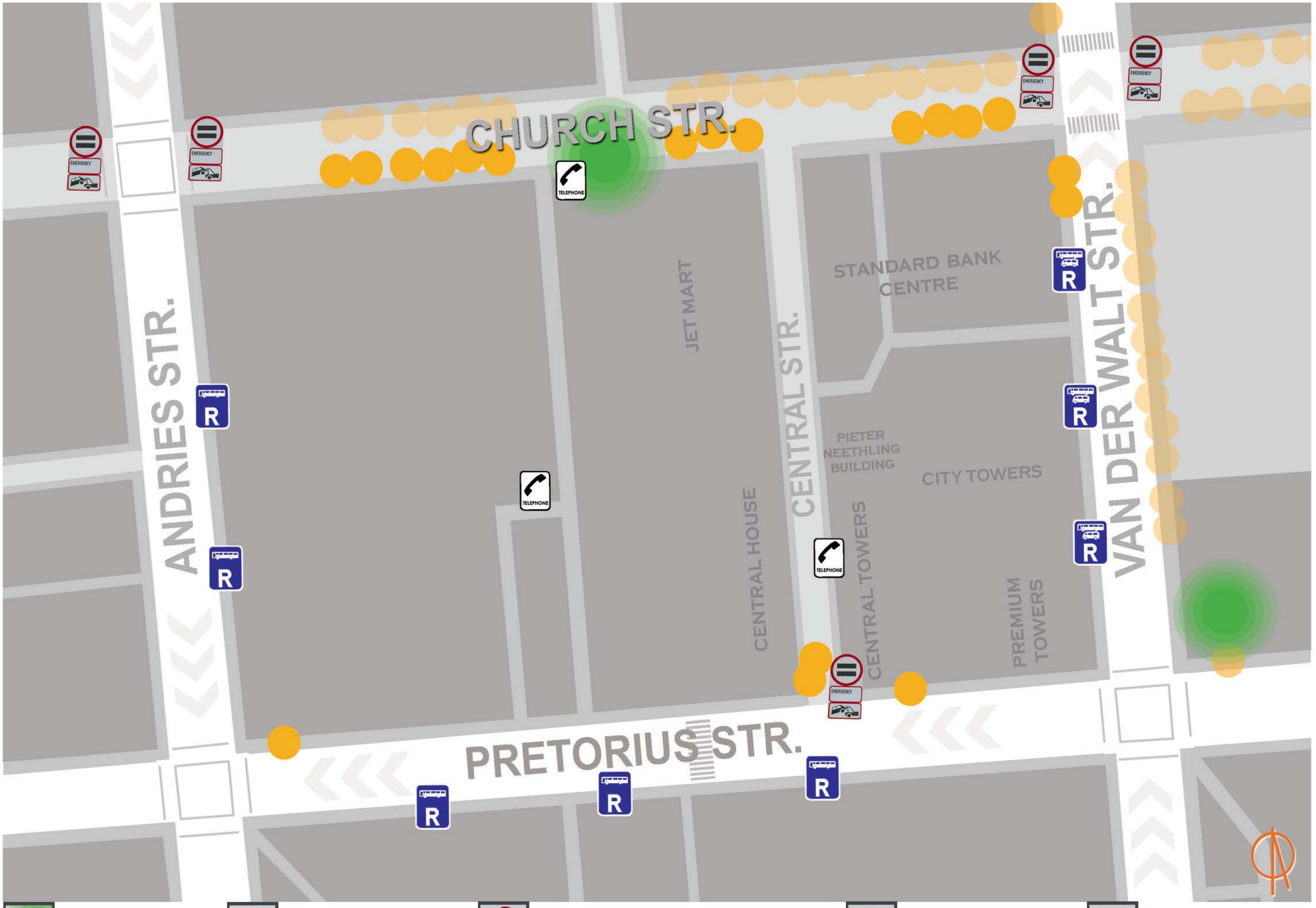

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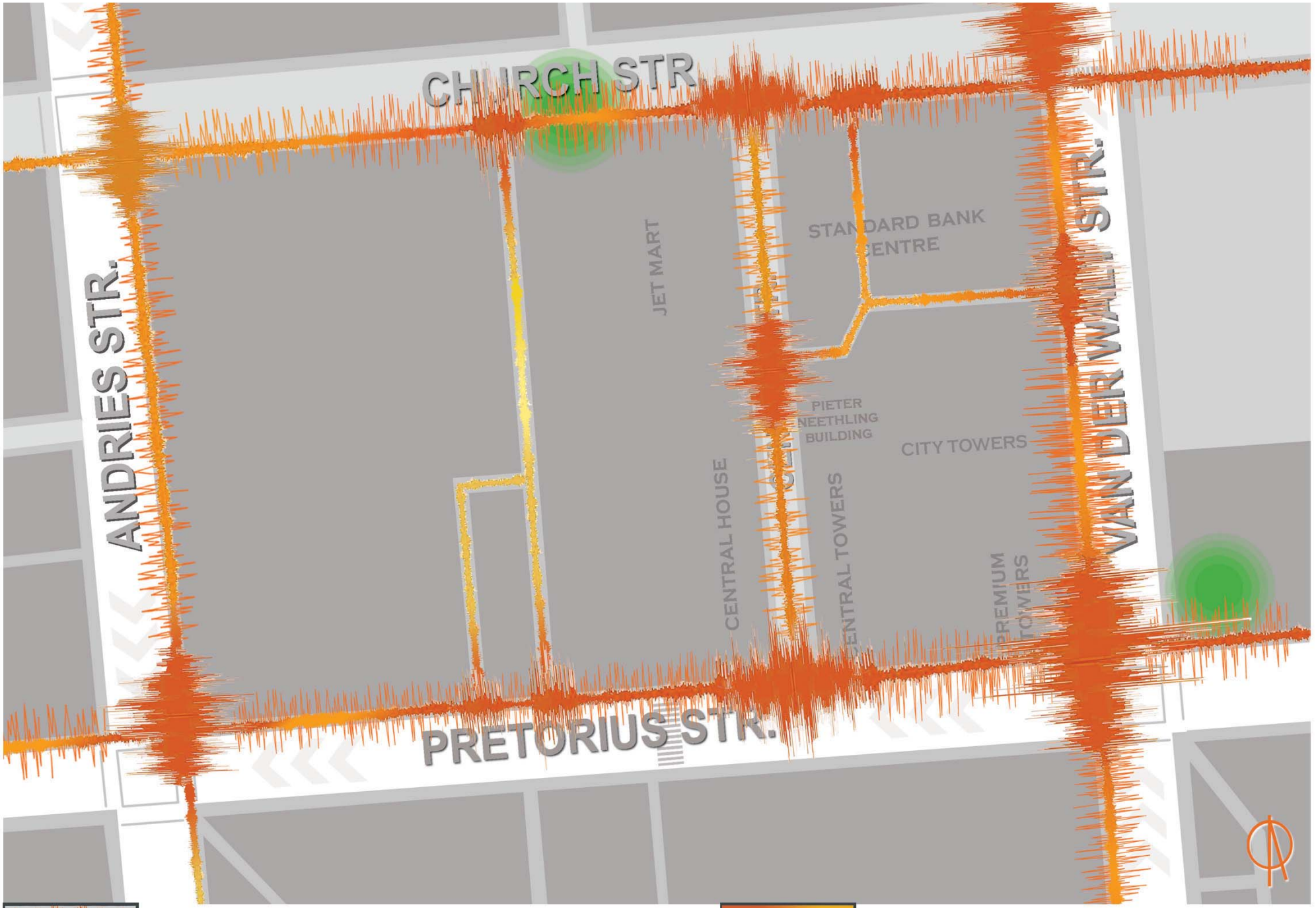

SPEED - PEDESTRIAN MOVEMENT

DENSITY - PEDESTRIAN MOVEMENT

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2. [Central Street]

Central Street is a pedestrianised street that links Pretorius (S) - and Church Street (N). The buildings surrounding it comprises of Central House, Jet Mart, the Standard Bank Centre, the Pieter Neethling Building and Central Towers. These buildings house both commercial and retail functions; ranging from independent businesses, such as hairdressers and tailors; to commercial businesses (Fig. 29). People utilize this street as thoroughfare between Pretorius and Church Street, as it is located between busy transport nodes which transport people into and out of the CBD. The movement that occurs as a result of these factors lends the attributes of a vibrant and extremely diverse setting, with the element of constant movement of pedestrians. The movement of people through the space links the various individuals from the various areas they came from.

Fig 26 Functions performed on the periphery of the city block.
Fig 27 Movement in and around the city block
Fig 28 Speed and density of pedestrian movement in and around the city block

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NWJ CNA STERNS

EDGARS

SOLE SHOWROOM

JET MART

STANDARD BANK CENTRE

SUN LIQUORS

STANDARD BANK - BUREAU DU CHANGE
SUN GINO's
BLANKET SPECIALIST
ROSTEN's PUB & GRILL
FONETECH
Dr. N. NAIDOO SURGERY
NAZIA's ELECTRONICS
M.A. MATJEKANE DENTAL PRACTITIONER
SLIMLITE CELLULAR
SITIO PC TECHNOLOGY: NETWORKING

SPORT SHOP

NADEEM ELECTRONIC WHOLESALERS

KK CELLULAR

AZEEM CELLULAR

KNOCK OFF FASHION ZONE

LETSATSI FINANCE & LOANS

CITY TOWERS

EDUCON BUSINESS COLLEGE

WALTLOO MEAT

DIXIES CURTAIN

TITI FASHION

MORKELS

CENTRAL HOUSE

CENTRAL TOWERS

CENTRAMED MEDICAL PRACTICE

HOME SWEET HOME

PREMIUM TOWERS

BULHAFI SHOES

ICY LANE

DARAJH

AERO CELLULAR

STEERS

KFC

ROMANS

OLIVER TASTE

CELLULAR AFRICA

ZICO FASHIONS

MIKKA SPORTS LIFESTYLE

GRAND SHOE

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From Pretorius Str.

From Pretorius Str.

From Pretorius Str.

Central Street - Viewed from roof of Central House

Central Street - Towards Church Str.

Central Street - Towards Pretorius Str.

OPPOSITE PAGE

Fig 29 The existing functions and building programs located in Central Street

Fig 30 Vie

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[PRECEDENT STUDIES]

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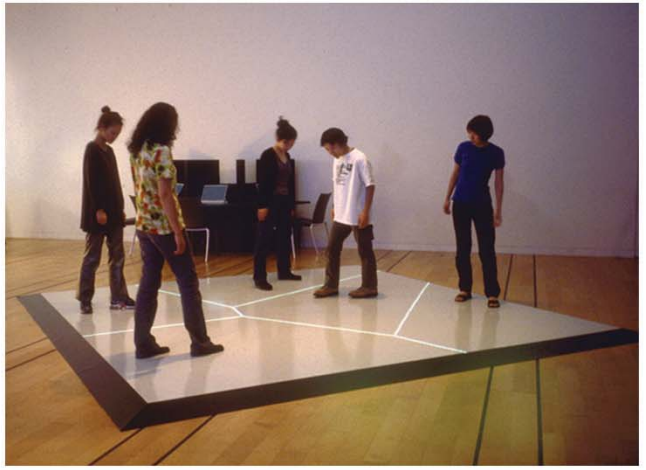

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Description

Boundary Functions shows that personal space exists only in relation to others, and isn't something that belongs solely to the individual. An individual's personal space changes dynamically in relation to other individuals around it. Boundary Functions is realized as a "set of lines projected from overhead onto the floor which divide each person in the gallery from one another. With one person in the gallery there is no response. When two are present, there is a single line drawn halfway between them segmenting the room into two regions. As each person moves, this line dynamically changes, maintaining an even distance between the two. With more than two people, the floor becomes divided into cellular regions, each with the mathematical quality that all space within the region is closer to the person inside than any other" (Snibbe. [S.a]).

Design influence

This project did not influence the design development but was studied as a personal interest, exploring changes in space as a result of changes in the movements of the user. Where both the body and the space are dynamic entities that are ever changing.

FIG. 3.66 THENDVNDKCMCMSKJ
SDFSDFDSF
FIG.EJSISOFCNSDFIHIFHIDHFIHIDFIDIF
FDSFSDFSDFSDF
SDFJSDIOSJFDOSIHIHIOHFIODHFIODHF
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[BOUNDARY FUNCTIONS
BY SCOTT SNIBBE, 1998

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Description

Body Movies was an installation in a public space that Rafael Lozano-Hemmer designed for cities such as Hong Kong, Duisburg, Lisbon, Liverpool, Rotterdam and Wellington. This installation, part of a series, explored the intersection “between new technologies, urban space, active participation and alien memory” (Lozano-Hemmer, 2006). Body Movies transforms public space with interactive projections of thousands of photographic portraits, previously taken on the streets of the host city. These portraits appear inside projected shadows of passers-by, whose shadows can range between two and twenty-five meters in height depending on the distance the users are from the light sources, which are positioned on the ground. When the spaces are empty the portraits cannot be seen, since the light sources on the floor flood the surfaces surrounding them with white light. When people are present in the space their shadows are projected and the portraits are revealed (Lozano-Hemmer, 2006).

Design influence

The notion of interactive projections and the participation by the viewers is of interest in the design development of *CAPTURE*. The aim is to develop a responsive space where the viewer and passerby can become integrated in the design function of a public gallery space. The experience of the user by moving through the space.

FIG 32 BODY MOVIES, 2006 IN HONG KONG, CHINA (LOZANO-HEMMER, 2006).
FIG 33 BODY MOVIES, 2001 IN LINZ, AUSTRIA (LOZANO-HEMMER, 2006).

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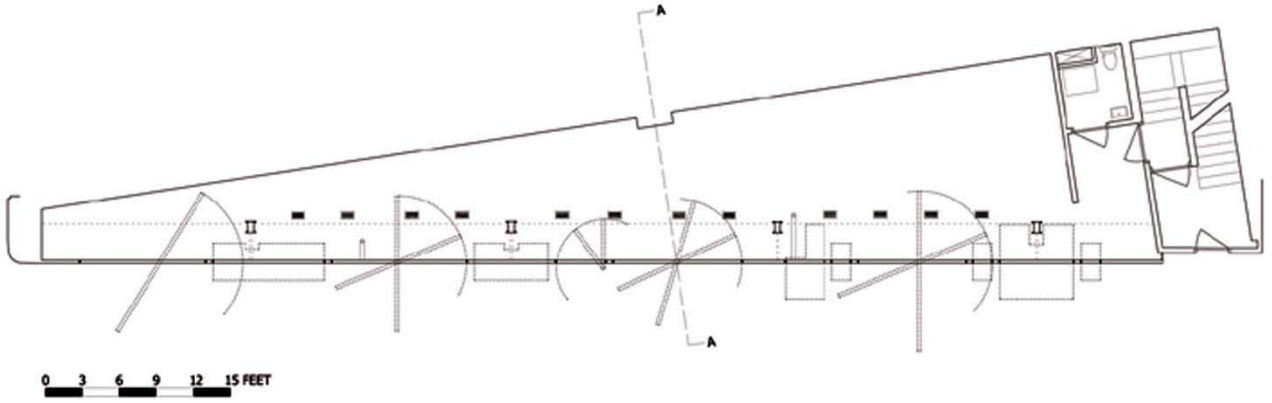
"Crown Fountain" is an interactive work of public art and video sculpture designed by Spanish artist Jaume Plensa and is featured in Chicago's Millennium Park, opened in 2004. The work reflects the artist's desire to meld the various elements from our shared universe, including water, light, nature and dreams. The fountain is inspired by the people of Chicago and designed to provide a dynamic space for silent reflection (Wikipedia_Crown Fountain.[S.a]). It has been described as a piece of sculpture, a piece of art, a piece of architecture, a fountain The fountain consists of two 15m high towers that are placed at opposite ends of a reflecting pool which measures 15 m × 71 m. Each tower, measuring 15 m × 7 m × 5 m, is made up of glass blocks that are held in place by a stainless steel grid which bears the load of the walls and withstand wind forces. These glass blocks protect an LED screen, on the front face of each tower; that displays digital images, ranging from people's faces, scenes from nature, or displays of solid colour, in a random sequence. Plensa explored the theme of dualism, incorporating the images of the faces which appear to be conversing with one another across a reflecting pool (Wikipedia_Crown Fountain.[S.a]). The faces of more than a 1,000 residents from Chicago were filmed for the digital displays. This leads hundreds of Chicagoans visiting the fountain hoping to see themselves appearing on one of the fountain's two screens, which leads to the integration of the viewer with the work of art forming an interactive relationship.

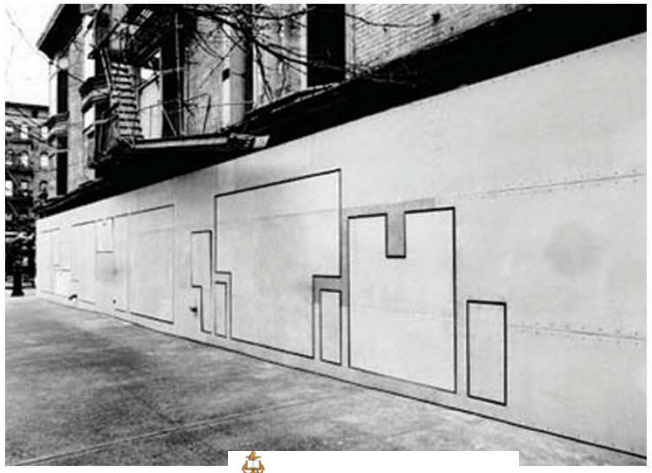
The control room is situated beneath one of the towers and includes high-definition video servers and sensors that monitor equipment temperatures. The sequence of the displays is programmed to be random to ensure dynamic viewing.

A face appear on the sculpture for a total of 5 minutes, followed by a subsequent segment, where the mouth is puckering, followed by a section, in which water appears to spout from the open mouth, there is a smile after the completion of the water spouting from the mouth after which water rushes down from the top of the structure, washing away the face, and another picture appears. Water continuously falls from the sides and back of each tower.

Fig 34 Crown Fountain – without a digital image (Available from http://en.wikipedia.org/wiki/Crown_Fountain)
Fig 35 Crown Fountain – with a digital image (Available from http://en.wikipedia.org/wiki/Crown_Fountain)
Fig 36 Crown Fountain - The two towers facing each other across the reflection pool (Available from http://www.ganzelgroup.com/ph13.html)

CROWN FOUNTAIN
BY JAUME PLENSA, MILLENNIUM PARK
CHICAGO, ILLINOIS





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Description

Storefront for Art and Architecture, a nonprofit organization, was founded in 1982 in New York City (Storefront. [S.a]). It focuses on the development of innovative approaches and increased awareness in architecture, art and design. Facilitating various experimental programs ranging; from exhibitions, artists talks, film screenings, conferences and publications; with the intention of generating dialogues and collaborations between groups and individuals from the various professions. Storefront is situated on a "major downtown thoroughfare between three radically different cultural sectors" leading to it attracting a diverse audience (Storefront. [S.a].) In 1993 artist Vito Acconci and architect Steven Holl were commissioned to replace the existing façade. The resulting design consisted of a series of twelve panels that are able to pivot vertically or horizontally thus making possible different configurations of the façade as well as the option of opening the entire length of the gallery directly onto the street, leading to the boundary between interior and exterior to become blurred. This unique access to the street that is created by the façade along with the triangular floor plan encourages artists exhibiting in the gallery space to engage and experiment with these unusual conditions (Storefront.[S.a]).

Design influence

The function of the gallery space and the concept behind it was explored as it links to *CAPTURE*'s function. The notion of the blurred boundary between interior and exterior space relates to the boundary between *CAPTURE*'s interior and exterior, where the existing boundary (shopfronts) has been altered changing the relationship the interior has to the exterior, leading to a change in the perception of the user in the space and the navigation through the space. The experimental programs that is conducted by Storefront, informed the notion of a student research space that forms part of *CAPTURE*'s program. To be used by students from the schools of Art and Architecture from the University of Pretoria, as a studio/research space to conduct projects pertaining to the city of Pretoria subject

Fig 37 Storefront for Architecture - Ground floor plan (Available from http://www.storefrontnews.org)
Fig 38 Storefront for Architecture – closed façade (Available from www.bldgblog.blogspot.com)
Fig 39 Storefront for Architecture – open façade (Available from http://www.storefrontnews.org)

STOREFRONT
FOR ART AND ARCHITECTURE
NEW YORK CITY

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Description

The Bag Factory is a non-profit organisation located in Newtown, Johannesburg. It aims to promote the visual arts by facilitating artist studio's and residency programme. Upcoming and established artists can rent studio spaces in a "cultural environment that encourages diversity and cross-fertilisation of ideas and practice" (The Bag factory, 2009). The organization presents a residency programme in which artists can participate and upcoming artists as well as students can acquire "advice, support and encouragement" from their piers and draw on the expertise of these more established artists (The Bag factory, 2009). The residency programmes forms part of a continuously expanding network world wide, which facilitates the exchange of ideas and practices between artists around the world. Public workshops are also presented to help promote the development of skills as well as visual education.

Design Influence

The program of the establishment informed the design and programming of a artist studio space. Where the space can be rented out to artists. Established artists can give advice and share their knowledge with upcoming artists and the public. Workshops can be presented to aid in informing and educating the public with regards to art as subject.

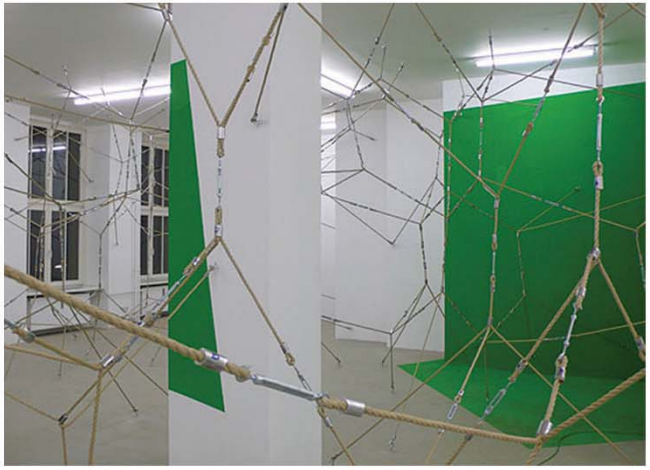
THE BAG FACTORY
NEWTOWN, JOHANNESBURG

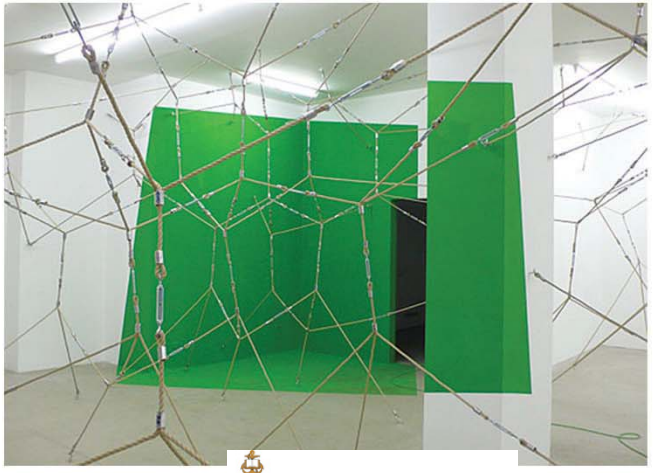
Richard Serra is an American minimalist sculptor and video artist known for working with large scale assemblies of sheet metal (COR-TEN-Steel). Many of these works are self-supporting and emphasize the assembly process, the integrity of the materials and the integration of site and viewer. He often constructs site-specific installations, frequently on a scale which dwarfs the viewer, creating a dialogue with the particular setting, may it be urban or landscape (Richard Serra. [S.a.]).

One of his famous works is the sculpture entitled, *Snake*, consisting of three steel sheets which create two tilted curving paths, completed in 1997 as a permanent installation in the Guggenheim Museum, Bilbao. The sculpture formed part of the space it was installed in, and captured a sense of movement. In 2005, the museum commissioned Serra for a permanent installation of his work, which incorporated (Richard Serra. [S.a.]). The whole work consists of eight sculptures. *Snake* and the *Torqued Ellipses* articulates the potential for movement by creating surprising experiences of space and balance as viewers walk in and around them, following the sequence of the sequence of the works. The configuration of the ellipses and the tilting paths of *Snake* create spaces with differing effects on the movements and perceptions of the viewers, as the inner spaces cannot be anticipated from the outside. Shifting in unexpected ways as viewers walk in and around them, creating an unforgetable sensation of space in motion. Provoking a sensation of steel and space in motion exploring the physicality of space (Richard Serra. [S.a.]).

Fig 41 The Matter of time – Snake (Available from http://www9.georgetown.edu/faculty/irvinem/visualarts/).
Fig 42 The Matter of time - Torqued Ellipses (Available from http://top-people.starmedia.com).
Fig 43 The Matter of time – installation (Available from www. http://mesmertron.wordpress.com).

THE MATTER OF TIME
SNAKE AND TORQUED ELLIPSES BY ROBERT SERRA
GUGGENHEIM MUSEUM, BILBAO





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Description

Nonspheres IV, an installation by Puerto Rican artist Luis Berrios-Negrón; for Program, a non-profit-making gallery in Berlin. It formed part of his investigation into the tension that exists between nature and technology. A carbon tetragonal structure was created through the use of steel cables which filled the gallery space. It was intended to suggest continuous relationships and a sense of boundlessness between the "ego and the outside" (Programonline, 2007). The installation seemed impenetrable by viewers and offered them limited space to navigate their way (Kowalska, 2008). As the viewers found their way through the cable network, they were confronted with a green screen where they viewed minimized images of themselves that have been filmed by a surveillance camera that is installed amongst the cables. These images entangles the viewers in the past, present and future, "in a lateral world of imaginary time in physical space (Kowalska, 2008 and Programonline, 2007).

Design influence

The idea in the creation of a network in the space that inhibits and navigates the movement of the user was of interest during the design development of *CAPTURE*. The projection of the user on a surface amongst this network linked to the idea of user experience and participation. The technical choice of steel cables to construct the network influenced the material selection in *CAPTURE*, where a similar network is installed in the exhibition space of *CAPTURE* which can be changed in configuration depending on the function or needs of the featured exhibition.

NONSPHERES IV
BY LUIS BERRIOS-NEGRON,
PROGRAM GALLERY, BERLIN

Fig 44 Nonspheres IV (Available from www.programonline.de/nonsp[illegible]

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[DESIGN DEVELOPMENT]

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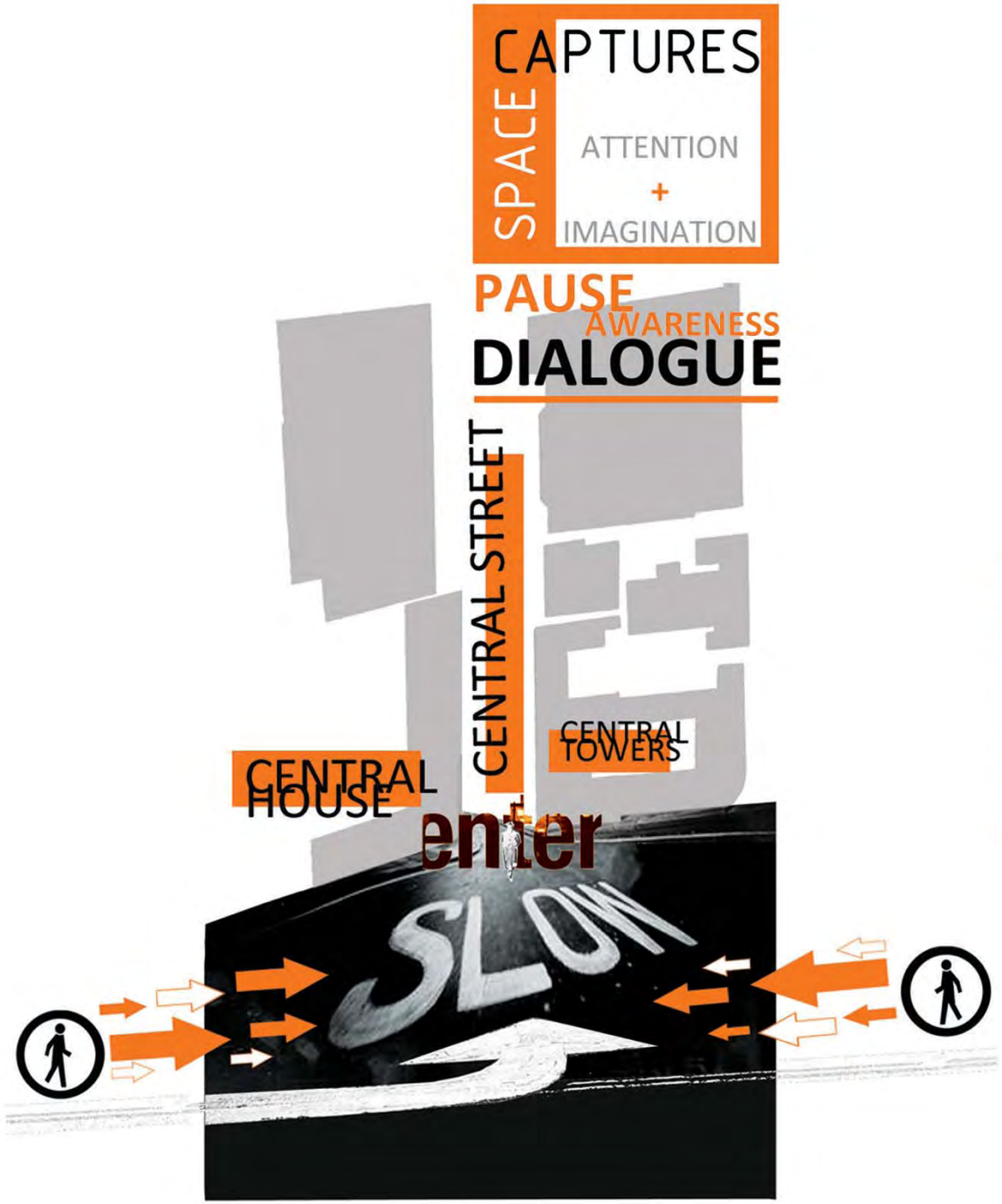


Fig 45 Design initiator

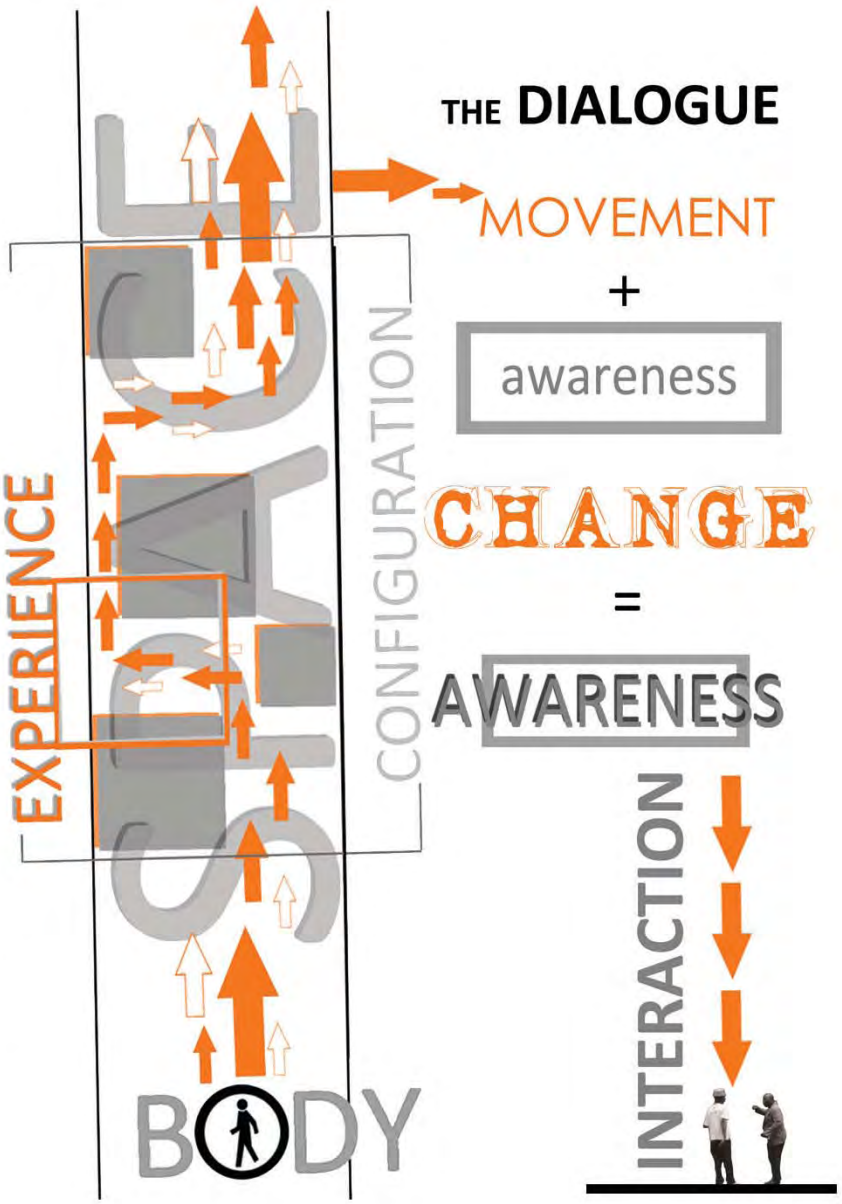
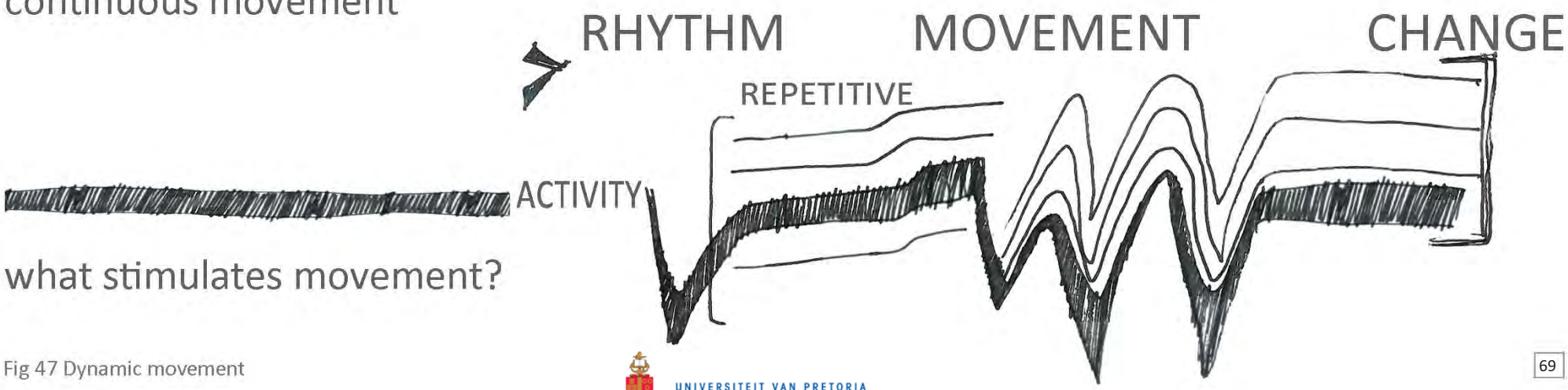


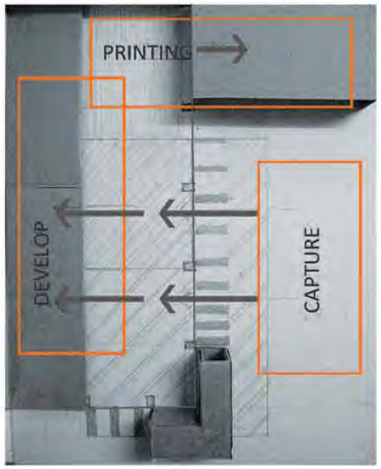
Fig 46 Factors in space that influence each other.

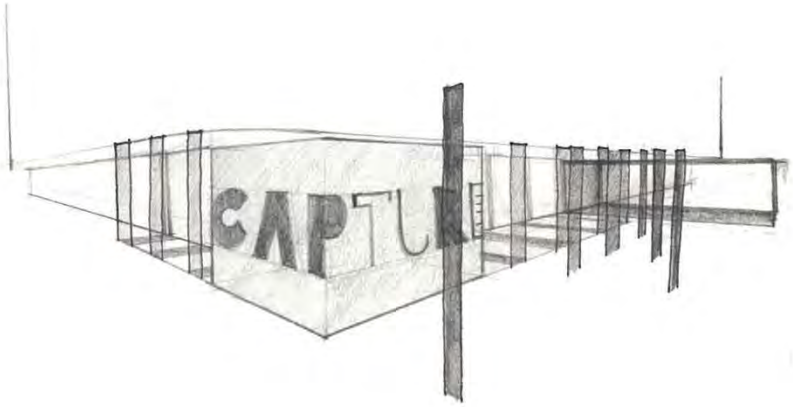
continuous movement

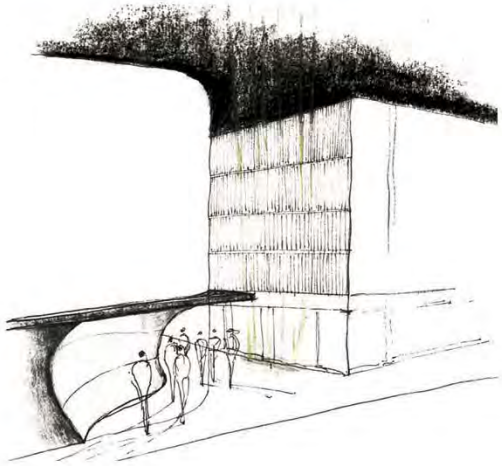


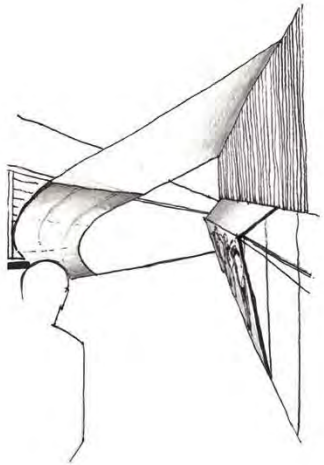
what stimulates movement?

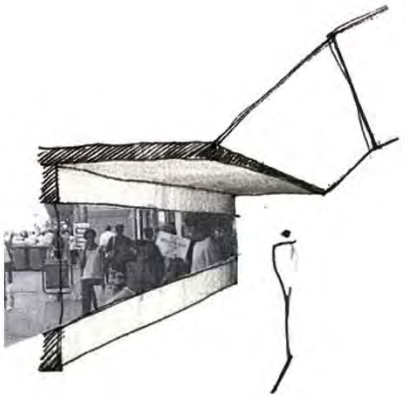
Fig 47 Dynamic movement

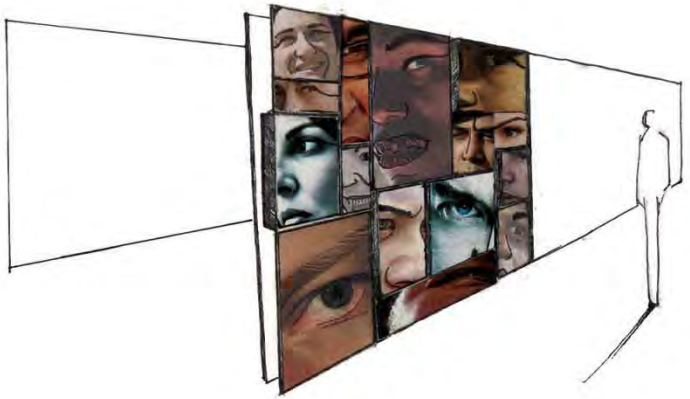








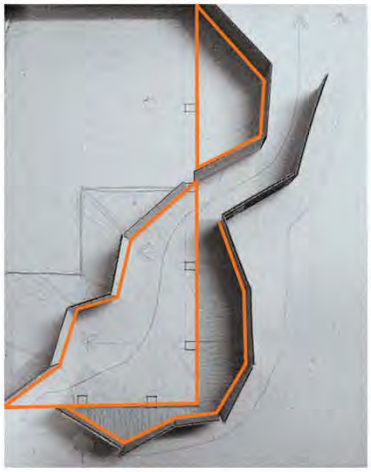
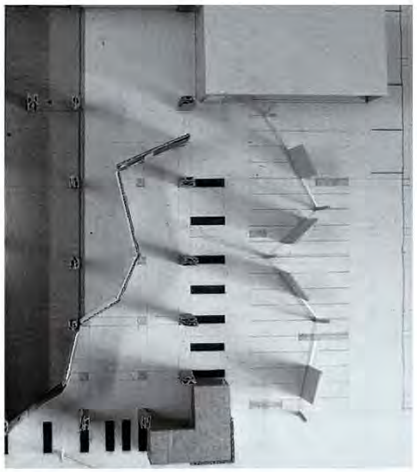




STAGE 1 - INITIAL CONCEPT

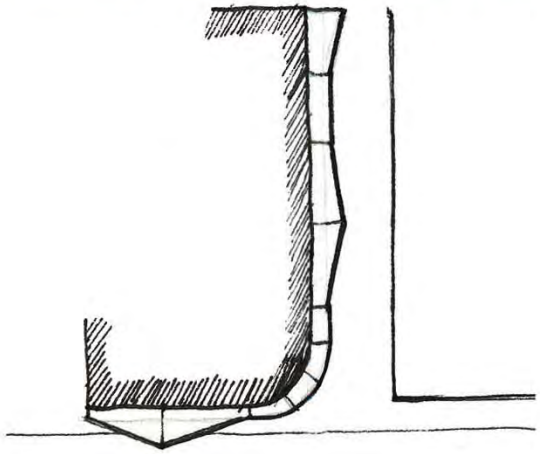
A photographic function, in the form of a photo development lab and public exhibition, was introduced to the space, with elements which capture the movements of the users and incorporate them into visual images that are viewed as one moves through the space.

Fig 48 Stage 1 – Initial Design Concept


STAGE 2 - INITIAL CONCEPT

A photographic development studio and exhibition function in the space, with elements in the pedestrian street which forms a jagged pattern. These elements change in configuration and have images exhibited on them, some of which are captured when the user move through the space. PVC sheets are fitted to the exisitng building facades and has printed and projected images on them.



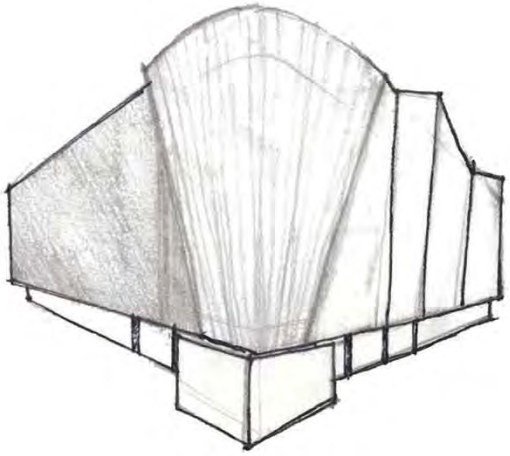
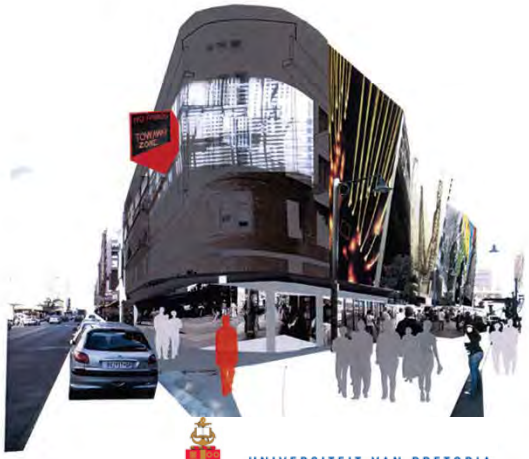




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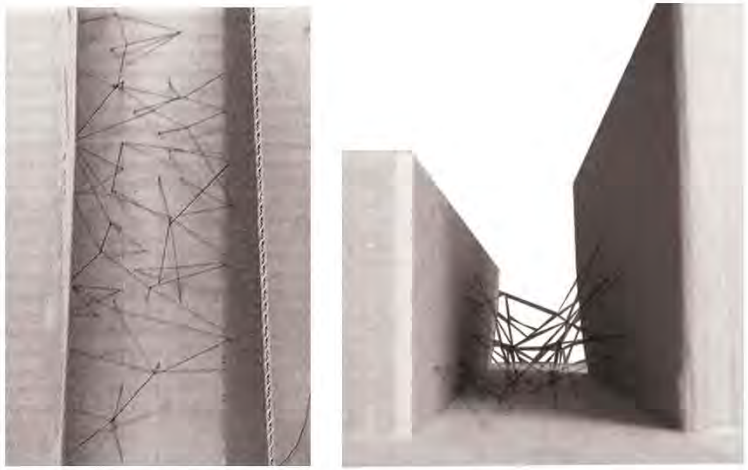
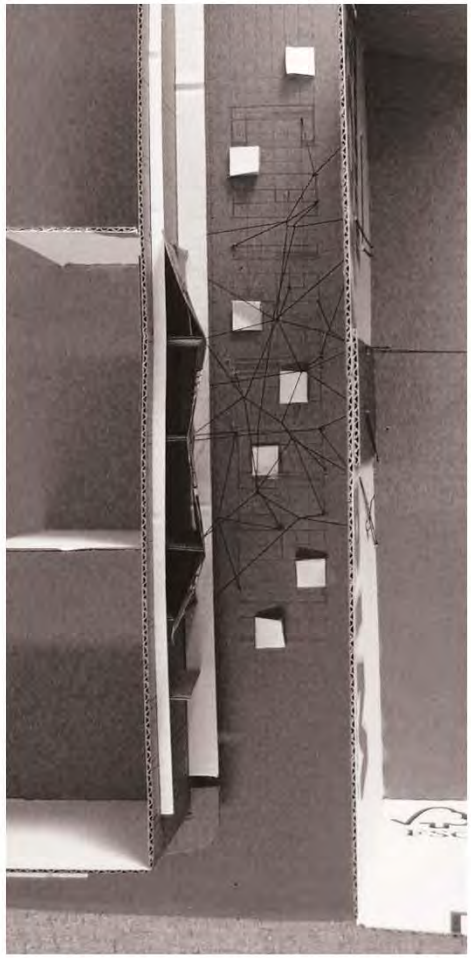
Fig 49 Stage 2 – Initial Design Concept



STAGE 3 - INITIAL CONCEPT

A network within the space between the two buildings, which can be incorporated to navigate the user in and through the space. Images that are suspended within the network, forms part of the network and appears as if they have been captured within space. As a user walks through the space these images are viewed whilst moving.

Fig 50 Stage 3 – Initial Design Concept



STAGE 4 - INITIAL CONCEPT

The "cable network" concept is further explored with the implementation of seating elements on the ground, within the pedestrian street, for viewing purposes.

Fig 51 Stage 4 – Initial Design Concept

CAPTURE

FINAL STAGE - DESIGN INTERVENTION

1. [Overview of theoretical discourse]

From the theoretical discourse it is clear that there is a lack of dialogue between the static architectural environment and the dynamic user. Movement through space is inherently linked to the user's spatial experience; an aspect that can be changed by morphing space which will increase awareness of space, thereby creating a moment where spatial interaction is possible.

2. [Aim of intervention]

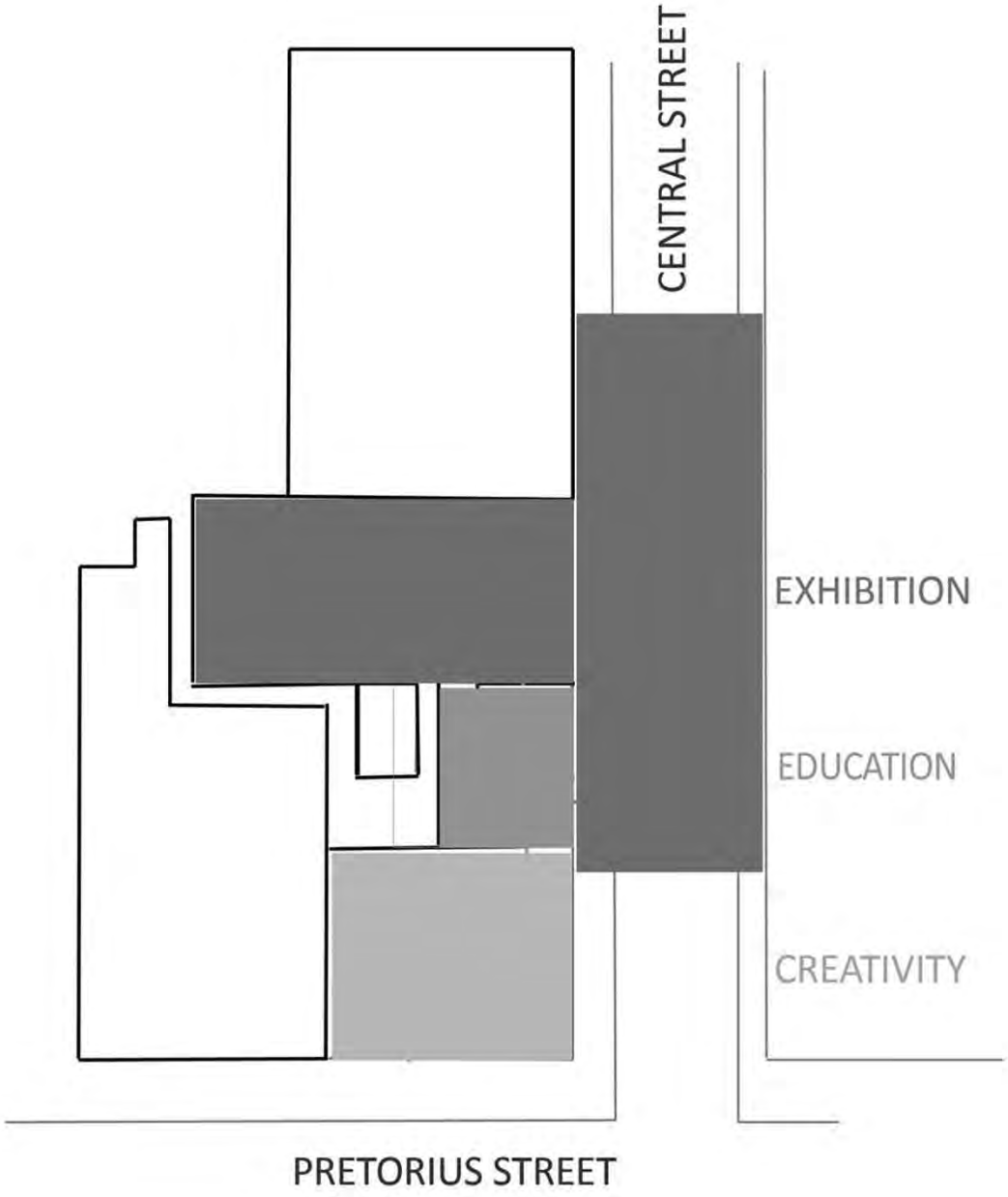
The aim is to create a space which captures the attention and imagination of its users and navigates them through it exposing them to the different functions facilitated within it as well as to the space and to each other. It does this to create a moment of pause in the movement, a moment of heightened awareness, a moment in which the dialogue between user and space may begin. A spatial intervention which has been informed by the existing movement within a pedestrian thoroughfare. The element of public art, in the form of the visual image, has been identified to be the way in which the surroundings of a user can be communicated to them, and can encourage interaction and interpretation within the space. The intention of the design intervention is to bring art to the public domain, exposing the everyday user of the city to it.

3. [Spatial intervention]

The name of this spatial intervention, *CAPTURE* suggests the capture of the user's attention and imagination within the space. On a tangible level, *CAPTURE* facilitates the introduction of art into the fabric of the city by creating a public exhibition space in Central Street. It is envisaged as an initiative by the Department of Arts and Culture in collaboration with the City of Tshwane to develop and promote the role of the arts in the social development and rejuvenation of the city.

It aims to establish an important relationship between those in a professional creative industry like architects and visual artists as well as the everyday street artist or crafter. This relationship extends to the viewing public and other associated parties like the University of Pretoria, established art museums and galleries as well as local governing bodies.

Agents
- City of Tshwane
- Department of Arts and Culture
- University of Pretoria – Art, Architecture and Design
- Artists (Local and International)



CAPTURE

Fig 52 Spatial programming

4. [Spatial Programming]

– Artist studio / Workshop - Creativity – exposed and shared
– Student Research Center - Education – investigate and experiment
– Interior and Exterior Exhibition space - Exhibition – visual image - communicator
– Curator's office
– Ablution facilities

4.1 [Artist Studio]

CAPTURE will form a partnership with local as well as international artists to utilise the artist studio. Artists will be able to rent the space to work in. The agreement will be revised quarterly to ensure that the space remains viable and attracts the attention of passers-by with a variety of projects. Knowledge and skills are exchanged between the artists and the public through the presentation of workshops and training programmes. A selection committee will decide which artists will use the studio/workshop, to ensure that the intervention fulfills its intended purpose.

4.2 [Student Research Centre]

CAPTURE will also provide an opportunity for the University of Pretoria's Departments of Visual Arts and Architecture to use parts of the space for student research. Art and Architecture students will be able to research the city and its users as part of their required investigation for design projects.

4.3 [Interior and Exterior Exhibition space]

CAPTURE will include an interior exhibition space, which spills out onto an exterior exhibition space where visual images may be appreciated by the public.

The exterior exhibition is located in Central Street, where it communicates directly with the passing public. It will feature periodic exhibitions of both local and international artists and architects. The visual images that will be exhibited are both in printed and projected format. Images in the public domain will be exhibited in projected format as this minimises the risk of vandalisation.

The intensity of the exhibition will change to a finer grain as it envelopes the interior space, allowing for more intimate viewing by the public. The Department of Arts and Culture will act as the curator and form partnerships with artists so that they may get involved with *CAPTURE* and exhibit their work.

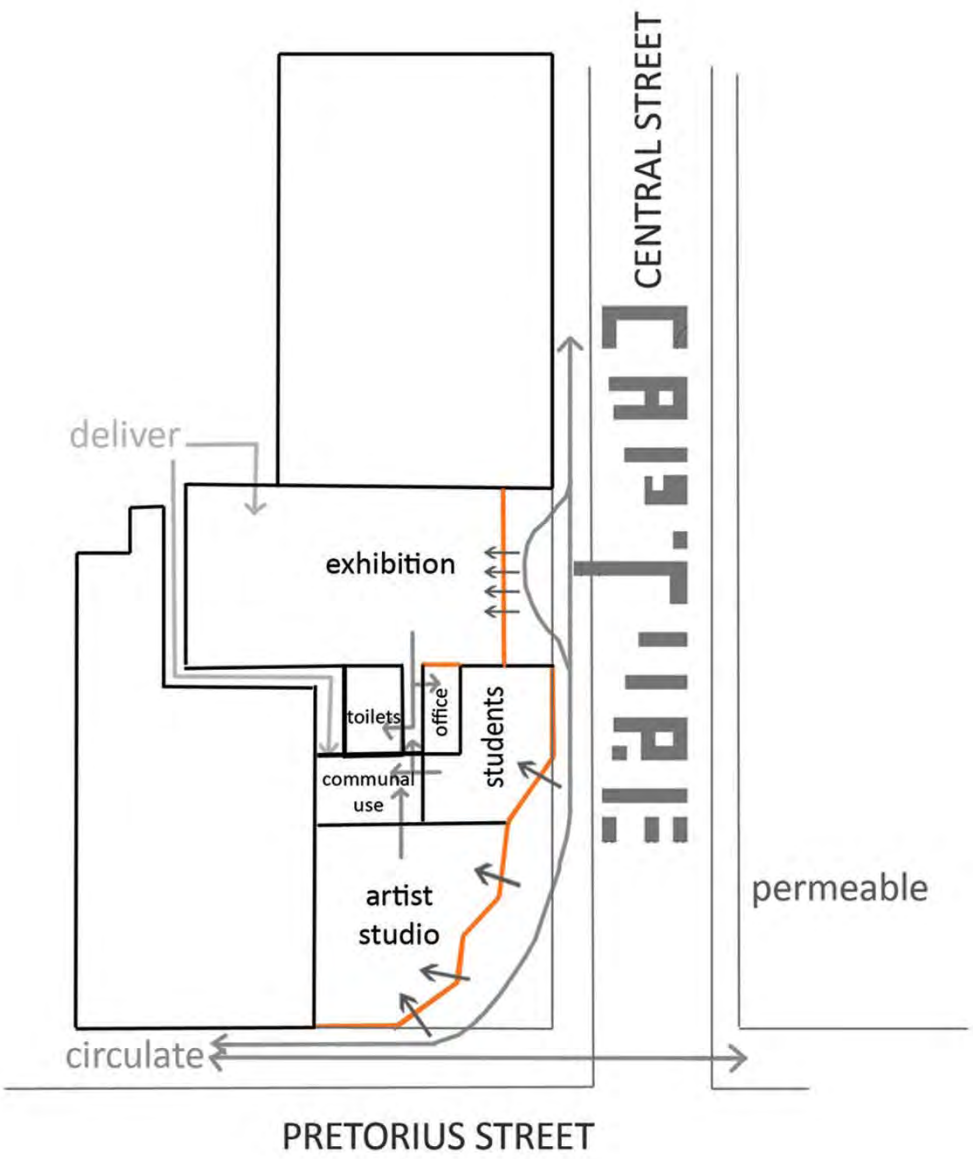


Fig 53 Circulation and Access

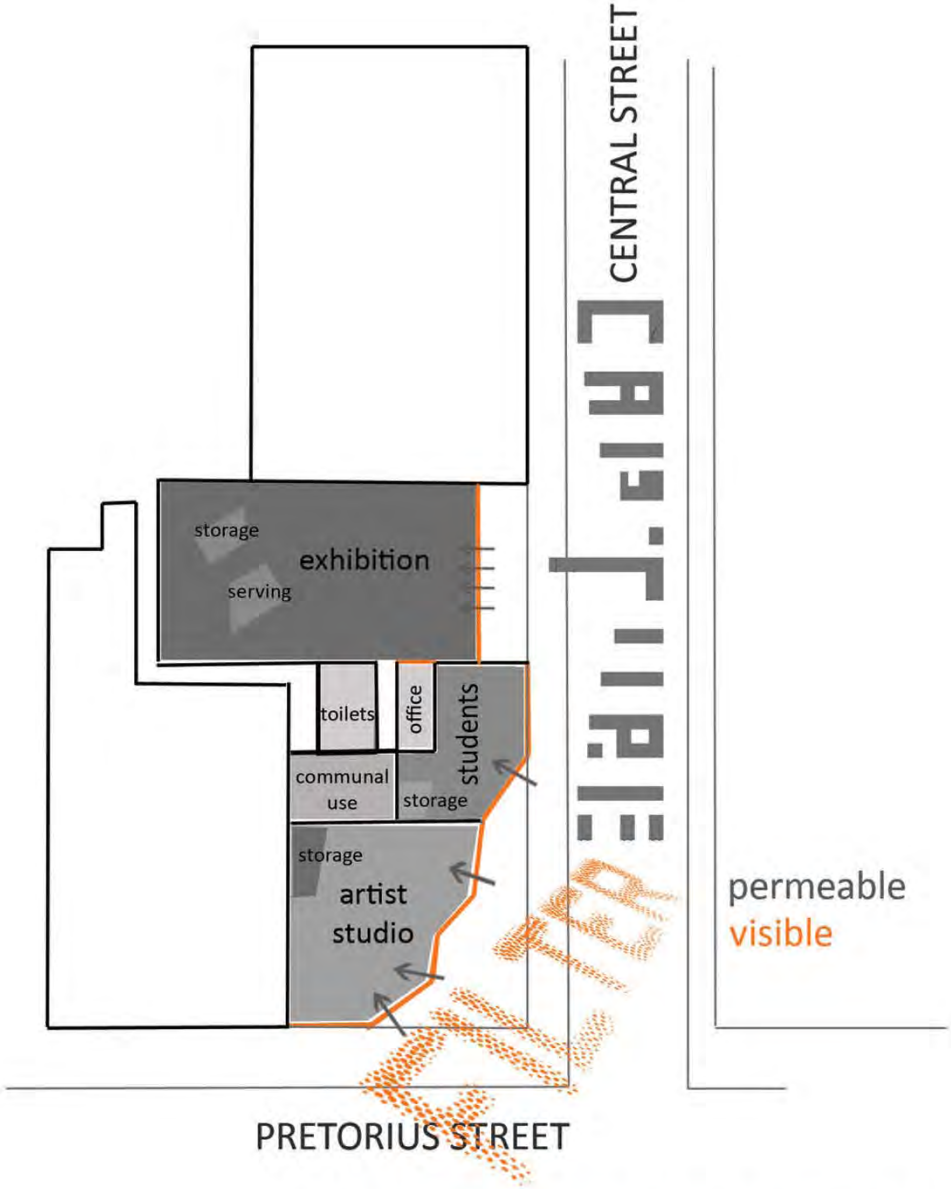


Fig 54 Space use

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5. [Capture as navigator]

CAPTURE functions as a filter in the continuous movement pattern of Central Street. It aims to navigate and guide movement, essentially slowing it down to create a heightened awareness of the surrounding environment. This is done in an attempt to render the space more functional and integrated with the user.

5.1 [Circulation]

CAPTURE's filtering process starts by attempting to pull people from the street into the semi-public, intimate setting of Central Street thereby revealing the activities within to a larger public. This is achieved by cutting the corner of Central House diagonally to facilitate movement round the corner into the pedestrianised street.

5.2 [Ease of access]

Accessibility to the space is of the utmost importance. The spaces need to be both physically and visually accessible. The entrances to the spaces, facilitating easy access to both passers-by and intentional visitors. These entrances are on the same level as the existing pavement, facilitating easy access for people with varying levels of mobility. The entrances are recessed, seemingly 'pushed' back by the stream of pedestrians. This blurring of the interior/exterior threshold aids in 'pulling' people into the more intimate interior spaces of Central House.

6. [Space use]

The approach space use and the response to existing skin is one of 'light' intervention. The manner in which new elements are inserted into the existing space gives the illusion that they have been suspended in space. The connections to the floor, walls and soffit are detailed in such a manner as to appear separate of the existing skin. This is achieved through the use of pin-like connections and shadowlines. The intervention needs to retain its flexibility to ensure that the spaces can accommodate various users with different needs over time.

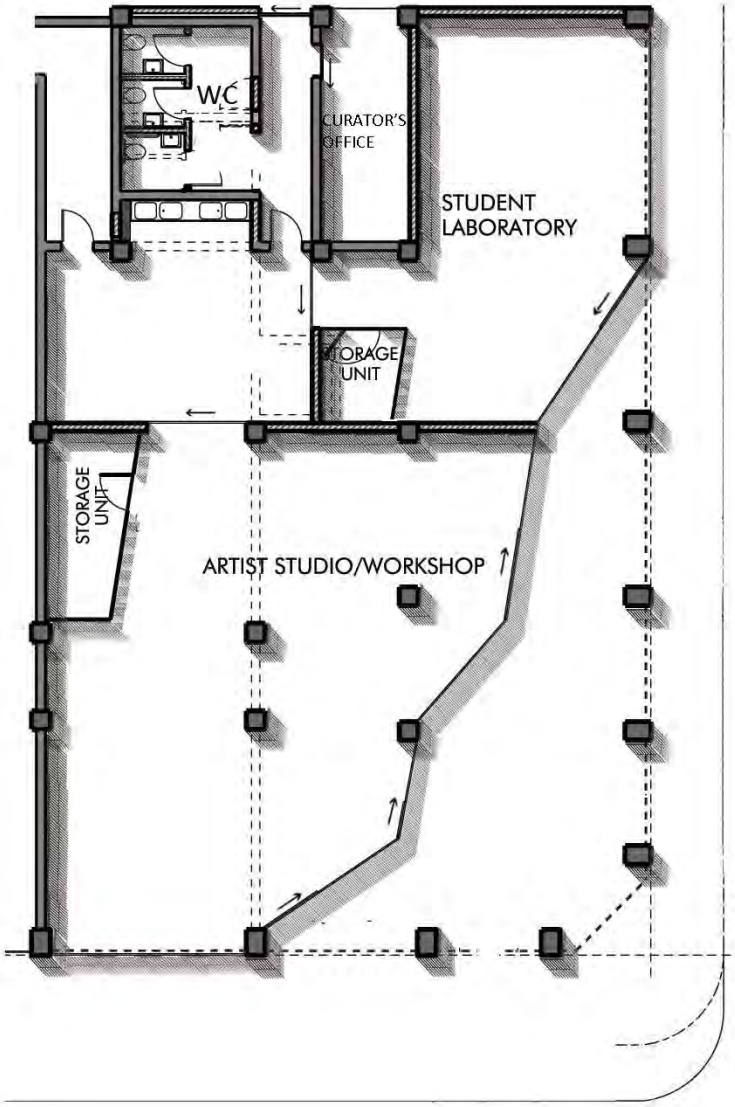
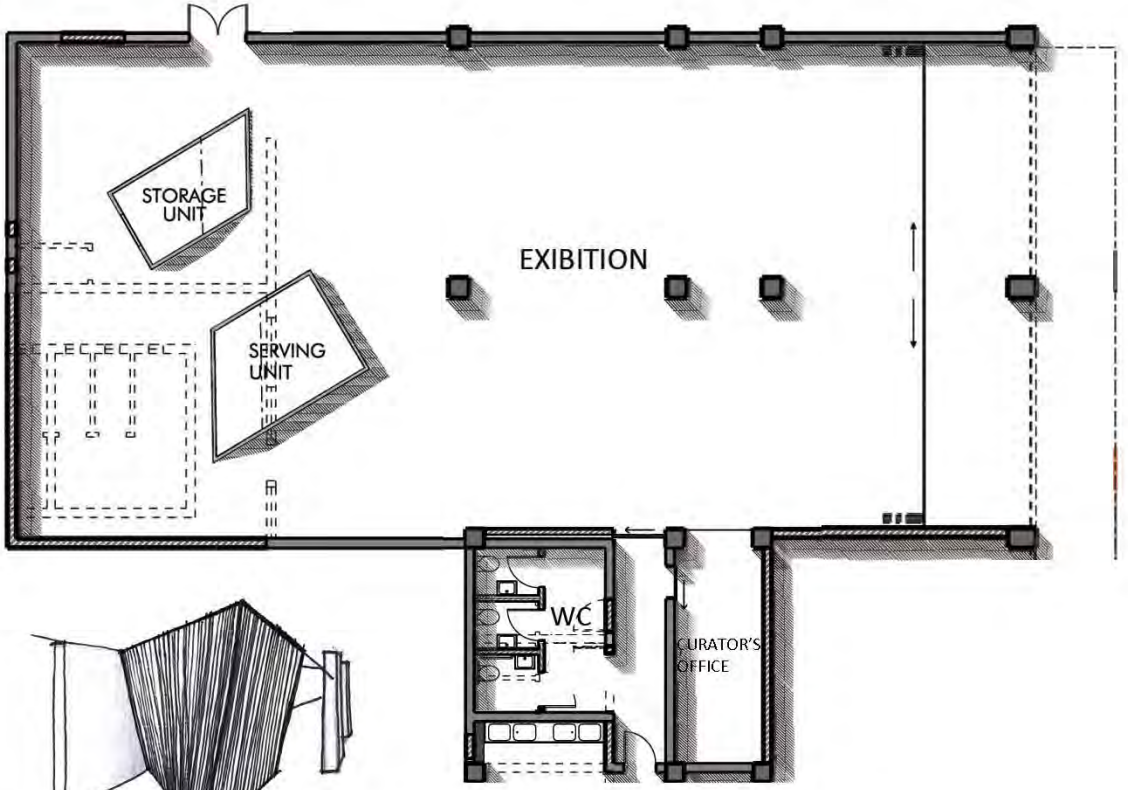
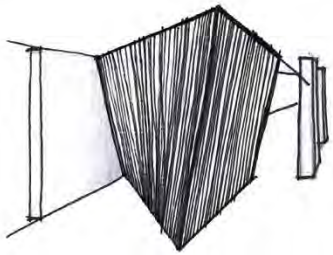


Fig 55 Plan view – Artists Studio and Student Research Space





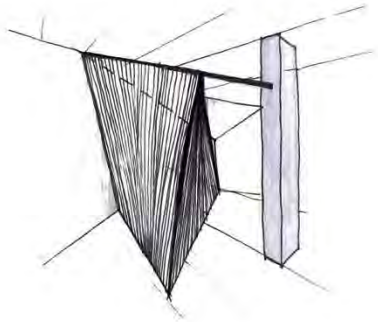


Fig 56 Plan view – Interior Exhibition space

Fig 57 Conceptual images of suspended units in Interior Exhibition space

CAPTURE

6.1 [Artist Studio]

The space is located where Pretorius Street and Central Street cross, and the corner is cut diagonally. The space can be rented as studio workspace by individual or collective groups of artists. The space is fitted with glass shop-fronts placed in a jagged pattern along the line of the corner. The entrances to the space are detailed as glazed shopfronts, aiding in making the space visually accessible. It exposes the artists and their work to those walking past the space, generating greater 'visual' interest. The space facilitates a diversity of users with different spatial needs depending on the intended function. Movable work surfaces as well as dedicated storage facilitates the flexibility of the space.

6.2 [Student Research Space]

The 'student space' is located next to the artist's space, where students from academic intuitions like the University of Pretoria can conduct investigations into the city and its users. This is equipped with wireless internet connections, storage space as well as dedicated work surfaces. The artists and students share a space fitted with washbasins. The ablution facilities are also shared by both spaces.

6.3 [Exhibition Space - Interior]

The exhibition space is accommodated for in the design of both the interior and exterior. The interior is fitted with storage and serving units to be used during functions or exhibition openings. These can also be used as projection surfaces. Printed images are exhibited on the periphery walls of the space.

A network of stainless steel cables aids in navigating the viewers though the space. The cables are flexible and can be adjusted as need be. This added flexibility makes it possible to alter the space with minimal effort. Visual images can also be suspended within this network. The entrance to the space from the street has a glass shop-front rendering the space visible from the street. It is recessed from the street allowing the exterior circulation to push into the space, and thereby pulling people into the interior. The curator's office also has a glass shop-front, which looks out into the space.

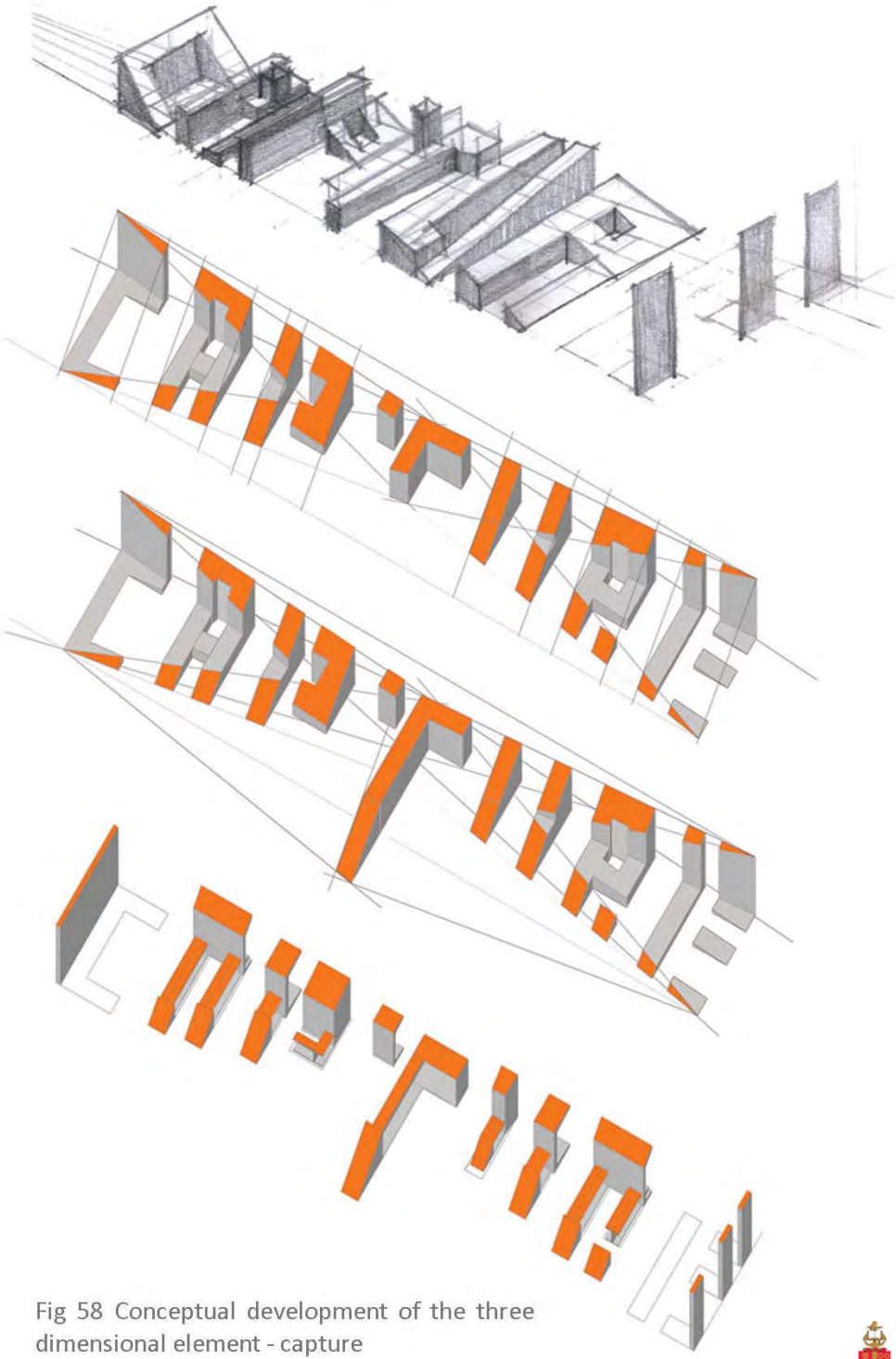


Fig 58 Conceptual development of the three dimensional element - capture

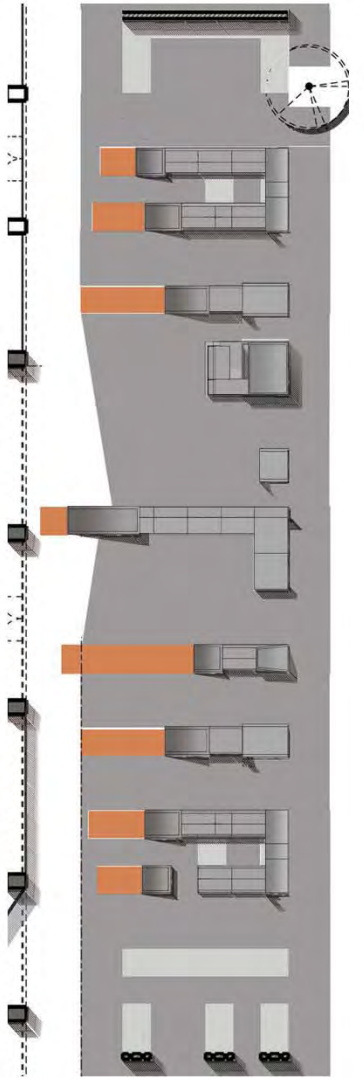


Fig 59 Plan view – Exterior Exhibition space

CAPTURE

6.4 [Exhibition Space - Exterior]

The exterior exhibition space finds form as a sequence of three dimensional seating elements on the street. These elements are introduced as a means of navigating people through the space, whilst at the same time capturing their attention and imagination. The elements offer a place to pause and a place to view the visual imagery exhibited in the public walkthrough. The elements are arranged and detailed in such a manner as to 'guide' people into the interior of Central House, both physically and by means of visual sightlines. These also spell the word *CAPTURE*. This should not necessarily be legible whilst in Central Street as the focus here should rather be on the displayed imagery. The graphic 'text' will however be visible from surrounding buildings, luring people to the exhibition on ground level.

As on the inside, a flexible steel network is utilised in the exterior space. These cables span between Central House and Towers. They are suspended above the seating elements so as to not obstruct movement. Textile 'screens' with printed graphic images are suspended within the network.

7. [Conclusion]

The existing movement through the space facilitated decision making during the design development. By changing the path of the user through the space the user becomes more aware of the space and as a result the space becomes morphed and more integrated with the movement of the user.

If the space stayed static there would have been no opportunity for the building to be dynamic and react to what may happen in future. By introducing flexible elements like the cable networks and photographic images the movement through the space can be changed over time and creates the opportunity to alter the spatial experience and interaction with the space.

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CAPTURE

Fig 60 Key plan indicating views for perspectives

Fig 61 View from Pretorius Street towards Church street

Fig 62 View facing Church Street, opposite interior exhibition space – day vie

Fig 63 View facing Church Street, opposite interior exhibition space

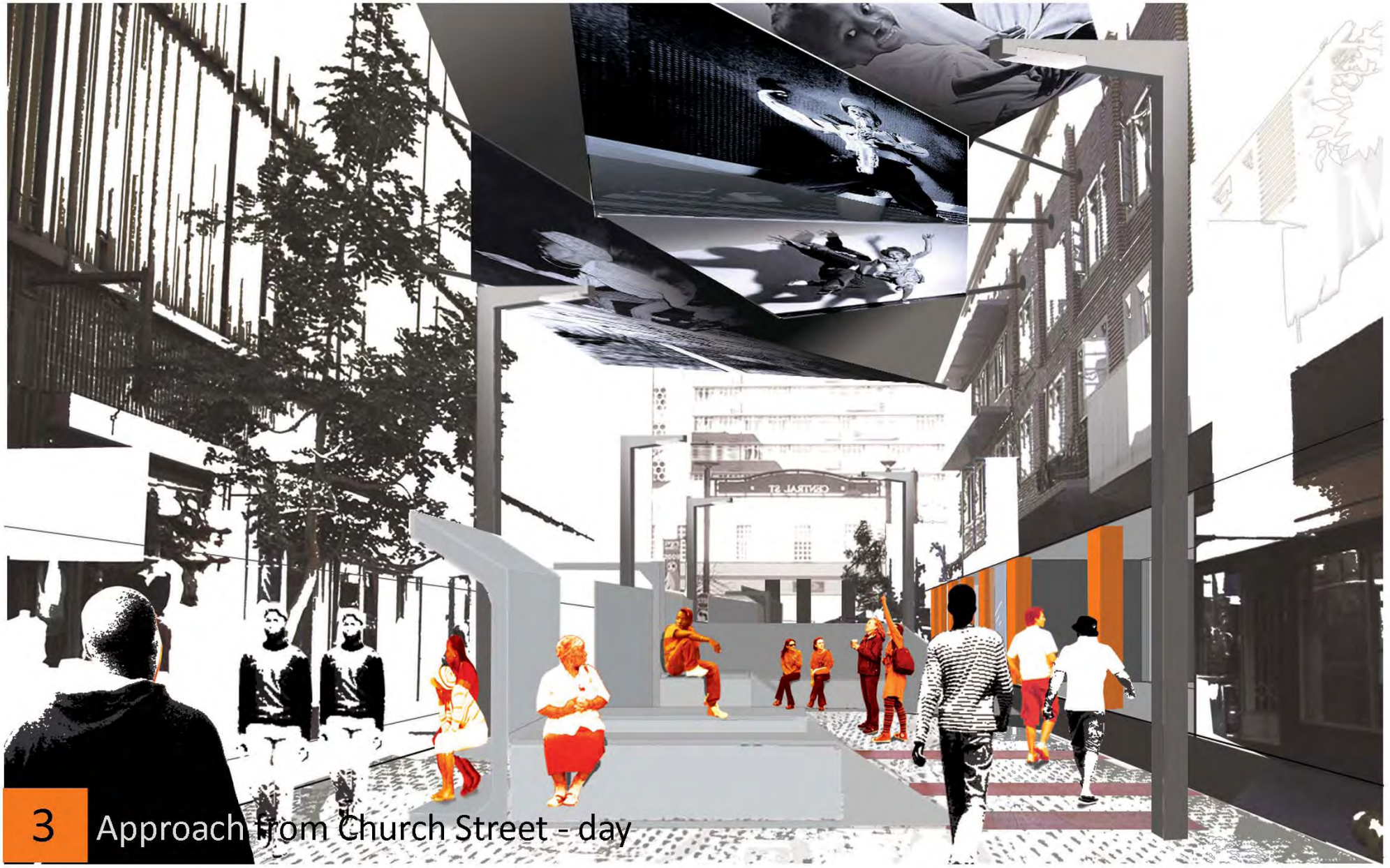

Fig 64 View facing Pretorius Street – day view

Fig 65 View facing Pretorius Street – night view

Fig 66 Entrance to interior exhibition space

Fig 67 Interior exhibition space, behind the serving unit

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[TECHNICAL INVESTIGATION]

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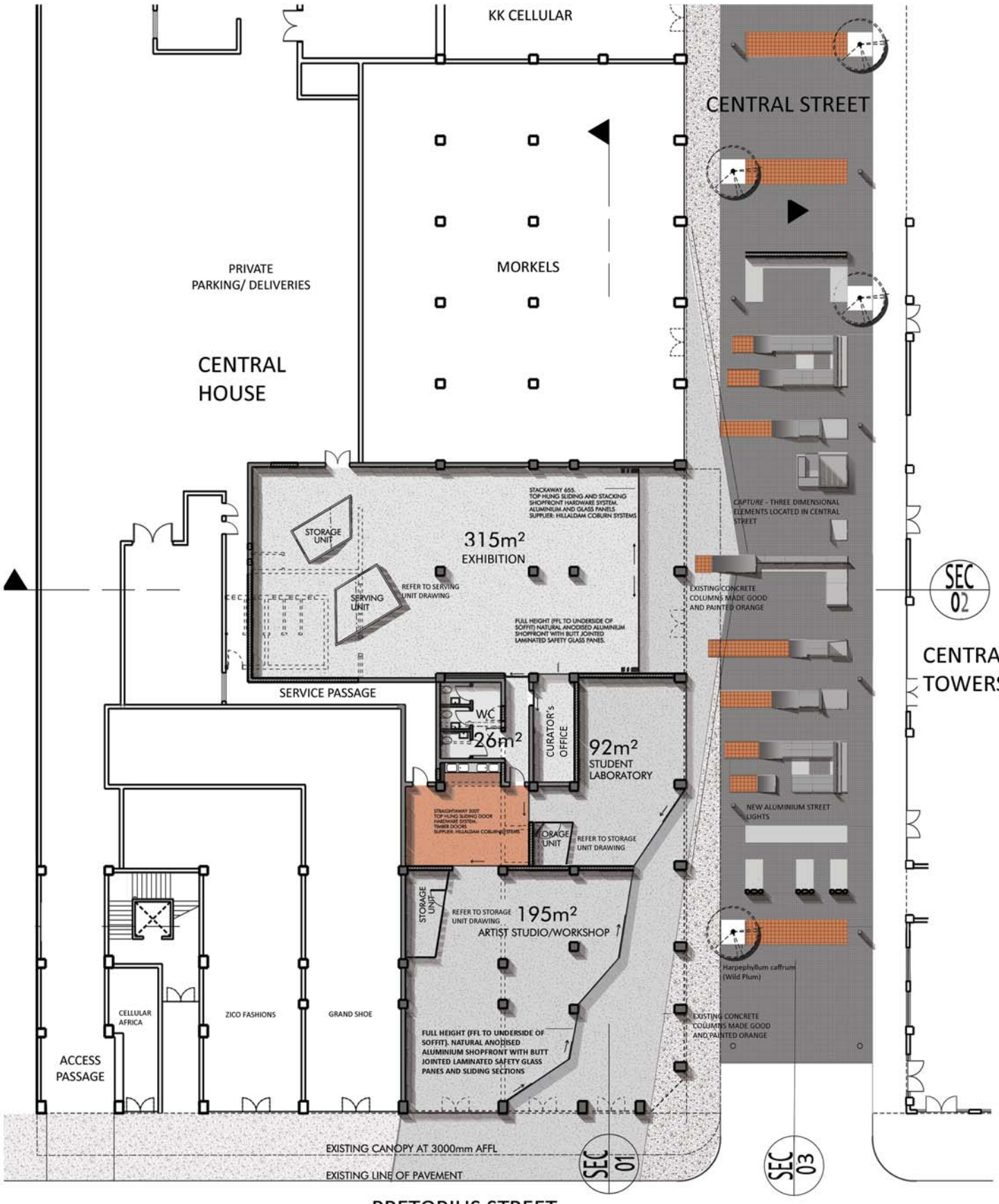

SEAMLESS SELF-SMOOTHING FLEXIBLE POLYURETHANE BASED FLOOR SYSTEM. MASTERTOP 1325 FOR AREAS WITH HEAVY PEDESTRIAN TRAFFIC
SUPPLIER: BASF CHEMICAL COMPANY
COLOUR: DUSTY GREY

SEAMLESS SELF-SMOOTHING FLEXIBLE POLYURETHANE BASED FLOOR SYSTEM. MASTERTOP 1326ARTFLOOR
SUPPLIER: BASF CHEMICAL COMPANY
COLOUR: LIGHT GREY

EPOXY RESIN COATING FOR CONCRETE FLOORS AND WALLS. MASTERTOP 1120T GOOD RESISTANCE TO A WIDE RANGE OF CHEMICALS
SUPPLIER: BASF CHEMICAL COMPANY

NEW EXPOSED AGGREGATE CONCRETE TO MATCH THE COLOUR OF EXISTING FLOOR FINISH ON PAVEMENT

100 x 100mm COBBLE STONES. EXISITNG STONES TO BE REUSED IN INDICATED PATTERN

225 x 225mm BASKET WEAVE PATTERN FROM RE USED RED FACE BRICKS, APPLIED TO INDICATED PATTERN

FLOOR FINISHES SCHEDULE

FLOOR PLAN NEW WORKS AND DEMOLITIONS

0 1m 5m 10m 20m

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The technical investigation of the intervention is revealed with the focus on certain of the main design elements and aspects. The technical section of the intervention is apparent through the utilization of certain materials as well as of certain methods of construction.

Fig 68 Final plan – Demolitions and New Works

Fig 69 Southern Elevation

Fig 70 Eastern Elevation

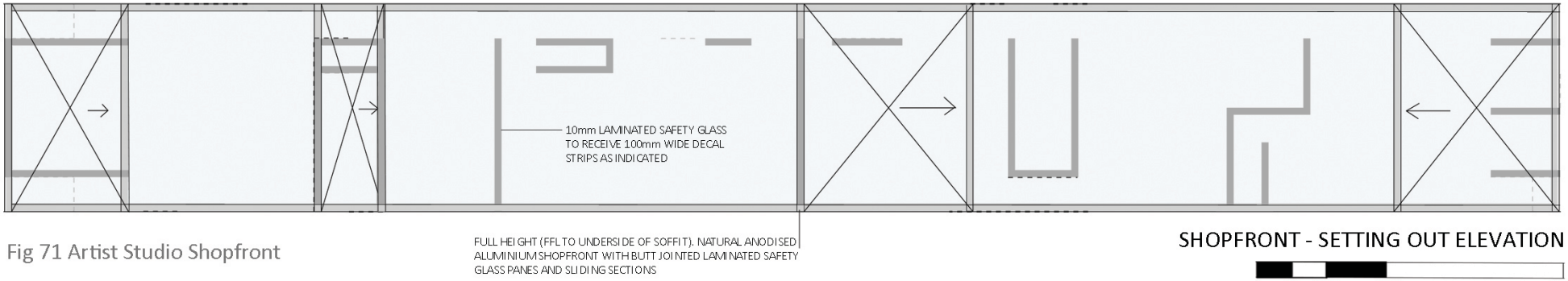
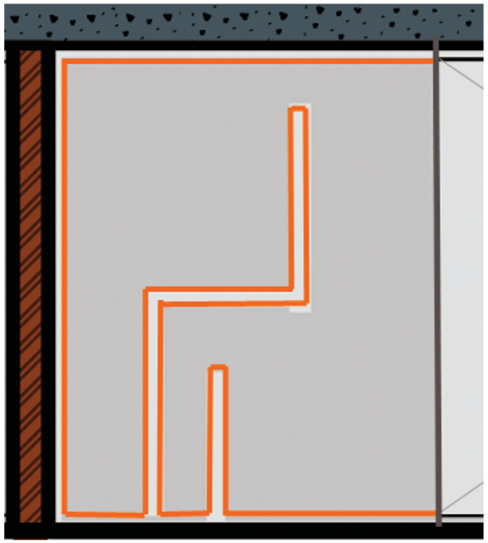


Fig 71 Artist Studio Shopfront

Fig 71.1 Artist Studio Shopfront Elevation



ELEVATION - STORAGE UNIT
IN STUDENT RESEARCH SPACE NOT TO SCALE

Fig 72.1 Storage unit Elevation

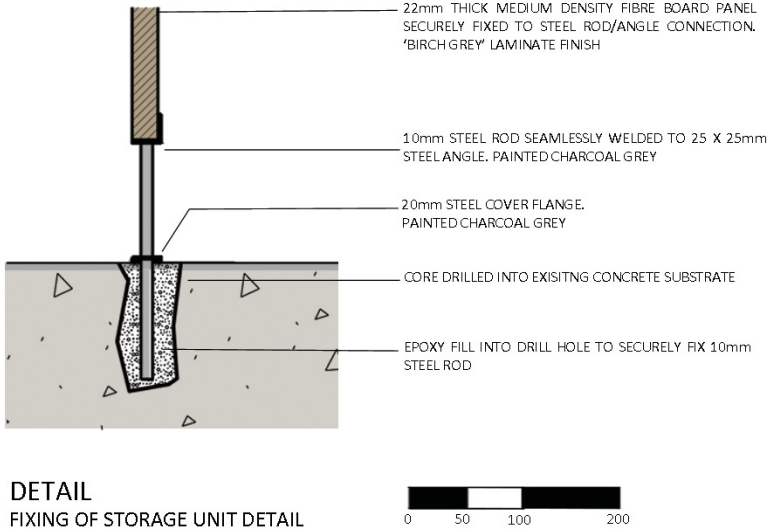


Fig 72.2 Storage unit detail

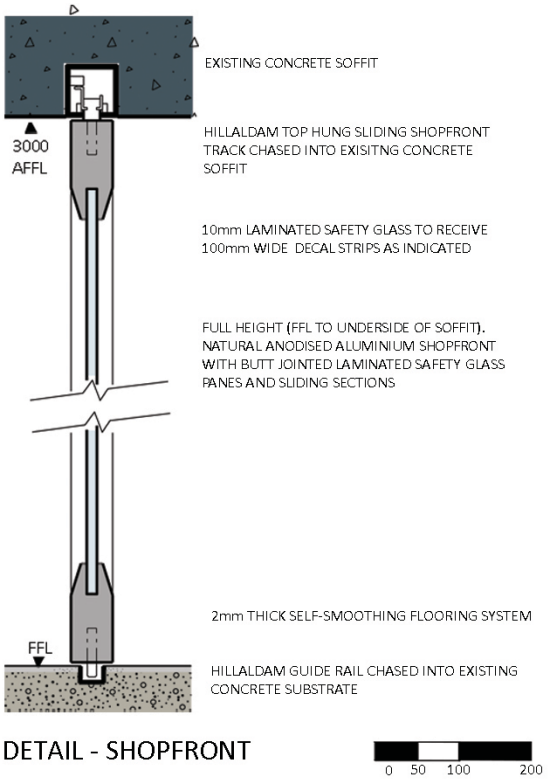


Fig 71.2 Artist Studio Shopfront Detail

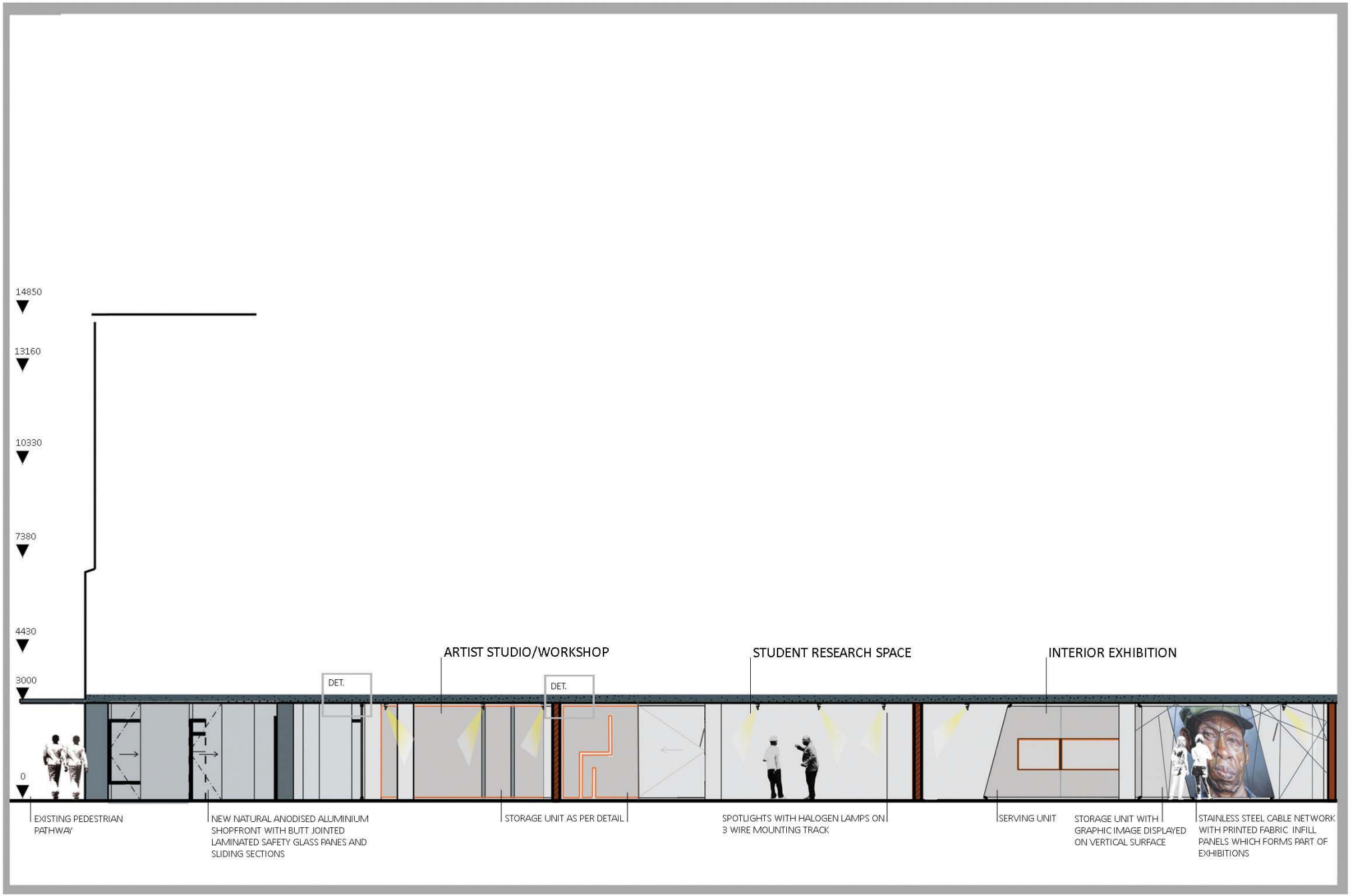
1. [The Existing space]

The existing building consists of a column and beam structure with masonry infill. The existing soffit height throughout is 3meters above floor level. Some existing walls are removed and new walls added to ensures that the structural integrity of the building envelope is not compromised.

2. [Artists Studio]

The existing shopfronts which frames the corner is removed and the line pushed back forming a jagged pattern. A new aluminium and glass shopfront is installed that are fitted with three Sliding opening sections. An abstract pattern of *CAPTURE* will be applied to the shopfront

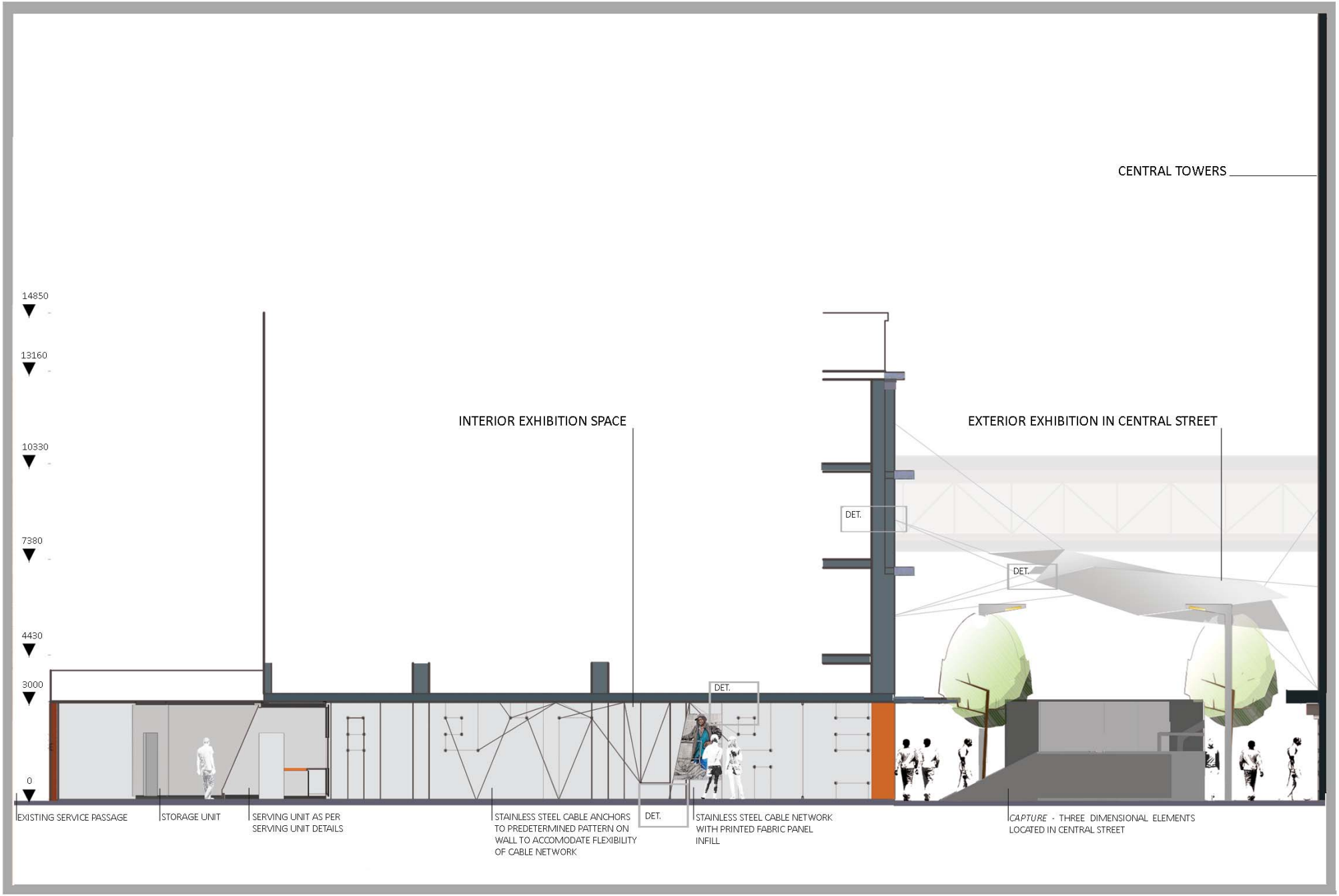
Timber panels forms storage units within the artist studio and the experimental laboratory. They appear to be suspended within the spaces, emphasizing the notion of being captured. They are attached to the walls, floors and soffit with steel rods to create a “pin” like connection to the existing space. These panels are perforated with holes at specific places which stems from the pattern that is created by the abstract spelling of *CAPTURE*. The holes are framed with steel angles that are painted tangerine orange to emphasize the pattern.



SECTION 01

0 1m 5m 10m 20m

Fig 73 Section 01



SECTION 02

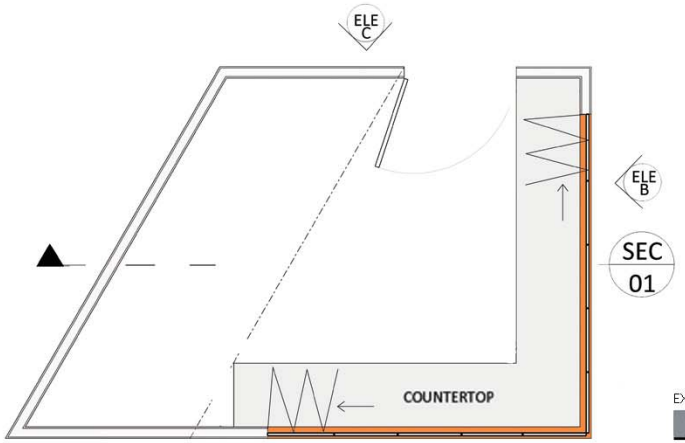
0 1m 5m 10m 20m

Fig 74 Section 02

3. [Serving Unit - Interior Exhibition]

The Storage and Serving units within the space are composed of drywall partitioning that is fixed to steel lipped zed channels which are fixed to the floor and soffit. This connection creates a shadowline which makes the units appear to be suspended within the space. LED lights will be housed in the recessed openings that are created which will emphasize this.

Fig 76 Serving Unit and Details in Interior exhibition Space

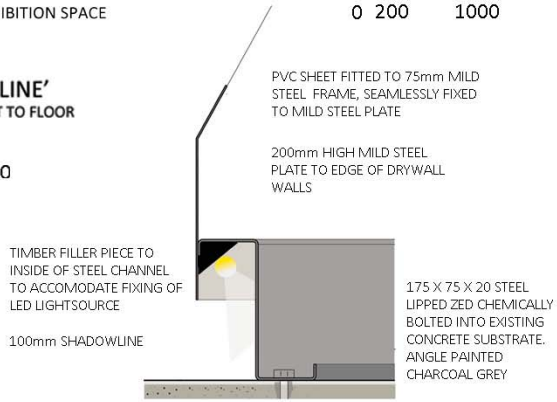


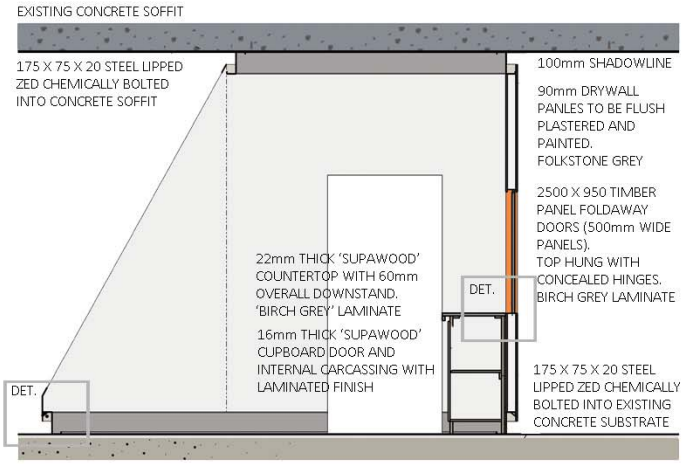
PLAN - SERVING UNIT
INTERIOR EXHIBITION SPACE

100 500
0 200 1000

DETAIL
'SHADOWLINE'
FIXING OF UNIT TO FLOOR

10 50
0 20 100



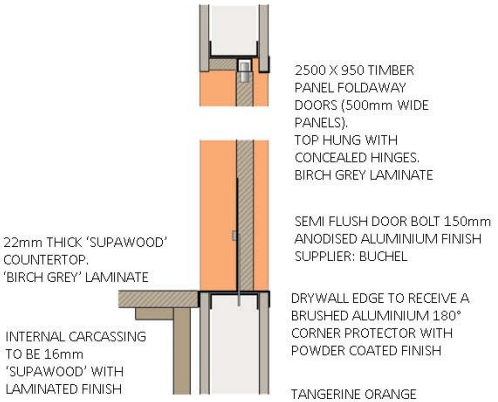


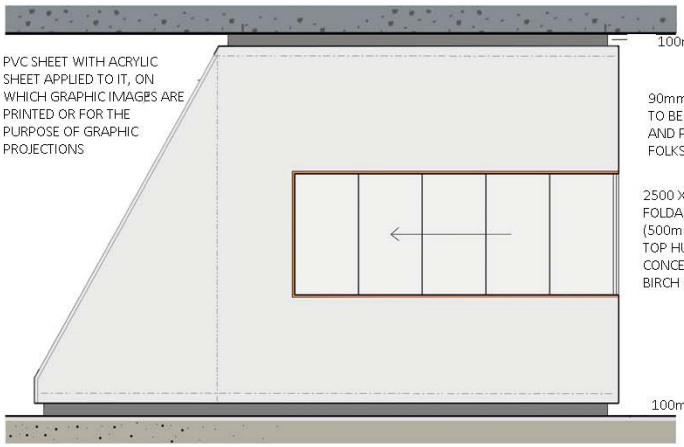
SECTION 01 - SERVING UNIT
INTERIOR EXHIBITION SPACE

100 500
0 200 1000

DETAIL
TIMBER PANEL CONNECTION

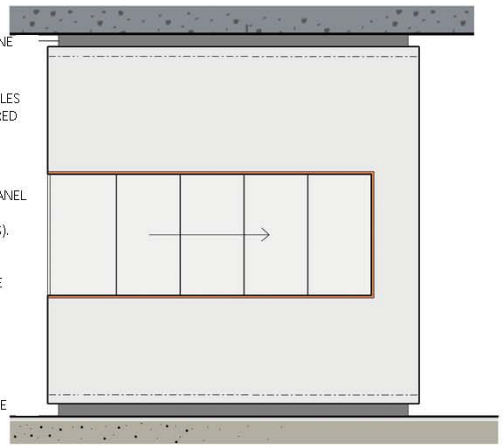
10 50
0 20 100





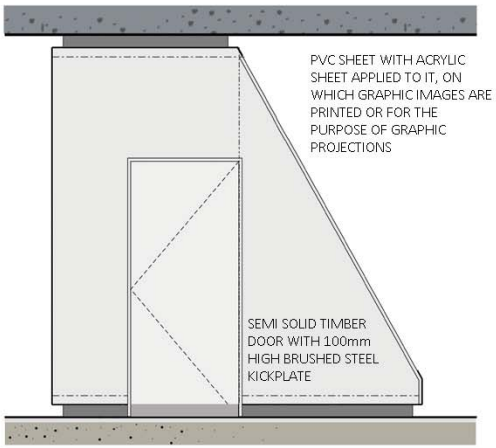
ELEVATION A - SERVING UNIT
INTERIOR EXHIBITION SPACE

100 500
0 200 1000



ELEVATI
INTERIOR EXI

100 500
1000



ELEVATION C - SERVING UNIT
INTERIOR EXHIBITION SPACE

100 500
0 200 1000

4. [Cable Network - Interior Exhibition]

The cable network are connected to the walls, floor and soffit with anchoring clevises. Images that are printed onto vinyl sheets are attached between the cables in the network with connecting wire clamps.

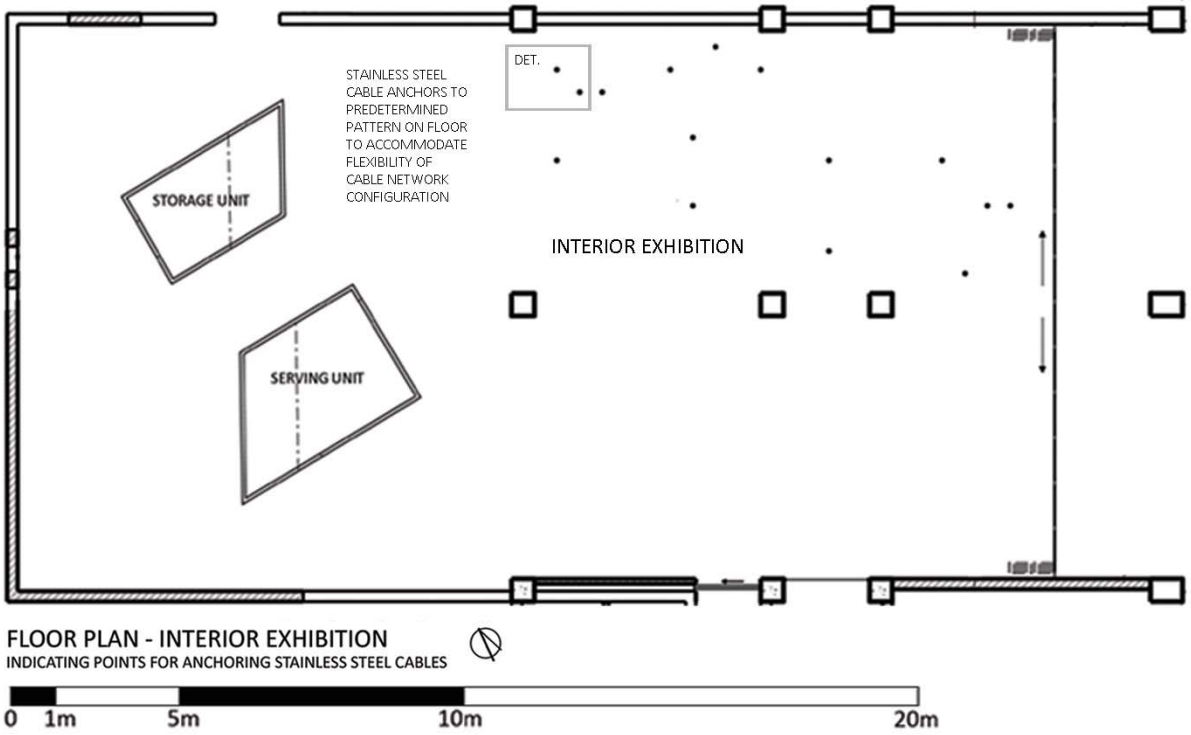


Fig 75.1 Cable Installation plan

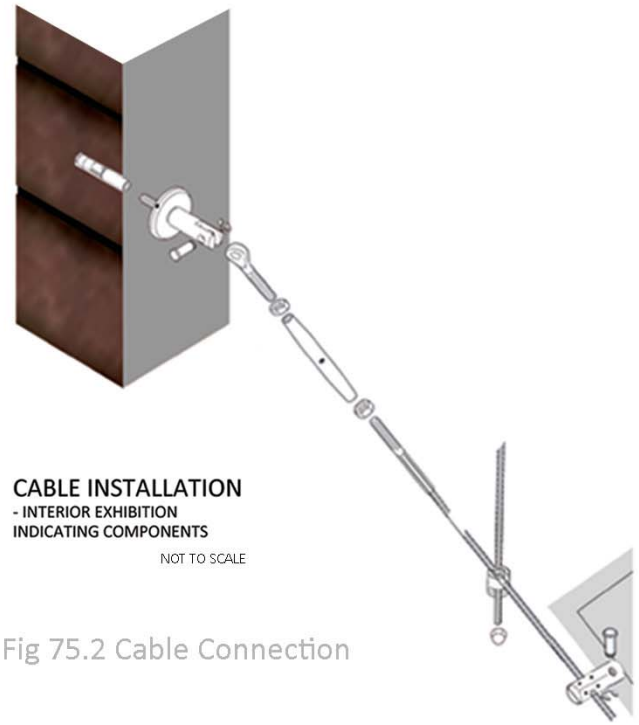


Fig 75.2 Cable Connection

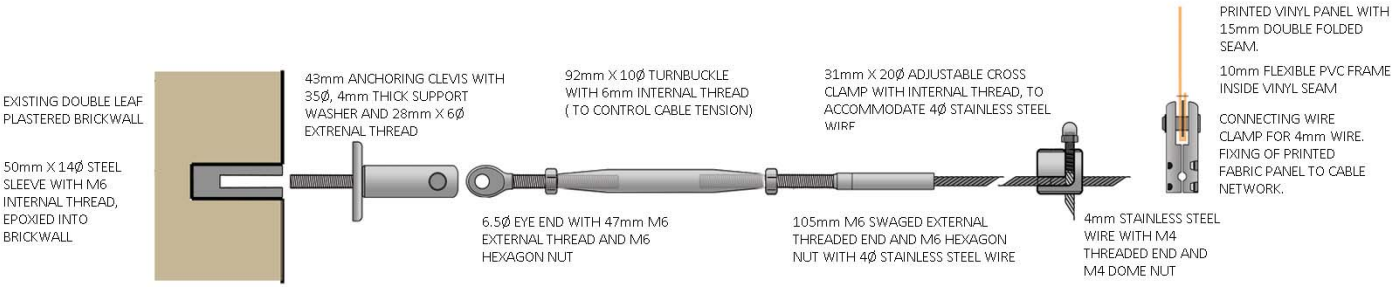


Fig 75. ail

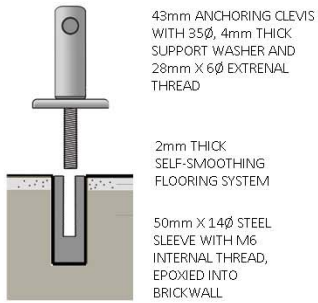


Fig 75.4 Cable Detail

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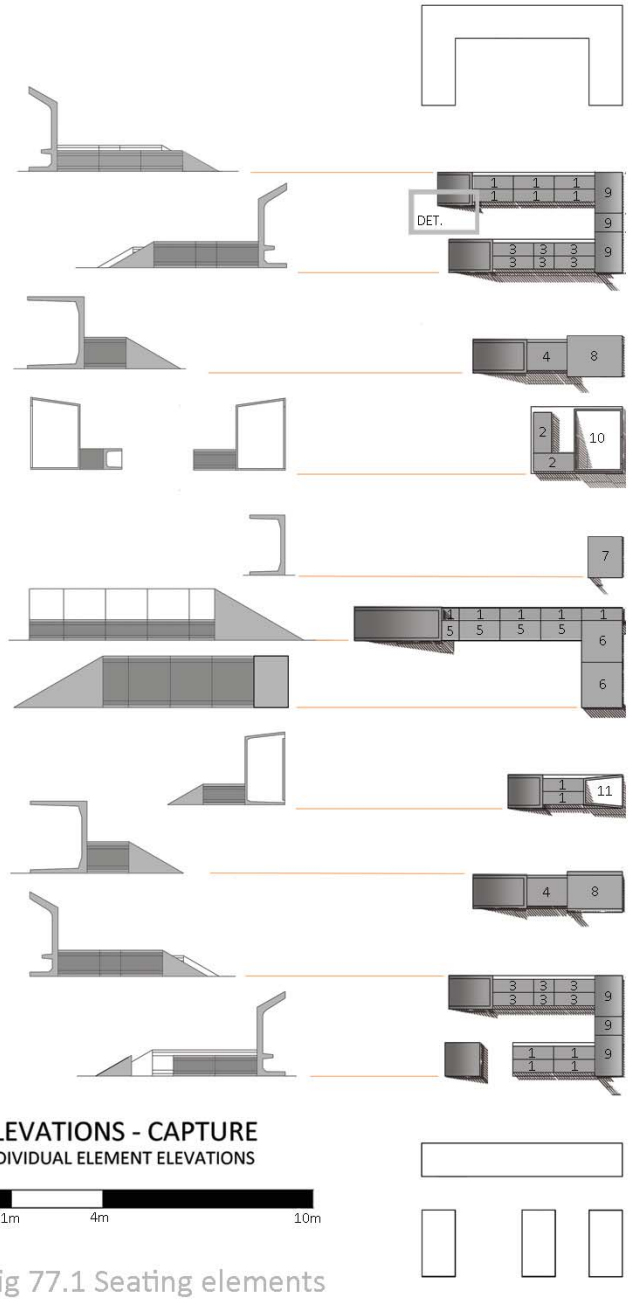


ELEVATIONS - CAPTURE
INDIVIDUAL ELEMENT ELEVATIONS

0 1m 4m 10m

Fig 77.1 Seating elements in elevation

PLAN - CAPTURE
INDICATING SCHEDULE KEY TO ELEMENT SIZES

0 1m 4m

Fig 77.2 Seating elements in plan

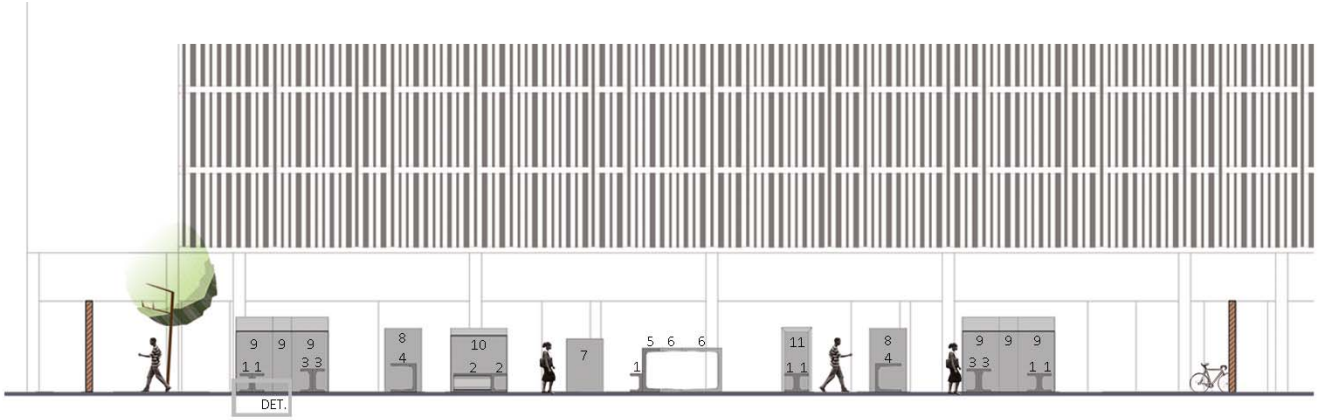
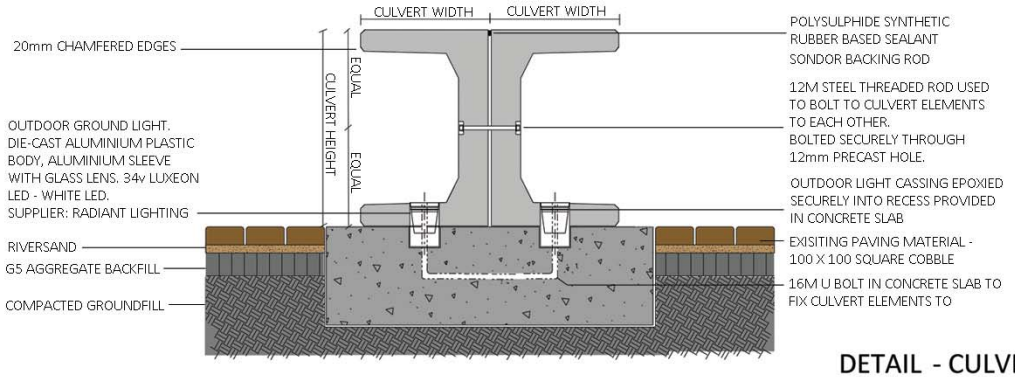


Fig 77.3 Section 03

SECTION 03

0 1m 4m 10m 20m



DETAIL - CULVERT FIXING

0 100 200 500

Fig 77.4 Culvert connection Detail

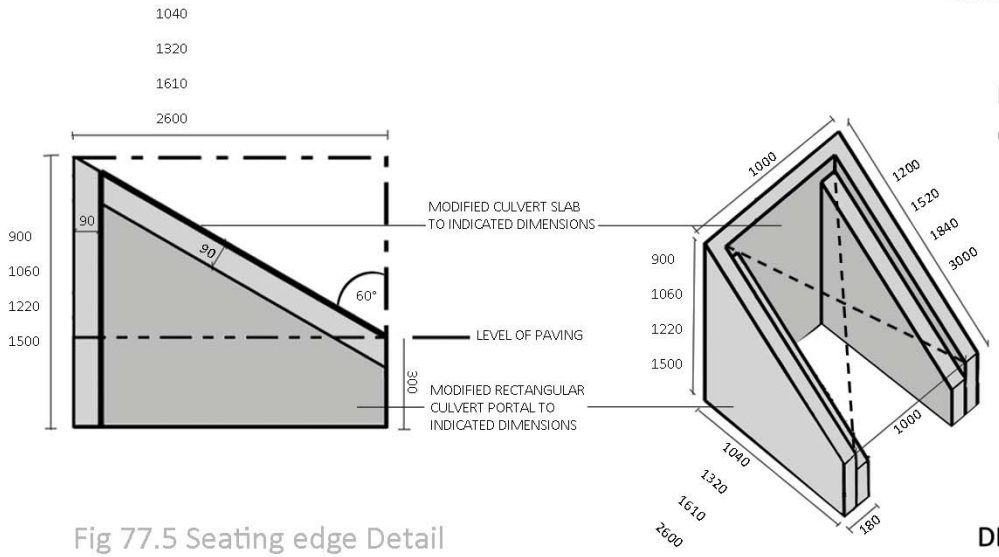


Fig 77.5 Seating edge Detail

DETAIL - EDGE DETAIL
NOT TO SCALE

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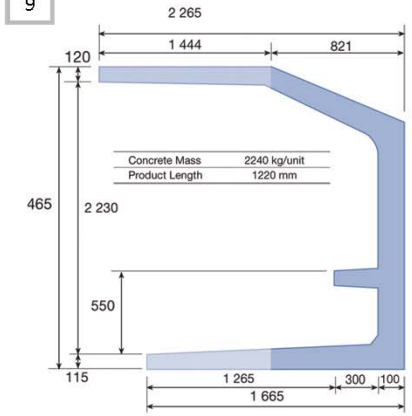
ROCLA BUS SHELTER

9



5. [Three dimensional seating elements - Exterior Exhibition]

The three dimensionalThese elements are positioned in such a way as to ensure optimum, easy circulation through the space.
A three dimensional sequence of seating elements that are introduced into the street was initially investigated as being concrete elements. In the process of refining the design the possibility of *Rocla* pre cast products as material use where established. The products that are supplied by Rocla ranges from concrete culverts, busstops, culvert slabs, signal house units and toilet elements. These elements are implemented into the design of the seating elements, applied in curtain ways to achieve the effect of a three dimensional word – *CAPTURE.*

ROCLA - SECURE SIGNAL HOUSE

10

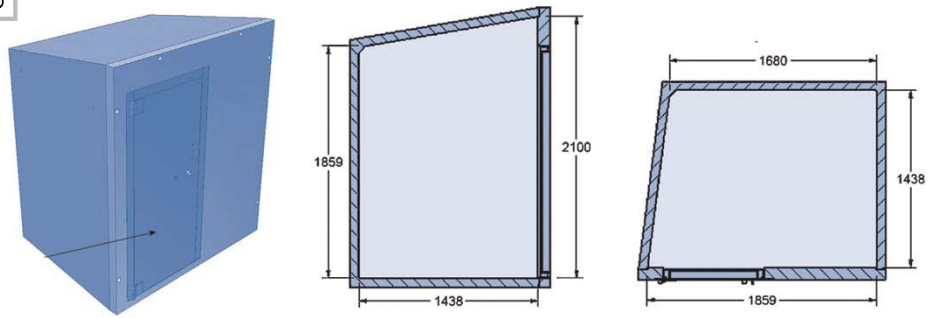
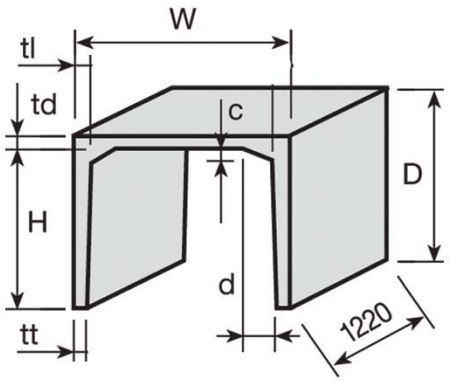


Fig 77.6 ROCLA elemant schedule

ROCLA - RECTANGULAR PORTALS



ROCLA ELEMENT SCHEDULE

	Nominal Size			Dimensions							Approximate Mass	
	S	x	H	W	D	td	tl	tt	c	d	per m	per unit
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/m	kg/unit
1	450	x	300	600	390	90	75	65	37	75	255	311
2			450	600	540	90	75	60	37	75	303	370
3	600	x	300	760	390	90	80	70	50	100	305	373
4	750	x	750	920	840	90	85	60	50	100	507	619
5	1200	x	450	1440	570	120	120	105	50	100	720	878
6			1200	1440	1320	120	120	80	50	100	1078	1315
7	1500	x	900	1750	1025	125	125	95	75	225	1119	1365
8	1800	x				150	150	100	100	300	1858	2266

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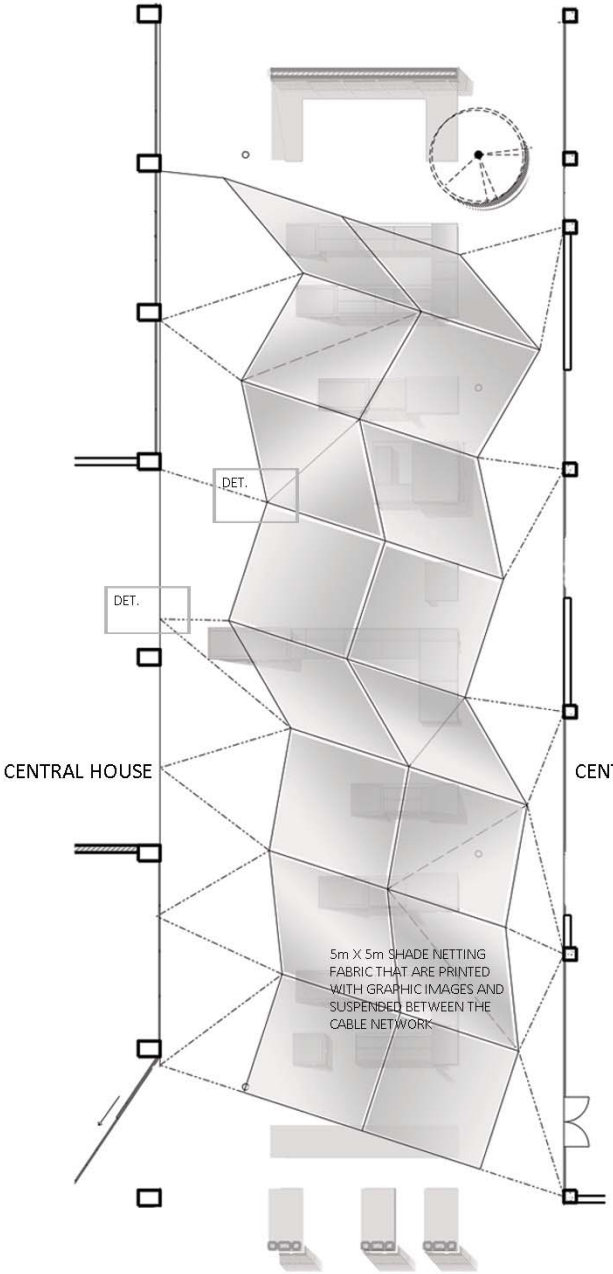
6. [Cable Network - Exterior Exhibition]

The overhead cable network stretches between Central House and Central Towers where they are connected to the building envelope. The cables connect to each other. The cables form rectangular or trapezium shapes which is then filled with printed shade net panels. The panels are provided with seams through which a flexible PVC frame is guided to ensure a smooth stretched surface.



OVERHEAD CABLE AND AND INFILL PLAN
INDICATING POINTS OF CONNECTION TO TWO OPPOSITE BUILDING FACADES AND CABLE IN NETWORK TO EACH OTHER

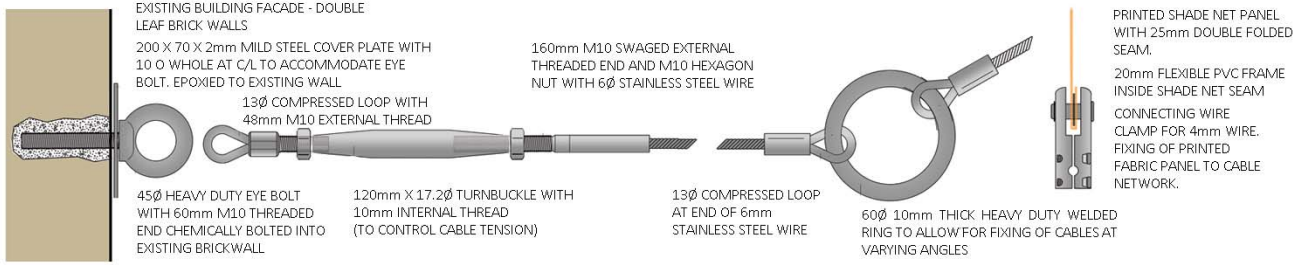
0 1m 5m 10m 20m

Fig 78.1 Cable

CABLE INSTALLATION
- EXTERIOR EXHIBITION
INDICATING COMPONENTS

NOT TO SCALE

Fig 78.2 Cable Connection



DETAIL
FIXING TO EXTERIOR BUILDING FACADE

5 20
0 10 50

DETAIL
CONNECTION BETWEEN CABLE ENDS

5 20
0 10 50

Fig 78.3 Cable Connection Detail

Fig 78.4 Cable Detail

Fig 80 Flooring products from BASF The Chemical Company (BASF Flooring Submittal, 2006).

7. [Flooring Materials]

The flooring material used in the spaces is a Polyurethane based flooring system used for protection of concrete floors. The existing screed floors must be carefully examined and made good where needed before the installation of the flooring system takes place. The different spaces are designated by different colours and products that are determined by the intended use of the spaces.

The majority of the floor surface which include the artists studio the student research space as well as some of the exterior circulation area will be covered with a seamless, self- smoothing heavy duty polyurethane based flooring system. A product from BASF The Chemical Company will be utilized. According to the BASF flooring submittal (2006) the Mastertop 1324 has a matt, durable abrasion resistant, non slip surface finish, designed for use in areas with high levels of traffic such as exhibition halls and service corridors. The colour that will be used is Dusty Grey from the companies colour chart.

The section of floor that is located between the artists studio and the student research space requires flooring material which will resist chemicals. The area will be covered with an epoxy resin coating intended for concrete floors and walls. A product from BASF The Chemical Company will be utilized. According to the BASF flooring submittal (2006) the Mastertop 1120T offers resistance to a wide range of chemicals and aggressive solutions found in general industry and may be applied in Laboratories and engineering workshops. The colour specification is Tomato Red from the companies colour chart.

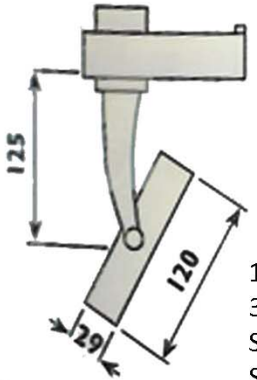
The floor surface in the interior exhibition space will be covered in a seamless, decorative self-smoothing polyurethane floor system intended for commercial application. A product from BASF The Chemical Company will be utilized. According to the BASF flooring submittal (2006) the Mastertop 1326ArtFloor is durable, flexible and acoustically absorbent with uses ranging from galleries, canteens and reception areas. The colour specification is Light Grey from the companies colour chart.

8. [Lighting]

The lighting system implemented in the interior spaces are mounted on track systems to ensure flexibility within the spaces. The lighting used in the artists studio, the student research space and the interior exhibition space are spotlights which house halogen lamps, generating quality lighting and colour rendering.

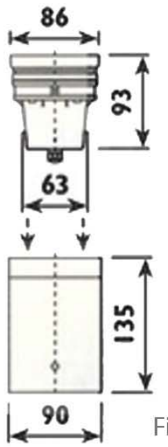
Compact fluorescent lamps will be used in the street lighting .

The concrete elements will house outdoor groundlights witrh LED lights fitted to them.



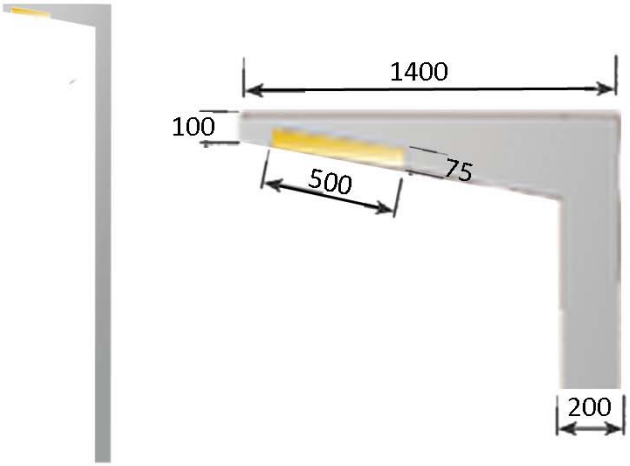
12V Spotlight with Halogen lamp
3 Wire Mounting Track
Satin Chrome Finish
Supplier: Radiant Lighting

Fig 81 Lighting – Spotlight (Radiant Lighting Product catalogue, 2006)



34V Outdoor Ground Light with Luxeon LED source
Frosted Body
Supplier: Radiant Lighting

Fig 82 Lighting – Outdoor downlight (Radiant Lighting Product catalogue, 2006)



240V Compact Fluorescent
Extruded anodised aluminium 6m high mast and polycarbonate cover.
Mast embedded in substrate

Fig 83 Lighting – Street lighting

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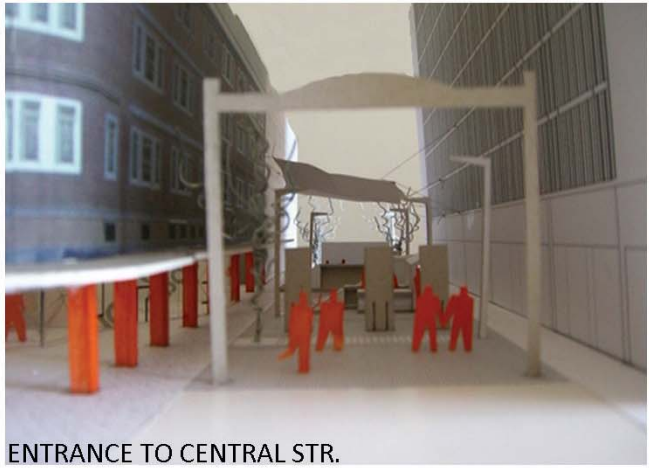
APPROACH FROM PRETORIUS STR.

VIEW INTO ARTIST STUDIO FROM PRETORIUS STR.



ENTRANCE TO CENTRAL STR.

PLAN VIEW OF THE SPACES

ARTIST ACTIVITY IN THE ARTIST STUDIO

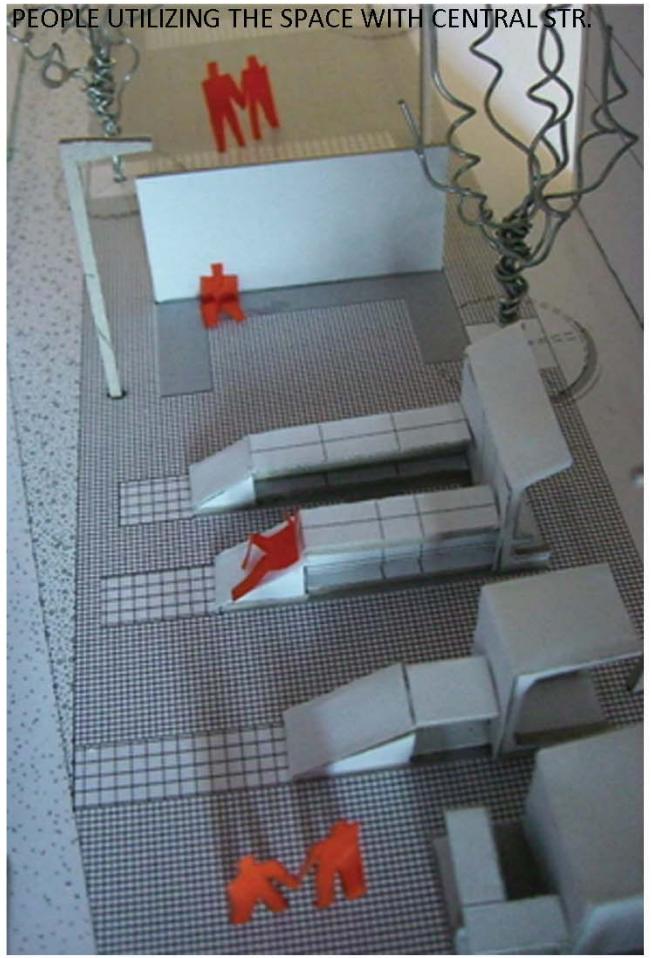
OVERHEAD CABLE AND GRAPHIC PANEL NETWORK

VIEWING OF ARTWORK WITHIN INTERIOR EXHIBITION

APPROACH FROM CHURCH STR.

VIEW OF 3D SEATING ELEMENTS

PEOPLE UTILIZING THE SPACE WITH CENTRAL STR.



Jacques Lauscher - for always persisting, not always agreeing but never giving up.
Barbara Jekot - for the encouragement, support and believe.
My Familie - Dankie dat julle altyd daar was, al was julle ver.
Bells & Elana - for all your help throughout the year - i don't know how i would have made it without you.
Koekie - for crying, laughing and moaning together - for always being there.

[THANK YOU]

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