CHAPTER 6_ Engagement by Architectural design

COMMUNITY FACILITY AND AFRICAN CONTEXT PRECEDE NTS

This section is not intended to promote the highlighted projects or take away any credit from the Architects criticism. It is merely intended to express noticeable commonalities in architecture and context and in doing so is not copying architecture, but learning from successful intervention and tectonic approach aimed at uplifting a society, a community and a people.

Precendent intention:

- Contextual response
- Tectonic response
- Space programming response
- Social intervention
- Client, user approach
- Built form sustainability
- Materiality
- Theoretical approach

Nelson Mandela Interpretation centre.
Alexandra, Gauteng, Peter Rich Architects

Contextual response
High density urban community, spatial and social history township settlement
Scale response: Domestic & civic
Resources in township effectively expressed in building

Tectonic response
Site constraint driven, Alexandra street space
Disabled access
Domestic scale + Civic scale by use of material and space manipulation
“Dialogue” between: rural, handmade, material finishes and urban recycled, manufactured, waste material.
Loose fit, open air building
Cross views

Space programming response
Alexandra street structure, organic yard layout
Lower ground: public plaza, shops, training facilities
Food court, jazz café, internet café, workshops
Night time cinema projection

Social intervention
Bridge serving as structure but also a storyboard of the people, changing exhibitions
Expresses tactile and visually the culture of Alexandra.
Dignified response to people in the architecture.

Client, user approach
Community owned facility.

Built form sustainability
Urban recycled, manufactured, waste material.

Materiality
“Dialogue” between: rural, handmade, material finishes and urban recycled, manufactured, waste material.
Polycarbonate sheeting, handmade battered seating.
Use of rigid tough material

Theoretical approach
Tough, but dignified,
Container of stories
An armature for the stories of the people, a current day museum.
Khayelitsha Service centres and pay points
Cape Town, Western Cape, Piet Louw Architects

6.1.2

Contextual response
Close proximity to other community and public facilities.
Fits to place and time
On edge of city in contaminated landscape of built environment

6.1.2.1

Tectonic response
“Simple elegant and framed external space.
Strong and direct
Minimalist but tough in appearance
Robust, resilient and ambiguous.
Building response to street, adds to street tectonics.
Raised ground floor
Balance between unity, proportion and rhythm.

6.1.2.2

Space programming response
Space designed to reinforce ad integrate places of civic significance
Designed to be reached by foot in close convenience to community.
Pay points for government tax and service.
Built form realises rich possibilities for people engagement

6.1.2.3

Social intervention
Contact centres, for interaction with representatives.
Close to users, the public the community

6.1.2.4

Client, user approach
Used as interface for public, civic and community, it becomes a part of the whole for amenities.

6.1.2.5

Built form sustainability

6.1.2.6

Materiality
Layered facade

6.1.2.7

Theoretical approach
Architecture as public responsibility, and role for architecture in a city/community.
Aim that architecture can create meaningful city spaces.
Buildings are instruments of public place making.
Definition between public and private

“ The buildings are driven by realisation that where there is no significance informing context, it becomes necessary to create one, to plant seeds that can become the beginnings of public place, through the placement of architectural elements.”
Usasazo Secondary school
Cape Town, Western Cape, Noero Wolf Architects

Contextual response
Densely populated informal settlement: favela
Fragmented articulation of street façade mimics scale of informal settlement.
Central circulation space mimics the character of informal spaces.

Tectonic response
L shape protects form strong directional wind
Double use street edge classrooms for business also.
Rooflight used for ventilation, cause heat suction

Space programming response
37 classrooms, library, computer room, hall, administration section.
Entrepreneurial education
Small foot print, difference used for sport field and agriculture use

Social intervention
Education

Client, user approach
Provincial government public works project.
Students, community

Built form sustainability
Passive ventilation and light wells.

Materiality
Concrete Block, tubular steel frame structure, and lightweight steel roof cladded with corrugated sheeting.

Theoretical approach
Architecture as urban acupuncture, to learn form the immediate environment, for educational reasons.

“a critical insertion into an area in need of improvement, healing and the reconciliation of competing demands and traditions”
**Philippi Public Transport Interchange**
Cape Town, Western Cape, Architects: Du Toit and Perrin in Association

**Contextual response**
Developing formal / informal settlement: Philippi outside Cape Town Central
Creation of civic buildings and prominent space in an almost desolate place

**Tectonic response**
Linear shape accommodates busses, taxi and quick passing form commuters
Buildings: "Urban blocks, neutral architecture"
"Celebrate the passing of time and light.

**Space programming response**
Public space with verandah walkways,
Varied scales of trading. FORMAL & INFORMAL
Taxi bays, bus bays & vehicle drop and pick-up bays.

**Social intervention**
A integrated public environment that in future could stimulate further investment.
Supporting existing hawkers and informal economies

**Client, user approach**
City of Cape Town Municipality, public spatial framework.
Urban commuter of Philippi and region +- 30 000 daily
Informal economy

**Built form sustainability**
Low key architecture, recyclable material

**Materiality**
Concrete framed structures with lightweight corrugated sheet roofing,
Use of colour to show proportion and tone.
Panel modules to create human scale.

**Theoretical approach**
A creation of quite architecture, made on human scale with functional intention. A amenity for the user. Creating outdoor living rooms by public furniture and trees.

"The buildings are driven by genuine ‘usefullness’ and yet have sufficient gravitas and delight to make the by default almost civic buildings"
A tertiary African context

I cross a stream
I run the road
I find myself in the center of the bend,
Wrapped up in confusion over me and my ways
In confined thought I can't provoke any source of development.
Engaging does not lighten my load.
The community does not guide my flow.
On this island I find my hollow buried deep in reference and textbook.
Why am I separated if my people share my way
Why am I divided if knowledge guides my way
Is not an education to further my tomorrow day by day?

Please explain this image that killed my African way.

JAKO NICE_2008
A THEORETICAL APPROACH OF BUILT FORM

Identification and orientation are primary aspects of man’s being-in-the-world. Whereas identification is the basis for man’s sense of belonging, orientation is the function which enables him to be that ‘homo viator’ which is part of his nature. It is characteristic for modern man that for long time he gave the role as wanderer pride of place. He wanted to be ‘free’ and conquer the world. Today we start to realize that true freedom presupposes belonging, and that ‘dwelling’ means belonging to a ‘concrete’ place.”

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“The existential purpose of building (architecture) is therefor to make a site become a place that is, to uncover the meanings potentially present in the given environment”. See figure 59: typology of place Mamelodi

The architectural response and outcome thereof are merely products of their Environment. To be responsive to both human and nature one needs to respond to the make-up of place and this relates to the local climate, weather and people doing.

Mamelodi East, University of Pretoria Mamelodi campus. Sited in an arid climate zone, that receives cold winters and warm summers, receives avg to high rain of a +max of 1600mm per year and low 0-10 knot wind, majority of the year is clear skies, allow an average of 7 hours of sunlit daylight hours of clear skies per day, every year. With an 500mm/per 20m site slope or virtually flat. Sited within the foothills of the Magalies-berg Mountains it posses a scenic and natural beauty as seen in Chapter 5 graphs.

A town of mixed development, some rural dwellers, some urban spaces. Tarred roads and part gravel roads. Large potholes and broken sewer lines, poor storm water management and little infrastructure. A well developed and articulated urban housing sector and a rural shack development knitted together with the campus at its centre. Connected by main arterial roads and train tracks, with an exceptional well working taxi system.

But richly layered with people, people from all places across this country and other African countries. Well developed communities of groups of people but no one single community system that connects them all. Exciting and vibrant people space and living places, scattered all round. This is the make-up of space, for future architecture to take place in. As Christian Norberg Shultz explains it: “dwelling means belonging to a concrete place.”

“The basic property of man-made places is therefor concentration and enclosure.”

This dissertation engages with the architecture of new space, derived from existing space. By this it is implied that a current existing structure is revitalized and required to be given a new identity as seen in the introduction chapter of this document. Not only the structure, but the entire University campus.

As Robert Venturi defines architecture with regards to facade and space:

“The wall between the inside and the outside”

So does this “new space become the”wall between the inside of campus and the public outside. The outside architecture defines a new place. The new architecture,
the facility adds to this creation by itself becoming the wall between the public space and the built space, but the tectonic formation of the "wall" intends to blur the new and redefine it as a secondary transition space of built form and private civic function. Presenting a new character to lost architectural space.

The "new space" becomes the zone of transition between the past, the current and the future.

Not only in the sense of site and time, but also in the sense of function and new functional requirement. To be discussed in the typology chapter 7.

It is of most importance that the structure also displays this thought and becomes just as woven as the form. Only then does the theory become material and confirm the space. Hence the space is required, the architecture in context, the existing in time

And the theory becomes the potential space for interaction and experience.

Envisioned as a tiered system, and programmed in the same way.

A set of layers and phases one passes and develop into and finally become a role player and benefactor and not only a beneficiary to your community. Figure 60a&b

Figure 60a & 60b
Layers: tiered levels
Of space and services
Provided_ vertical up and across facility

Figure 61
Layers: typology of place
Mamelodi community

Figure 62
Typology:
Roof and structure morphology.
Layers.

Layer 1:
- Government
- Community meeting
- Tertiary education
- Public services
- Appointments
- NGO appointments
- Research assist
- Community awareness
- Public transport and service
- Public needs
- Government & NGO assist
- Tertiary education
ANALYTICAL PROCESS OF ARCHITECTURAL REASONING

The process of design is not single fold. For any plausible architectural response a series of tests and experiments needs to be taken and critically analysed. Only after this possible solution can be elected. The solution consisting of an amalgamation of various ideas and development, one influencing and developing the other. The ideas and developments are guided by site and contextual restrictions. Program and zoning restrictions, as well as spatial and cost restrictions.

“The relationship between architecture, urban form and social purpose are direct Function and form are one and the same thing in sociological terms.”

This section deals with development of the Community Engagement Facilitator.

- Planning of urban site, planning of building and existing site section and tectonic development of architectural responses and current proposed Architectural solution.
- The following is a series of planning developments.
- This project has developed from loose Hybrid elements of civic and community needs; in the form of loose buildings collectively forming a typology and built form, purpose designed for interactive spaces. As seen in figure 72b. As this dissertation proposes that it is the shared space that allows the architecture to develop.
- The architecture or built form response is merely a functional response and hence a potential environment. It is the space between that sustains the project. It is the spaces that has memory and constant changing life, not only by nature but time. The “shacks” scattered around Mamelodi and South Africa are prime examples hereof. They are shelter, shelter built for function, the form merely a response of need and available material at hand. In the same way this project intents to reflect this concept where the form follow the function. The need is derived and required, the form is an attribute there-of in the words of louis Sullivan: “Form follows function.”
- In the development of this principle for costing and appropriateness to housing multiple functions, a rationalised development was required: The form of singular structure condensed multilayered spaces were chosen, as seen in design development stages 10 - 20.
- The conclusion was made that, in limiting the spacial experience to main corridors of legibility, expressing the built form as part of the spatial experience, the effective experience becomes more memorial. It is this principle of strong lines and set paths leading to zones of change and thought, for decisions of now and future, the spaces in between becomes the potential social interactive spaces, allowing the architecture to become the potential environment.

- While being very functional in requirement, the public space needs to be very social. The pragmatics of joining two such varied concepts becomes problematic. The solution to this predicament was to create inside - outside spaces. This effectively allowed the design to become public and private simultaneously. This was achieved by large public corridors with penetrating slab openings allowing trees and vegetation growing through at upper levels, becoming the zones of transitions between the public space and the private space. This was both a functional decision in separating the space and legibility as well as a spatial decision on making the building a more interactive experience. Seen in development 18.
- Within the layers and thresholds, the users, tenants and visitors are always aware of where they can go and were activity is occurring thus adding to legibility. The large mass of structure required to host all the required functions evolves into a very large building. This has the negative effect of being dehumanising, an attempt was made to resolve this possible tectonic problem.
- The concept of layers - figure 63 - of modules on facade planes breaking the mass into smaller units, not only in articulation but also in material use. The use of brick work for small units, fitted into large concrete and steel frames that collectively create a large module and in finality the composition of the whole in a single morphing typology; binds the units to modules to planes to a tectonic mass. Figure 58, 61, 63 & 65. This resulting in a humanising volume opening up onto a large square with articulated green squares of trees.
- As a civic building with an estimated 500 users per day the requirement for public access and corridor space becomes a necessity. The challenge lies in making the large walkways architectural spaces and not “dead” when not used. By carving up the public square into smaller squares specifically responsive to their immediate amenity allows for a smaller module of experience. Similarly by opening the walkway corridors and varying the experience of inside-and-outside it becomes modules of experiences, spaces of memory and not only volumes of space. Each plane/floor responds to its elevational context. This provides identities to facades, and memory spaces to the potential environment. This has effect not only at a personally level but also at public level.
Each facade responding to its immediate context and spatial experience. For example, public facade: open corridors, university facade: polycarbonate sheeting, Square facade: brick detailing.

It is the parts that complete the whole, that makes the whole work.

An important aspect to consider was that although the external space are used at a human level, they also serve as images to the community, thus the choice of typology and articulations of material becomes incredibly important with regards to scale. Serving both direct contact scale as well as long distance scale. Response was attempted by adding small unit articulation that reads as single mass from afar, but detail from close, simultaneously the larger elements serving as skins from close but being the large tectonic morphology from far. Eg. The roof structure and the polycarbonate sheeting.

Figure 62
EXISTING CONTEXT

Figure 66a
Existing structures
Lecture halls
On site.

Figure 66b
Existing structures
Lecture halls
On site.

Figure 66c
Existing structures
Lecture halls
On site.

Figure 67
a,b,c,d
Existing material type
On site.
Plan and site development. Urban and site scale.
- Creation of courtyards surrounding existing buildings.
- Attempting to change the grid to respond to the street edge.
- Creating access passages to the internal of the campus, thus opening up the two segregated zones.
- The design centralised around new entrance proposal for University of Pretoria Mamelodi Campus.
- Proposing densification of retail at street edge.

However:
- The courtyards enclosed the public space and internalised the design, limiting view legibility to 2 passages. This went against the principle of creating space that allows engagement between people and function.
- The densification of space could lead to crowding and limited access. Hence requiring a design change.
DEVELOPMENT 2 OF 20
- Plan and site development. Urban and site scale.
- Indicating movement across the site, as noted previously: Too restrictive.
- A change in layout for the new proposed University entrance design, proposing an arc of public space and reducing the overall density on the front face of the site.
- Introducing trees and green shrub to define the facility for the passerby.
- Creating mental images and reducing noise disturbance of private squares.
- First indication of varied building mass, intending to collectively create a single complex

However:
- The same restriction still evident, but form and change of grid is kept.
Figure 70
Proposed loose set spatial development of Student information booths.

Figure 71
New University administration design development note urban proposal only.
6.3.3

Figure 65 a - d. CONCEPT DEVELOPMENT MODEL 1.

- Exploration of site and contextual response.

- The initial attempt at contextual forming of site. The built form resulting from the layout of existing buildings. This explains the reason for the multiple bends in structure.

- The site required a formation of form that responds to its layout, as this serves as principle to the design philosophy of engagement; “and space between” tying the past and the future. Making use of existing material and structure, reinventing a new possibility of the same space use in the attempt of revitalization.

- An important principle was to include the existing context and new site, extending the campus to the street and opening up the mental image of the University Site was

- As can be seen in the model, the use of colourfull beads intends to illustrate the people and the functions of their needs, furthering the idea of varied built mass, but sinlge complex.

- The first few design stages hinged on the idea of a main structure as backbone grounding the development -where the work gets done- and a loose set of buildings articulated for movement and ease of access and experience along its edge, acting as the foreground they became the spaces of place making and were intended to be the people interactive civic amenities, ie: Home affairs, legal, aid etc.

- Also seen here is the first development of the taxi drop-off, pick-up area. Being a large civic building, a large influx of people are expected, requiring the facilities to provide and sustain it. This explains the decision for a taxi drop-off only and using the holding bays already existing, 150m down the street.

- This model also indicates the large site urban scheme of the new “face” of the university, its new administration entrance, further north off the taxi drop-off & pick-up. Also seen in figure 71

- The creation of a new service lane was introduced at this stage of the design, which intended to facilitate the service of the new “city-township” block that was created. It also served the precept of taking the people of the main busy street and making a more private safer zone at building edge.

See chapter 3 and urban design document for macro context decision.
6.3.4 DEVELOPMENT 3 OF 20

- Plan and site development.
- Urban and site scale.
- Indicating new structure with reduced entrances to courtyards in an attempt to control security, with the spatial intention of restriction and release into courtyard.
- The Courtyard serving as “the change in form” and “transition space”.
- Development in the entrance admin University building.

However:
- The same restriction still evident, but form and change of grid is kept.
- Better articulation and stronger formation of space and definition.
6.3.5

DEVELOPMENT 5 OF 20

- Plan and site development.
- Indicating new buildings. Public space and scale.
- Opening the courtyard squares to become public realm by wrapping the existing structure, thus engaging with built form.
- This proposal addressed both the concept of public engagement and built form engagement.
- The development of the major and minor scale of architecture, experimenting with the attempt of making large mass human scale.
- Creating public squares and small spaces of experience.
- Linking the parts of site to each other, thus proposing a holistic development, in aim of total engagement of tiers of society. As noted under chapter 4 and the introduction.
- Creating vistas and visual links from key areas of arrival.
- First attempts at integrating the lecture halls in function and visual line.
- The development of the public square at the new University entrance attempts a modernist approach of creating a landscape of arrival signifying identity and presence to the new image of the campus and building.

However:
- In the creation of multiple space, the legibility and orientation of the design becomes blurred and unclear. A ordered articulation is evident, but not legible to the first time user.

![Diagram of site and program development with plan indicating new buildings and public space development.](image)
Creating a chain structure of service feed. By filtering through the buildings from one end and exiting on the other, proposing a continuous movement of public service. This development attempted a rationalised process of service delivery and user experience. With in-house or administrative procedure occurring in the main structure. Creating the image of constant activity and engagement leading onto “rest zones” of green space which separates the two areas.
**DEVELOPMENT 9 OF 20**

- Plan and site development. Indicating new buildings.
- Public space and movement
- Development of taxi drop-off and pick-up with hawkers' vending space.
- Developing service buildings into courtyard squares allowing flow of service and separations of public and private.

- Introducing delivery service area within facility as part of site access and cross movement.
- In principle attempting the creation of individual space of experience and image.
- 1st development in the transition space concept, as a translucent box between the lecture halls and the new structure, serving the public and student.
- Developing the visual and virtual zone of engagement by extending the walkways between the renovated lecture halls to the public area of the new developed facility.
- Opening up the ground floor for access and legibility.
6.3.7.1

Figure 80
Section of development 9 & 10

MAIN STRUCTURE 4 OF 6

RESEARCH MEETING ROOM
NGO OFFICE - CIVIC
LEGAL & AID SPACE - COMMUNITY
MAIN STRUCTURE 2 OF 6

GREEN SPACE
PUBLIC COURTYARD
TERTIARY FACILITY
CIVIC FACILITY
COMMUNITY FACILITY

CORRIDOR
ACCESS WAY
WALK WAY
COMMUNITY FACILITY
DEVELOPMENT 10 OF 20

- Plan and site development.
- Development of taxi drop-off and pick-up with hawker vending space. Note: separated for increased usage.
- Development of public ablutions and service.
- The development of student bus drop-off at main entrance.
- Inclusion of service cores and connections to existing services.
- Creation of a series of connected corridors and passages, aimed at creating a connected environment from University to public user.
- Inclusion of service road for maximum access to buildings.

However:
- The multiple structures raises question to cost and functionality effectiveness.
- One finds a blurred sense of being as a result of legibility.
- The spaces do work autonomously by intent, but this ideas was in fact found to negate the principle of unity and complexity.
- The separation and layout of taxi area is questionable and needed reconsideration and precedent.
- The image of multiple nucleuses created a sense of confusion and thus a critical decision on purpose and rationality was required with regards to arrival and orientation.
- Integration with Lecture halls and campus needed to be more apparent and legible.
- In conclusion, complexity confused project intent and realisation. Simplicity and reduction was the principle requirement at this stage.
6.3.7.5

Figure 83
Elevation of development
9 & 10

Existing
SCEKE CIRE LPS&
MAIN STRUCTURE BLVs

CIVIC FACILITY - 12 L100
ACCESS WAY
WALK WAY
COMMUNITY 1.1.M
GREEN SPACE
COURT YARD
COMMUNITY 1.2.L1
Initial development of a typology of form aimed at a morphology of shape and unity of structure. In principle, differing scales of building receiving a set roof typology, concluding into the roof developing into a skin. As seen later, this concept evolved into the final typology and morphology of the proposed architectural solution.

1-2 lvl structure

2-3 lvl structure

3-4 lvl structure
DEVELOPMENT 13 OF 20
A new concept experiment of space and relation to site.

- Proposed pragmatic response, with less theoretical intent with regards to engagement.
- In an attempt to resolve development 10 problems a proposal was derived that could be noted as idealist design, if existing lecture hall context was not in place. Thus being a test of spatial organisation and rational, cost and legible design intent.

- The first proposal of single large civic square, leading into a single large structure connected with smaller units. Aimed at developing an uncomplicated complex of services.
- Attempt to engage in a more effective taxi drop-off and pick-up. Aimed at visual and maximum hawker exposure.

However:
- In short, the principle of engagement with University was completely negated and a separation of space was created, that in fact re-affirms the current situation and site condition, and not improving it.

- Internalising service experiences lead to the conclusion of illegibility, but in contrast, the bridge cross over serving as community flank with ramped system running along the front edge connecting each level was an attempt at legible and integration of space. But the relation of wasted space to used space was concerning.
6.3.8.1

Figure 85a,b,c
Sub development
Of concept 13

Figure 85d,e,f
Sub development
Of concept 13
DEVELOPMENT 14 OF 20
A design development formulated in response to
design phase 10 -13

At outset with intent a more simplistic design, the first
signs of tectonic form in development.
Formulation of core structure, internalising the smaller
collection of service structure, making the ground floor
an interactive space, in doing so creating a functional
public square for meeting, resting and hawking.
Allowing vegetation growth to define areas.
Creating visual connection and points of orientation.
Intending to produce legible space-making that allows
for easy and clear orienteering by a user.

First attempt at experimenting with the concept of
ramping edges and defining spaces by passage
tectonic.
The decision to attempt bridging the space between
the campus buildings and the new structure by
cantilever structure, creating a walkway.
Simultaneously proposing a design intervention with
the existing lecture halls creating a new facade to the
structure and responding at a planning level to
incorporating it in the program.
Delving into a process of developing the transport taxi
drop and go. Creating a two lane taxi stop, allowing
two directional entrance.
Starting the process of environmental response at a
tectonic level with a series of experiments, opening up
the roofs, allowing light and air into the buildings.

However:
Lack of consistency in tectonic form,
Ratio of walkway space to usable space was
uneconomical, thus questioning the use of ramps.
Resolution of space between lecture halls and new
structure not resolved but in the process.
Taxi stop, not efficient and to complex, a new
resolution is required.
Effective connection of public space is required,
creating points of arrival and visual links
"Urban rooms"
Level of engagement and visual connection not
Effective and evident enough.
A design development formulated in response to design phase 10 -13 of 20 spatial orientation.

- This diagrammatic response of design phase 14 explains the attempted resolution with regards to public space and legibility.
- Outlining the center point of the public square with its visual and programmatic connections. Its outlines points of travel and possible spaces of engagement and potential gathering spaces.
- The development of tectonic resolution in service cores and creation of square inside squares, by using architecture, a step back from the previous development by not using nature as the carving knife, for space making.
- The internal courtyard leading from the new lecture hall foyer as noted in image below, intends to redefine a new private public square as a center of importance.
- Developing the concept of walkways and passages, defining spaces and functions within the building, reducing mass into modules for tectonic and scale purposes but also for legibility and efficient user travel.
- Introducing service cores on edge of central square and main entrance flanks, serving functional reasons but also architectural definition to the space it frames, viewed from both the university and the public edge, creating a portal of frame.
6.3.10.1

Design development section for phase 14-15

Figure 88

EXISTING

INTERVENTION
6.3.11

DEVELOPMENT 16 OF 20
Plan and site development,

- Development of the taxi drop-pick & go, realising that the site in fact requires to be extended to the other side of the carriageway, allowing maximum exposure and engagement.
- Introduction of public service and ablutions.
- Attempting to define the public square into smaller squares relating to the immediate function of the building.
- A change to service core, by adding a central core structure linked by skywalks, aiming to reduce service cores and linking the two buildings in a physical way.
- Layout of program, and first approach at creating shared internal communal service rooms. Defining public and private access.
- Attempting organising the spill-out space from the new created lecture hall foyer.

However:
- Taxi stop and public walk space requires detail design.
- Public service areas requires better planning and placement for visual link and legibility.
- New central service with skywalks, needs to be carefully considered as it does divide the new created engagement space and visual link to the campus buildings.
- Public square layout, does require more substantial formation responds more to function and pathways.
- Thought to be given to removing and replacing the existing service yards and lecture halls, as they limit the space and create boundaries and aesthetic unpleasantness.
DEVELOPMENT 17 OF 20

Plan and site development,

- Detail development of public walkways and taxi drop-pick and go area.
- Design intent at revitalising the storm water channel attempting to create a green belt at site edge, for resting and shade.
- Creating minor squares at public service areas for waiting zones and definition of taxi holding area.
- Attempting to formalise the large civic-public square with sight lines and passage lines, first development from a movement diagram study. Figure 91.
- The introduction of a ramp at flank C intended for lvl 1 access only.

However:

- Position and placement of ablutions to be carefully designed, intend to be given to definition of space.
- Sight lines and walkways need to terminate or culminate into a space and not open land.
- Central service core still problematic, as well as service yards.
- Public square definition improved but still to be resolved.
- Attention to be given to planning of floors, specifically toilet facilities in flank A and B.
- Efficient and simple system of access needs to be introduced.
DEVELOPMENT 18 OF 20
Plan and site development,
- Development of public square design.
- Defining amenities and planning thereof with square layout: Queuing for services extending into lanes of trees.
- Introducing walkways
- Creating definition to space.
- Planning development with more resolved ablution facilities and access through building.
- Introduction of "memory wall" along site edge with photos, images and notices of role players in Mamelodi society; past and present.

However:
- Central service core between flank A & B still problematic, in dividing space and hierarchy order of development.
- External ramp system flank C is questionable with regards to dividing space and obstructing views and legibility.
- Layout of program in planning much more rationalized and functionable.
- The air shafts in flank A & B raises major concern to economic use of space, as two passages, and air shaft reduce functional space to a minimum.
- Serious attention was required in resolution of a passive ventilated naturally lit building.

- Memory wall creating a permeable edge for extension of green space onto the square but also defining edges with the centre of nucleuses. The wall acts as cultural emblem to the people and a peri rural / urban township.
- Introduction of additional programs and dedicated hawking area under ramp.
- The development of light and air shafts in flank A and B. Creating central void space allow air and light to travel.
Design section:
Exploration of tectonic context, structure, passive ventilation and corridor legibility.
6.3.14

Figure 94
Plan: site and program
Development 19 of 20

DEVELOPMENT 19 OF 20
Plan and site development,

- Removing the central service core, opening up the square, thus adding and giving definition to each flank.
- Programming flank A for community function only, hence creating hierarchy of space and program, and creating set urban rooms within the square.
- Removing the service road. It was serving as a separator of the space as opposed to linking areas, but allowing the delivery area to spill onto the square making it a more functional square space.
- Opening up vistas across the site thus creating destination on pathways with visual links through buildings and public spaces.
- Removing the service yards and creating a large single serving yard.
- By opening the "transitions space and creating a dedicated public space, for all user. In doing this it created an area for interaction between students, public and service providers.
- Apply the principle intention of being a engagement facility, not only in service and function but in space and people. Bringing people together.
- Extending the passage out into square and creating an inside-outside space. Intentionally blurring the built form space and the public walk space, but clearly defined by slab openings the private zone space.
- On the urban proposal a parking garage was proposed, but not designed, it was felt that the garage needs to be integrated with the design, as it host various users from within this building.
- New design of the three level parking garage serving University, public and students, linked by walkways into the facility and elevator down to new University entrance.

However:
- Public square still to be completed
- Proposed link to new University Administration entrance indicated and resolved.
Design section: Exploration of tectonic context, structure, passive ventilation and light wells specifically for flank C.

Design section: Exploration of tectonic morphing in context, across site.

Design site elevation: Exploration of tectonic morphing, material, roofing and scale.
6.4 SOCIAL DERIVATIVE SPACE PROGRAMMING

Planning and the programming there-off was derived from the user point of view. The lowest level being the most access and used, and the more developed services can be found on higher levels. See figure 99.

The focal zone of the program will be the civic functions during the day, while at night it will be the community functions. The space around the buildings are programmed to allow public to meander through the site and create its own community of user. The presence of hawkers from the taxi drop and pick-up, to the university entrances was taken in account and is required, as they sustain the people: selling for income, and allow cheap food to the users queuing or meeting.

No restaurant are proposed, as across the Hans Strydom roadway existing food stalls are currently serving people see chapter 5 social space analysis. Figure 43a, the principle methodology is to add to the community and not take away. Allowing the users to make use of the food stalls and hawkers has a communal benefit.

The programming methodology is intended for an open free access building with constant visual connections to other areas of site, facility and context.

Building zones: The building security access works on the basis of a 2 key system. As there is shared amenities for the people working in the facility, they share a key to their office and to the communal area.

The stairs and lifts are free access to all, excluding the stairs in the HP-i centre and the service lift.

There has been allowance made for in-house/back-of house activities with own delivery yard, service lift, ablution facilities, offices and storage compartment for deliveries.

It is proposed that maintenance, managing company will run the facility, both maintaining it as well as facilitating all organisation.

User arrival points have been carefully looked at, as there are multiple points of arrival to site, with even more possible venues to visit. Primary source of arrival: Taxi, walking and bicycle, with the employees commuting by vehicle. A parking garage has been proposed for the University and the employees of the facility, leading out from each floor of the building excluding the 2nd floor.

Basic layout: Figure 98

Public square
Flank A: Community facilities
Flank B: University of Pretoria, Government and public
Flank C: Public, community and Facility.

Taxi drop-pick & go
Public service and ablution

Parking garage

Urban proposal of new University of Pretoria administration building

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<th>SCHEDULE OF AREAS:</th>
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<td>TOTAL HABITABLE FLOOR AREA 4th fl</td>
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| TOTAL FLOOR AREA | 8171.00 msq |
| TOTAL FLOOR AREA garage | 7837.00 msq |

| UNIVERSITY SITE AREA | 2051960.00 msq |
| PROJECT SITE AREA | 154896.00 msq |
| PROJECT urban SITE AREA | 201277.00 msq |
| ALLOWED FLOOR AREA RATIO | NA |
| PROPOSED FLOOR AREA RATIO | NA |
| ALLOWED COVERAGE | 70 % |
| PROPOSED COVERAGE | 10 % |
Figure 98: Site roof plan, indicating layout and principle function.
<table>
<thead>
<tr>
<th>Community Type</th>
<th>Ground</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
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<tbody>
<tr>
<td><strong>Community</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>info&amp; tourism office</td>
<td>Community meeting rooms</td>
<td>EBIT class rooms</td>
<td>Community business facilities, hot desking venture</td>
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<tr>
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<td>Exhibition gallery</td>
<td>Community Sector 1, 2, 3 &amp; 4 offices</td>
<td>Teachers office</td>
<td>Break-out roof space</td>
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<tr>
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<td>Legal aid office</td>
<td>Community ward counselor office</td>
<td>Access card kitchenette and ablutions</td>
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</tr>
<tr>
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<td>Community administration office</td>
<td>HP computer i-centre</td>
<td>Access card kitchenette and ablutions</td>
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<td>HP ablutions</td>
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<td>HPI-centre foyer</td>
<td>Access card kitchenette and ablutions</td>
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<tr>
<td></td>
<td>Postnet retail outlet</td>
<td></td>
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<tr>
<td><strong>Military</strong></td>
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<td></td>
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<td>UP e-library</td>
<td>Access card kitchenette and ablutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tertiary</strong></td>
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<td></td>
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<td>Municipal pay points</td>
<td>Mamelodi East Municipal offices</td>
<td>NGO offices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home affairs booths</td>
<td>Home affairs satellite offices</td>
<td>Government department, Social development satellite office</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access card kitchenette and ablutions</td>
<td>Access card kitchenette and ablutions</td>
<td>Government department, Public service and administrations</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access card kitchenette and ablutions</td>
<td>In-house reception</td>
<td>Public stairs</td>
<td>4th floor_roof space</td>
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<td>Delivery yard and temporary storage</td>
<td>In-house managerial offices</td>
<td>Service lift, public lift and stairs</td>
<td>Conference venue</td>
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<tr>
<td></td>
<td>Delivery offices</td>
<td>In-house printing facility</td>
<td>Ablutions_mens, ladies &amp; disable</td>
<td>Break-out terrace small roof space</td>
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<td></td>
<td>Public stairs</td>
<td>In-house storage facilities</td>
<td></td>
<td>Break-out terrace large roof functions space</td>
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<td>Service lift, public lift and stairs</td>
<td>In-house ablutions &amp; common room</td>
<td>Public stairs</td>
<td>Public stairs</td>
</tr>
<tr>
<td></td>
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<td>Public stairs</td>
<td>Service lift, public lift and stairs</td>
<td>Service lift, public lift and stairs</td>
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<td><strong>CVI</strong></td>
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<td>Public stairs</td>
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<td>In-house managerial offices</td>
<td>Service lift, public lift and stairs</td>
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<td>In-house printing facility</td>
<td>Ablutions_mens, ladies &amp; disable</td>
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<td><strong>Government</strong></td>
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<td>Home affairs booths</td>
<td>Home affairs satellite offices</td>
<td>Government department, Social development satellite office</td>
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<td>Access card kitchenette and ablutions</td>
<td>Access card kitchenette and ablutions</td>
<td>Government department, Public service and administrations</td>
<td></td>
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<td></td>
<td>Access card kitchenette and ablutions</td>
<td>In-house reception</td>
<td>Public stairs</td>
<td></td>
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<td><strong>University of Pretoria</strong></td>
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<td>Public stairs</td>
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<td>Access card kitchenette and ablutions</td>
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<td>Public stairs</td>
<td></td>
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<tr>
<td><strong>Government</strong></td>
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<tr>
<td></td>
<td>In-house managerial offices</td>
<td>In-house printing facility</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>In-house storage facilities</td>
<td>In-house ablutions &amp; common room</td>
<td>Public stairs</td>
<td></td>
</tr>
<tr>
<td><strong>University of Pretoria</strong></td>
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<td></td>
<td>In-house ablutions &amp; common room</td>
<td>Public stairs</td>
<td>Service lift, public lift and stairs</td>
<td></td>
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<tr>
<td><strong>University of Pretoria</strong></td>
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<td></td>
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<tr>
<td></td>
<td>Public stairs</td>
<td>Service lift, public lift and stairs</td>
<td>Ablutions_mens, ladies &amp; disable</td>
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<td><strong>University of Pretoria</strong></td>
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<td>Service lift, public lift and stairs</td>
<td>Ablutions_mens, ladies &amp; disable</td>
<td></td>
</tr>
</tbody>
</table>
Figure: 100 a,b,c
Site, people context sketches

FLANK C  FLANK B  FLANK A

COMMUNITY ENGAGEMENT FACILITY ROOF PLAN_ (C.E.F.)
### Ground Floor

- **Exhibition gallery**
- **Gallery store room**
- **Information & tourism office**
- **Legal aid reception**
- **Legal aid waiting lounge**
- **2x Legal aid offices**
- **2x Legal aid enquiry booths**
- **File room**
- **Meeting room**
- **Ablution:**
  - 3x male toilets
  - 1x male urinal trough
  - 1x 3 faucet basin trough
  - 3x female toilets
  - 1x 3 faucet basin trough
  - 1x dressing and baby counter
  - 1x disable toilet
  - 1x disable basin
  - 1x store room
- **Community room:**
  - 1x kitchenette
- **Community facilities administration office, Adult education enrolment**
- **X2 booths**
- **Store room**
- **New entrance to existing Lecture hall**
  - X4, re-use fire door entrance / exit
  - **Public stairs**

### First Floor

- **X2 Community meeting rooms:**
  - Room 1 _ 148 seats
  - Room 2 _ 145 seats
- **Ward counselor office:**
  - 2x offices
- **Community sector 1,2,3 & 4 shared office:**
  - 4x office
  - **Public stairs**

### Second Floor

- **5x Adult education classrooms:**
  - Room 1 _ 23 seats
  - Room 2 _ 23 seats
  - Room 3 _ 30 seats
  - Room 4 _ 12 seats
  - Room 5 _ 16 seats
- **Teaching staff communal office:**
  - 2x offices
- **Ablution:**
  - 3x male toilets
  - 1x male urinal trough
  - 1x 3 faucet basin trough
  - 3x female toilets
  - 1x 3 faucet basin trough
  - 1x dressing and baby counter
  - 1x disable toilet
  - 1x disable basin
  - 1x store room
  - **1x kitchenette**
  - **Public stairs**

### Third Floor

- **Hot desk business facilities:**
  - Reception
  - Store room
  - Printer room
  - 6x single offices
  - 4x double offices
  - 2x triple offices
  - **Conference room:**
    - Foyer
    - Bar area
    - Lounge area
    - Multifunction room
    - Sound room
  - **Roof space break-out social area**
  - **Public stairs**

### Fourth Floor Roof

- **FLANK A**
- **ROOM TYP**
- **2008**
### FLANK B

#### ROOM TYPE

<table>
<thead>
<tr>
<th>GROUND FLOOR</th>
<th>FIRST FLOOR</th>
<th>SECOND FLOOR</th>
<th>THIRD FLOOR</th>
<th>FOURTH FLOOR_ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal pay point: 1x Safe room 1x Store room Work counters _ 5 seats Manager office Security access foyer 6x paypoint booths 1x Applications booth 1x Enquiry booth</td>
<td>Municipal offices: Reception Printing room 1x digital and plan file store 1x public counselor booth 2x service enquiries booths 4x building plan submission booths Building plan scrutiny officer office _ 3 x booths Public development officer office _ 2 x booths Traffic and road works officer office _ 2 x booths Public water officer office _ 2 x booths Ablution: Share flank B &amp; C 2x male toilets 1x male urinal trough 1x 2 faucet basin trough 2x female toilets 1x 2 faucet basin trough 1x dressing and baby counter 1x disable toilet 1x disable basin 1x store room Common room: Share flank B &amp; C 1x kitchenette Seated space</td>
<td>NGO. Offices: Reception General store room 6x NGO offices: Office 1: Project literacy Office 2: Community development resource association Office 3: The Mvula trust Office 4: POWA Office 5: Urban service group Office B: Ditsela</td>
<td>Community engagement faculty offices Faculty reception 1x Store room 1x Head of faculty office 3x shared faculty offices: Office 1: x2 booths Office 2: x2 booths Office 3: x 3 booths Faculty &amp; SRC school outreach support centre: X3 booths UP. CE. faculty research department X4 stations/booths</td>
<td>Conference room: Foyer Bar area Lounge area Multifunction room Sound room Public stairs</td>
</tr>
</tbody>
</table>

**Figure 101b**

**Detail Program sheet per floor Flank B**

**FLANK B**

**GROUND FLOOR**
- Municipal pay point:
  - 1x Safe room
  - 1x Store room
  - Work counters _ 5 seats
  - Manager office
  - Security access foyer
  - 6x paypoint booths
  - 1x Applications booth
  - 1x Enquiry booth

**FIRST FLOOR**
- Municipal offices:
  - Reception
  - Printing room
  - 1x digital and plan file store
  - 1x public counselor booth
  - 2x service enquiries booths
  - 4x building plan submission booths
  - Building plan scrutiny officer office _ 3 x booths
  - Public development officer office _ 2 x booths
  - Traffic and road works officer office _ 2 x booths
  - Public water officer office _ 2 x booths
  - Ablution: Share flank B & C
    - 2x male toilets
    - 1x male urinal trough
    - 1x 2 faucet basin trough
    - 2x female toilets
    - 1x 2 faucet basin trough
    - 1x dressing and baby counter
    - 1x disable toilet
    - 1x disable basin
    - 1x store room
  - Common room: Share flank B & C
    - 1x kitchenette
    - Seated space

**SECOND FLOOR**
- NGO. Offices:
  - Reception
  - General store room
  - 6x NGO offices:
    - Office 1: Project literacy
    - Office 2: Community development resource association
    - Office 3: The Mvula trust
    - Office 4: POWA
    - Office 5: Urban service group
    - Office B: Ditsela

**THIRD FLOOR**
- Community engagement faculty offices
  - Faculty reception
  - 1x Store room
  - 1x Head of faculty office
  - 3x shared faculty offices:
    - Office 1: x2 booths
    - Office 2: x2 booths
    - Office 3: x 3 booths
  - Faculty & SRC school outreach support centre:
    - X3 booths
  - UP. CE. faculty research department
    - X4 stations/booths

**FOURTH FLOOR_ROOM**
- Conference room:
  - Foyer
  - Bar area
  - Lounge area
  - Multifunction room
  - Sound room

**Public stairs**
### GROUND FLOOR

- **Home affairs public service counters**
  - Safe room
  - 1x Cashier booth
  - 1x finger print booth
  - 1x enquiries booth
  - 2x ID application booths
  - 3x PP/RC/Img Application booths
  - 3x DC/BC/MC/MA Application booths
  - 2x Collection booths

- **Flank C**

- **Figure 94.**

- **Public stairs, lift & service lift**

- **University Pretoria E-Library:**
  - 1x Collection and return counter
  - 13x computer stations
  - Digital cd racks archive
  - 1x store room
  - 1x multiple printing counter

- **Common room: Share flank B & C**
  - 1x kitchenette
  - Seated space

- **Private Ablutions: Share E-library, Hp i-centre & Postnet**
  - 2x male toilets
  - 1x male urinal trough
  - 1x 2 faucet basin trough
  - 2x female toilets
  - 1x 2 faucet basin trough
  - 2x dressing and baby counter
  - 1x disable toilet
  - 1x disable basin
  - 1x store room

- **Postnet retail outlet:**
  - 1x reception counter
  - 3x computer stations
  - 1x printing counter
  - 1x photocopy centre
  - 1x store room

### FIRST FLOOR

- **Home affairs Government offices**
  - Satellite Mamelodi East
  - Reception
  - 2x Senior Manager offices
  - 2x Manager offices
  - 12x Administration booths
  - 1x File store
  - 1x Digital file store
  - 1x Board room

- **Private Ablutions: Share flank B & C**
  - 2x male toilets
  - 1x male urinal trough
  - 1x 2 faucet basin trough
  - 2x female toilets
  - 1x 2 faucet basin trough
  - 2x dressing and baby counter
  - 1x disable toilet
  - 1x disable basin

- **HP-I centre reception**

- **In-house facility administration centre:**
  - Reception
  - 1x Printing centre
  - 1x Store room
  - 1X Communication room
  - 1x Manager office
  - 1x Assistant office
  - 6x General goods stores
  - 2x Washrooms:

- **HP-I centre:**
  - Foyer
  - Information desk & help desk
  - X4 seats
  - 7x Research computer terminals
  - 1x Printing counter
  - 1x Lounge
  - 1x Computer Lan
  - X22 seats

- **Private Ablutions: Share E-library, Hp i-centre & Postnet**
  - 2x male toilets
  - 1x male urinal
  - 1x 2 faucet basin trough
  - 2x female toilets
  - 1x 2 faucet basin trough
  - 2x dressing and baby counter
  - 1x disable toilet
  - 1x disable basin

- **Common room: Share flank B & C**
  - 1x kitchenette
  - Seated space

- **In-house facility delivery centre:**
  - Reception
  - 1x Wash-up counter
  - 1x Delivery office
  - 1x Municipal deliveries store
  - 1x Government deliveries store

- **Public stairs, lift & service lift**

- **Common room: Share flank B & C**
  - 1x kitchenette
  - Seated space

- **Private Ablutions: Share E-library, Hp i-centre & Postnet**
  - 2x male toilets
  - 1x male urinal
  - 1x 2 faucet basin trough
  - 2x female toilets
  - 1x 2 faucet basin trough
  - 2x dressing and baby counter
  - 1x disable toilet
  - 1x disable basin

- **Common room: Share flank B & C**
  - 1x kitchenette
  - Seated space

- **Public stairs, lift & service lift**

- **In-house facility administration centre:**
  - Reception
  - 1x Printing centre
  - 1x Store room
  - 1X Communication room
  - 1x Manager office
  - 1x Assistant office
  - 6x General goods stores
  - 2x Washrooms:
### SECOND FLOOR

<table>
<thead>
<tr>
<th>Government satellite office</th>
<th>Social development department:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>2x Senior manager offices</td>
</tr>
<tr>
<td>2x Manager offices</td>
<td>2x Manager offices</td>
</tr>
<tr>
<td>1x Digital store</td>
<td>1x File store</td>
</tr>
<tr>
<td>12x Administration booths</td>
<td>2x Junior manager / enquiries offices</td>
</tr>
</tbody>
</table>

**Ablution:** Share flank B & C  
2x male toilets  
1x male urinal trough  
1x 2 faucet basin trough  
2x female toilets  
1x 2 faucet basin trough  
1x dressing and baby counter  
1x disabled toilet  
1x disabled basin  
1x store room

**Common room:** Share flank B & C  
1x kitchenette  
Seated space

**Government satellite office**  
**Social development department:**  
Reception
2x Senior manager offices  
2x Manager offices  
1x Digital store  
1x File store  
12x Administration booths  
2x Junior manager / enquiries offices

**Public stairs, lift & service lift**

### THIRD FLOOR

University of Pretoria social research centre; Various faculties.

Department of social work and criminology research lab1.
Department of sociology: Community service and social transformation research lab2.

Research Reception  
2x Senior lecturer offices  
2x Research offices  
2x Research laboratories  
6x stations,  
2x meeting spaces  
1x Shared digital and file store

**Ablution:** Share flank B & C  
2x male toilets  
1x male urinal trough  
1x 2 faucet basin trough  
2x female toilets  
1x 2 faucet basin trough  
1x dressing and baby counter  
1x disabled toilet  
1x disabled basin  
1x store room

**Common room:** Share flank B & C  
1x kitchenette  
Seated space

Public stairs, lift & service lift

Outdoor rooftop function venue
6.4.3.3
Figure 101d
Detail Program sheet per facility. Miscellaneous facilities.

<table>
<thead>
<tr>
<th>PARKING GARAGE</th>
<th>UNIVERSITY GATES</th>
<th>PUBLIC TOILETS</th>
<th>SERVICE YARD</th>
<th>LECTURE HALLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUND FLOOR</td>
<td>1X New university entrance gate</td>
<td>Public ablutions x2:</td>
<td>1x New service yard</td>
<td>Lecture Hall 1:</td>
</tr>
<tr>
<td>1X Guard and communication room</td>
<td>2x male toilets</td>
<td>Hosting lecture hall 1, 2 &amp; 3 as per existing, also hosting New Urban University entrance proposal as well as require electrical generators and transformers for new facility.</td>
<td>1x Sound and electronic room</td>
<td>-</td>
</tr>
<tr>
<td>81 Bays</td>
<td>3x male urinal trough</td>
<td>4x Reuse fire doors for new entrance doors</td>
<td>4x Reuse fire doors for new entrance doors</td>
<td>Lecture Hall 2:</td>
</tr>
<tr>
<td>Public stairs and service lift</td>
<td>1x 4 faucet basin trough</td>
<td>New Seating: 164 new seats</td>
<td>New Seating: 164 new seats</td>
<td>Lecture Hall 3:</td>
</tr>
<tr>
<td>FIRST FLOOR</td>
<td>2x female toilets</td>
<td>-</td>
<td>-</td>
<td>1x Sound and electronic room</td>
</tr>
<tr>
<td>72 Bays</td>
<td>1x 4 faucet basin trough</td>
<td>-</td>
<td>-</td>
<td>4x Reuse fire doors for new entrance doors</td>
</tr>
<tr>
<td>Public stairs and service lift</td>
<td>1x dressing and baby counter</td>
<td>-</td>
<td>-</td>
<td>New Seating: 164 new seats</td>
</tr>
<tr>
<td>SECOND FLOOR</td>
<td>1x disable toilet</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>72 Bays</td>
<td>1x disable basin</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public stairs and service lift</td>
<td>1x store room</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1x shower</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1x caretaker office and store room</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Hosting lecture hall 1, 2 & 3 as per existing, also hosting New Urban University entrance proposal as well as require electrical generators and transformers for new facility.
Figure 102
Busines, taxis, Mamelodi

Figure 103
Early sketch design
Public walkways
Explaining the program by user experience diagrams and scenarios.
See figures 105a - c for reference.

The following is a dialogue of possible experiences and engagements as a user visiting with purpose, working or merely passing by on the way to somewhere else other than the Community engagement facility.

Defining the users:
- The civic service user
- The community user
- The student
- The adult student
- The lecturer
- The Government official
- The hawker
- The tourist
- Service and delivery user.

Defining the arrival:
- By car
- By taxi
- By bus
- By tour bus
- By walking
- By cycling

Ground floor being the floor of interaction and experience, queuing for ID, passports Death certificates and paying your electrical bills etc. Booking a class at the adult education centre and receiving information on legal aid. Learning from the E-library and watching an exhibition by a local artist.

First floor, meeting for community meetings. and making an appointment to submit your building plans or complain about your leaking sewer line. Enquiring what is needed to become a citizen at the home affairs offices and learning Computer skill, obtaining you computer licence at the HP I-centre

Second floor, going to class being taught maths, english and literacy, finishing your matric. Meeting a non-government organizations to obtain a grant for your business venture, community sector, or school. Visiting the labour department and voice your opinion and request information for your working situation.

Third floor, meeting the community engagement faculty of Pretoria University, taking part in a research program for the faculty of social sciences.

And finally chairing a meeting or being a guest in the rooftop conference centre.
User experience diagram

1. CIVIC SERVICE USER
2. COMMUNITY USER

Civic service user
Community user
Figure 105b
User experience diagram

3. STUDENT USER
4. LECTURER USER
Figure 10c: User experience diagram
5. HAWKER USER
6. SERVICE DELIVERY
6.5 PUBLIC ARCHITECTURE DESIGN PROCESS

6.5.1 Introduction:

As noted in the early part of this chapter, the requirement of a taxi drop-pick & go was a necessity. With this service, other services are required. As a commuter certain services are necessities. The introduction of two public ablation facility, one on either side of Hans Strydom road was a prerequisite. The additional requirement was public phone booths and waiting stalls.

However simplistic the design of these structures are, they simultaneously need to be hardy but elegant, they also need to be inviting but not a home. They need to be managed with surveillance. Finally they need to read as part of the total design in typology, planning and materiality.

The design: sketches 106a - 110b

Ablutions:
The intent was to provide for male, female and disable. Utilising passive ventilation and water harvest, maximum long term efficient with low maintenance cost as any other public facility structure. They require a storeroom that doubles as manager or cleaners room that provides surveillance over the facility. They require baby changing facilities for mothers at ladies ablation, and outdoor seating for waiting commuters and hawkers. A shower facility for the cleaner after work. A typology of curved roof structure enhancing ventilation was employed and was a derivative of the main facility structure. Roof overhang covering for warm and rainy summer days.

Telephone booths: A2
Initial thoughts was to provide roof coverings, but after some discussion, this concept was not the most effective, because it provides unfortunate sleeping place for homeless people, and thus makes it an unsafe area for commuters waiting for taxis'. The proposal was for the placement of concrete plinths, with the booths on top slightly elevated. The final textures and finishes of the concrete plinths are in pigmented concrete with artists design inlayed, similar to walls and floor slab of the ablation block. only allowing the tree coverage to act as covering. See figure 125a for texture examples

Waiting stalls: A3
Following the design typology of curved corrugated sheet roofs on lightweight steel structure assembled form standard members and concrete bolted into floor plinth with lightweight concrete beams placed for seating. Back of curved structure to be a bill board for advertising. Roof lifted of ground to allow through air movement, and to create a light weight image of structure. Each waiting stall fitted with permanent bin holder.
105. Engagement by Architectural Design

Figure 110
Design concept development
Typology

Figure 111a
Design planning development

Figure 111b
Final planning development

PROSES DESIGN

FINAL DESIGN

PHONE BOOTHs
PUBLIC TOILETS
MEN   LADIES

PUBLIC TOILETS
MEN   DISABLE  STORE   LADIES

PHONE BOOTHs   TAXI STALL