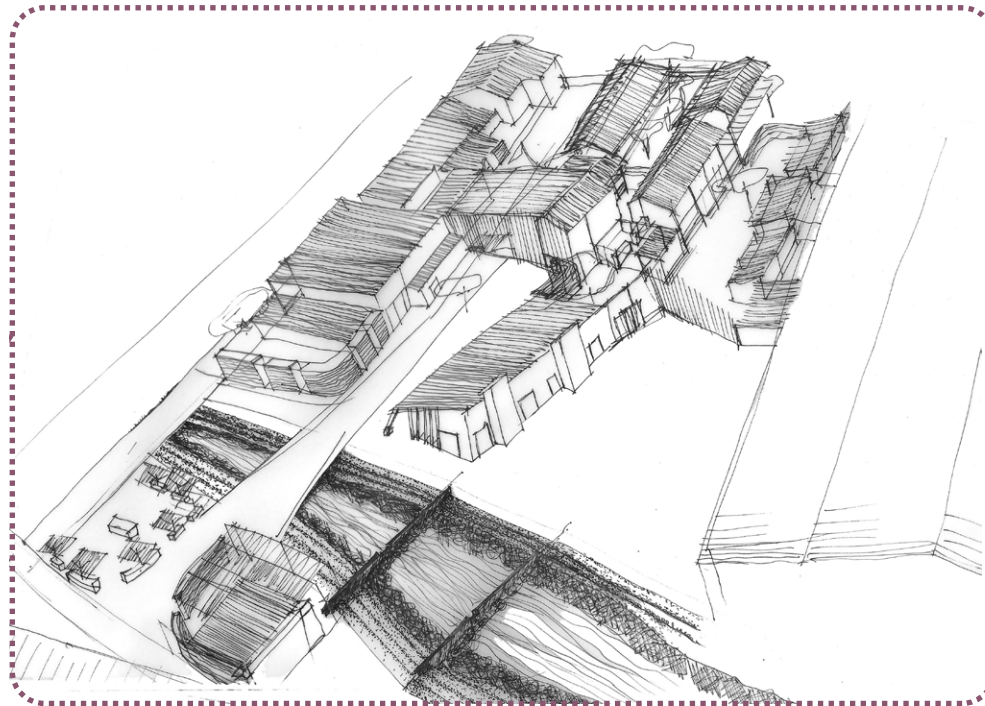


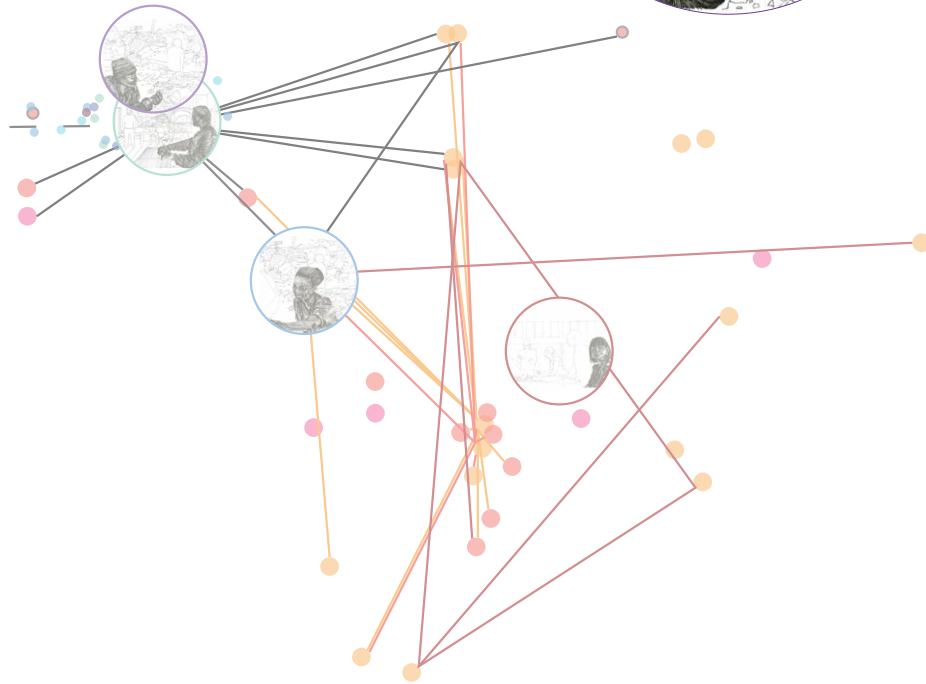
2019 Completion



Fourteen

Re-integrated

Conclusion



The year is now 2019¹ and construction is complete. We find Katlego² still on the streets of Marabastad, but the 'world' around him has undergone some fundamental changes. Today, wandering about, Katlego recalls the blackened surfaces of derelict buildings, and the wasteland, where he and his friends used to gather. The concrete channel, once littered with rubbish, is now a natural watercourse lined with greenery. Katlego is confused by the changes and feels a little out of place.

Following the new walkway³, where there used to be a road, he passes informal traders now housed on a raised plinth with roofing.

A soup kitchen⁴ opens onto the public square. A man working there is giving a blanket to a woman. She is coughing but gives him thanks. Katlego overhears the man informing her that there is free TB testing at the medical centre next door. Katlego watches her as she crosses the river and moves towards the new building.

Each time that he visits the soup kitchen, Katlego ventures further into the place, where he meets many new people.

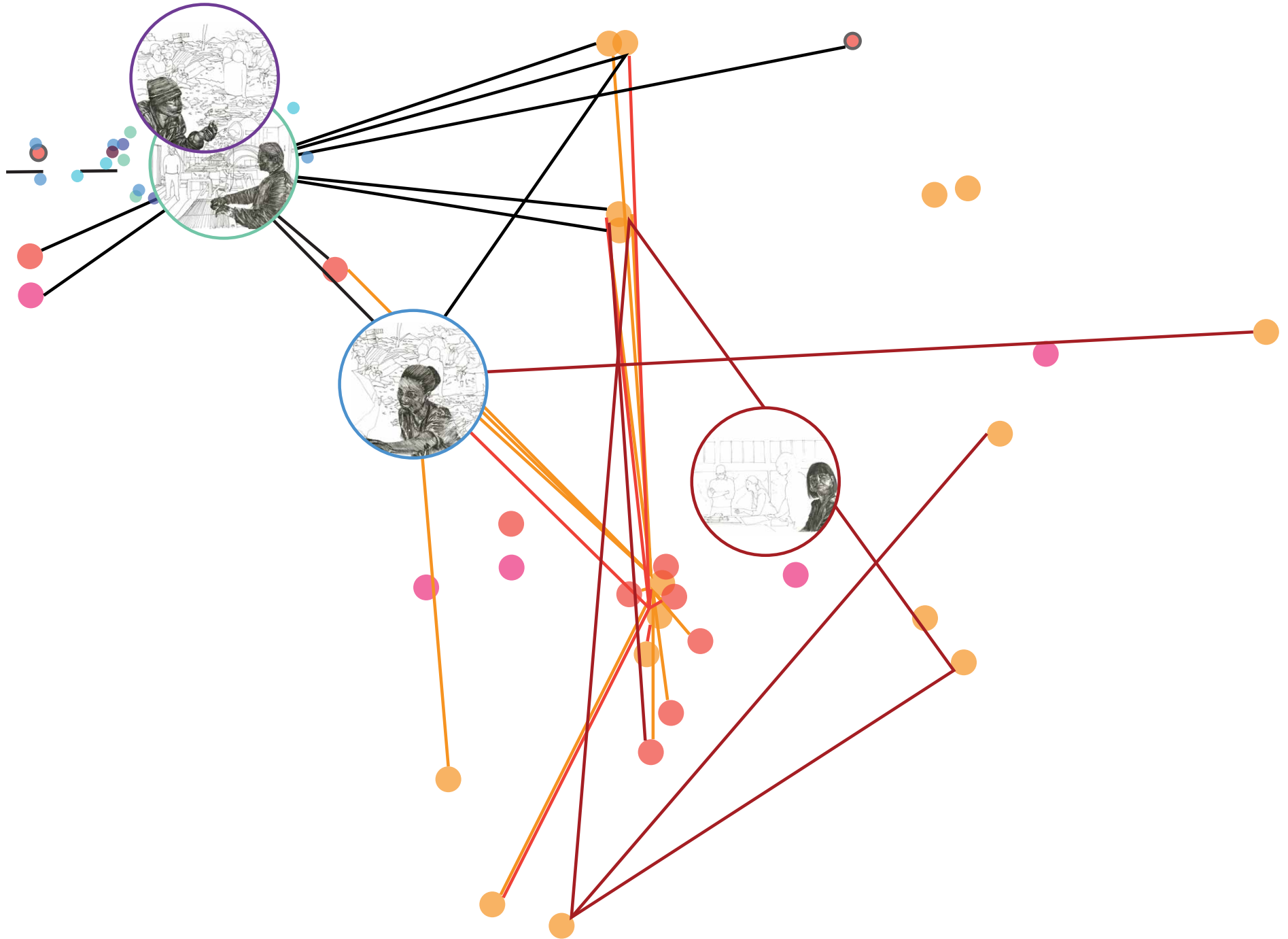
Building up the courage to cross the river⁵ himself, he sees that there is a new pharmacy that has opened there. A small group of people is standing in what appears to be a workshop⁶. They are working intently at something. Intrigued, he crosses a grassed area and lingers in a shaded walkway. Somebody is sitting on a window ledge, also watching the scene. Katlego moves away, and follows the shaded walkway through to an opening in a screened threshold⁷.

He sits himself down on a bench next to some indoor planting and takes in his surroundings. He looks at the beams of sunlight, which filter into the space, and notices that there are other people seated here too. Through an opening he catches a glimpse of greenery. He follows some people who are walking through the opening. Somebody is walking alongside him. The person has a kindly face and asks Katlego whether he is looking for somebody. Katlego shakes his head explaining that he had only been curious and had wanted to see the

- 1 See Figure 101
- 2 See Figure 102
- 3 See Figures 104 & 105 in order to follow Katlego's Journey on the plans (Section AA-EE)
- 4 See Figure 106
- 5 See Figure 107
- 6 See Figure 108
- 7 See Figure 109

Figure 101: (above) Katlego (Patrick: 2016)

Figure 102: The completion of the project (Patrick: 2016)



plants. The man says that the courtyard is part of the new healing facility. Katlego notices an entrance to the medical centre ahead and the person follows his gaze.

Yes, the medical centre - but that was already here. Now there are new clinics and a rehab too!
Katlego nods and walks into the medical centre. The other man stays behind in the garden.

Katlego agrees to be tested for TB and HIV/Aids, but does not wait for the results. A couple of days later he is back, having convinced himself to come for the results. A doctor greets him with a warm smile and tells him the results. She also provides him with packaged needles, saying to him that the pharmacy will also supply needles whenever he needs them. Katlego is confused but she explains that the testing has shown that he is a drug user.

You know that there are support facilities available here, like the rehabilitation centre, but only you can make that choice. Please, just make sure that you use the clean needles to safeguard yourself against disease.

He nods, feels embarrassed, and walks out through the exit onto Boom Street.

Months go by. Katlego is now collecting clean needles regularly, from the pharmacy. One day, he bumps into the doctor who is standing outside the screened foyer. She introduces him to a patient who has just finished the rehabilitation programme. They are on their way to the 'halfway house', where she will be completing an internship at Pillay Upholsterers. Mr Pillay, he learns later, was the man who had given a blanket to the sick woman who was standing in front of him on that first day, when he visited the soup kitchen.

That chance meeting seems to him like fate. He had seen that same woman on the streets a few months ago. He thinks about the opportunities she now has - reasons to 'stay clean'.

After a few days Katlego decides that he too could be healed. He builds up his confidence and walks into the foyer where he sees a now familiar face.

I am ready - I cannot see myself surviving another winter on the streets.

The person nods understandingly, guiding him through the next threshold that opens onto a courtyard: the next step of the healing journey. Beyond there is yet another courtyard. This is the place, he is told, where people will speak to him at any time⁹. To the right, there is a place for him to stay.

The next week is a week of agony for him. The next stage of the healing journey leads him to the first floor. Every day there are consultations with professionals and there are group meetings with other patients. Part of the programme includes spending time in the workshop he had seen. He chooses to learn about cars; gaining knowledge about motor mechanics is interesting for him.

After a few weeks he feels ready to move on to the 'halfway house' and to use the skills he has acquired, and to complete his internship.

~

Not only is this project a regeneration of the site, but also of self; that of Mr Pillay, Dr Radebe and Janeke, but most of all Katlego, who has now stepped out of homelessness.

10th STREET

11th STREET

BOOM STREET

GRAND STREET

GRAND STREET

MAMPURU STREET

EXISTING WAREHOUSE

EXISTING WAREHOUSE PARKING



1 : 200
Ground Floor Plan



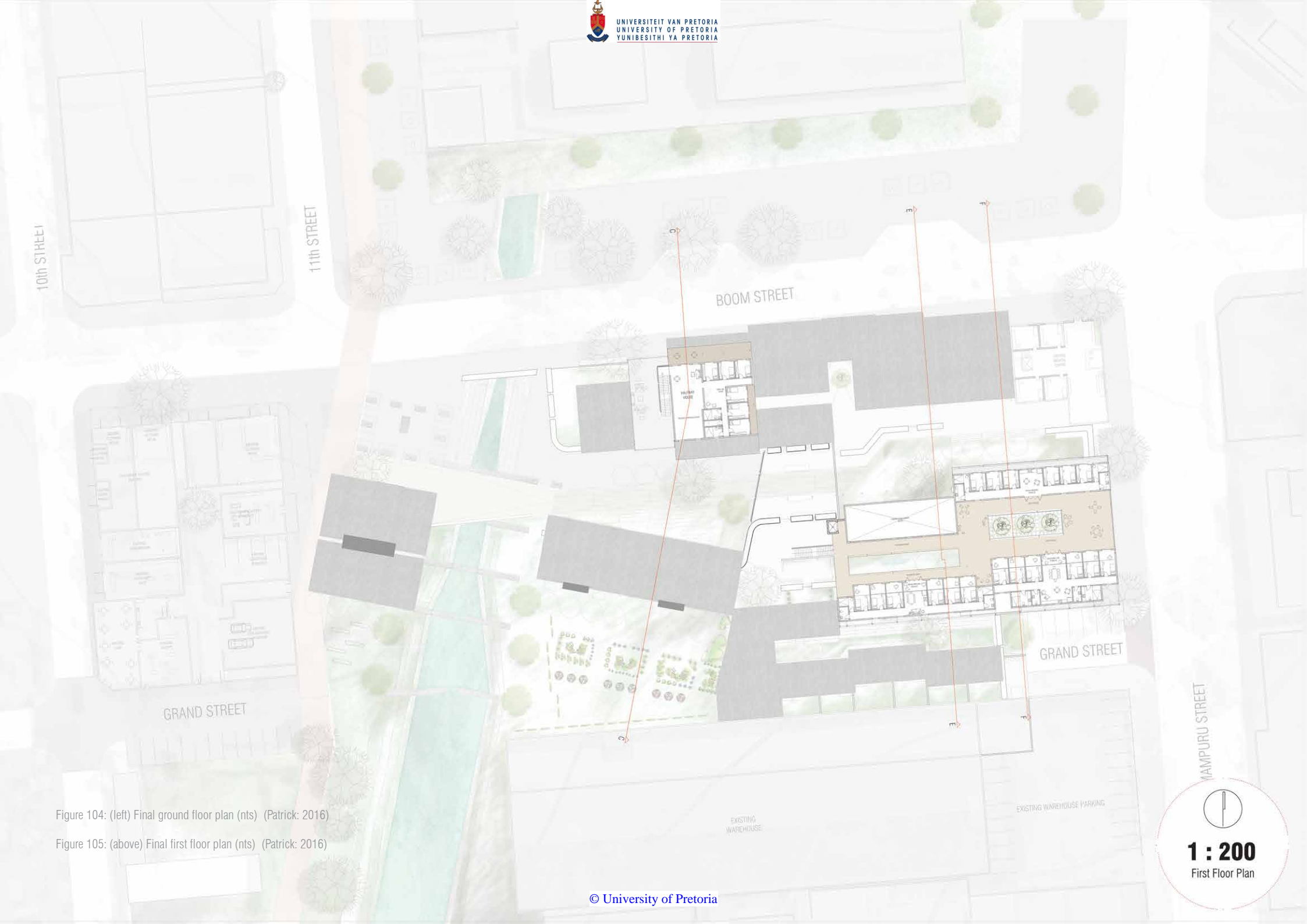
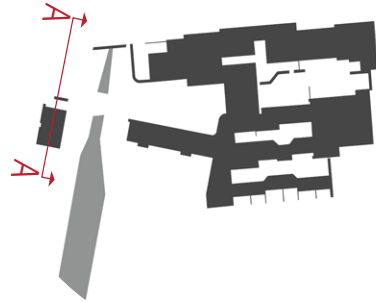
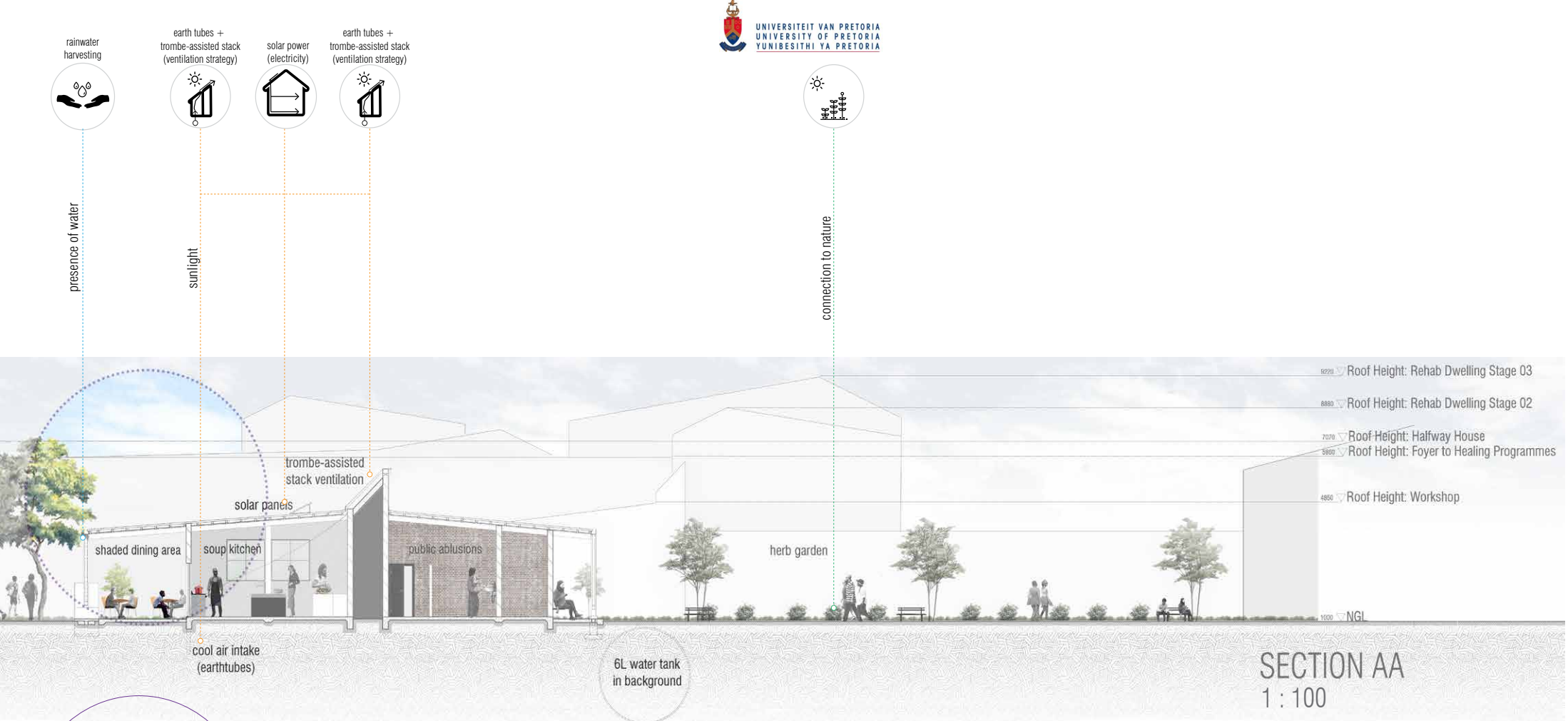


Figure 104: (left) Final ground floor plan (nts) (Patrick: 2016)

Figure 105: (above) Final first floor plan (nts) (Patrick: 2016)

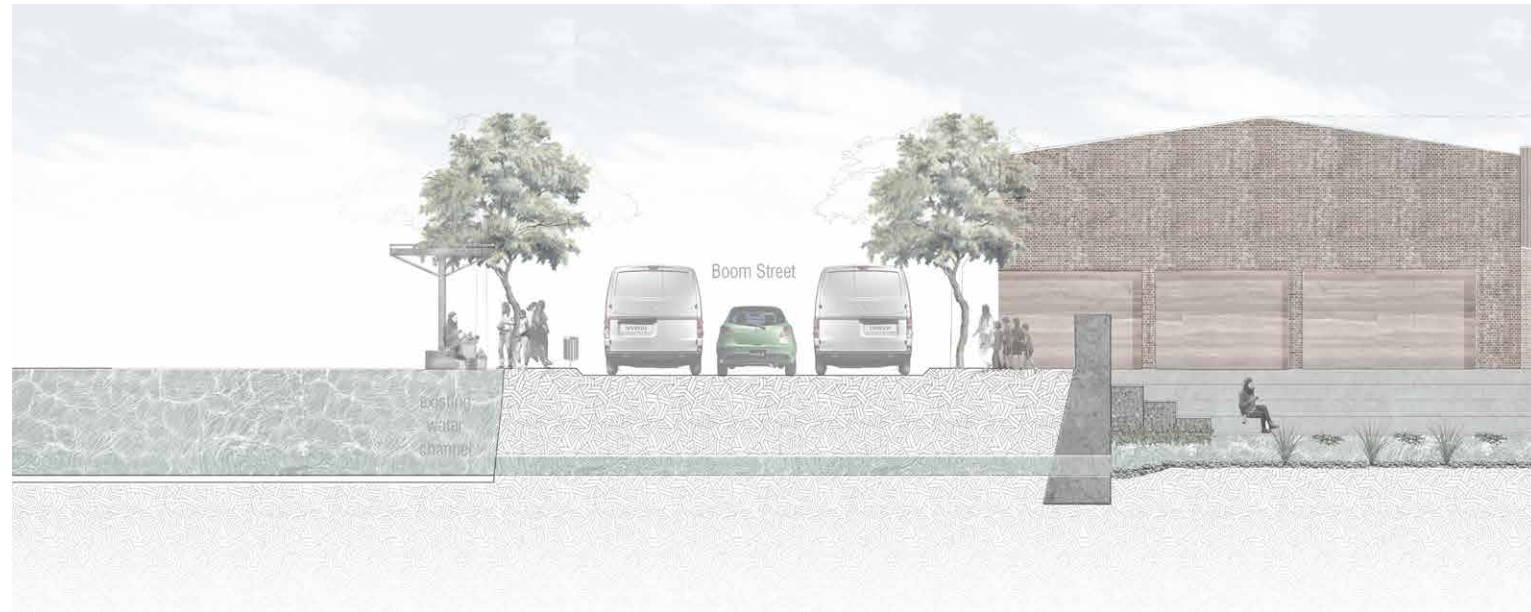
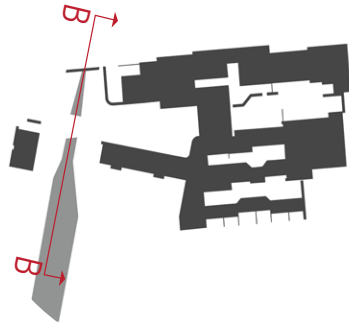
1 : 200
First Floor Plan





Katlego's Experiential Journey

Figure 106: (spread) Final section AA (nts) (Patrick: 2016)



responsive screen
(vertical slats for
western shading)



sunlight

rainwater
harvesting



presence of water



connection to nature

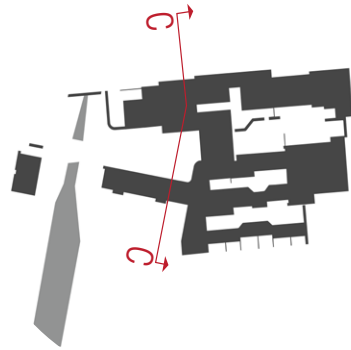


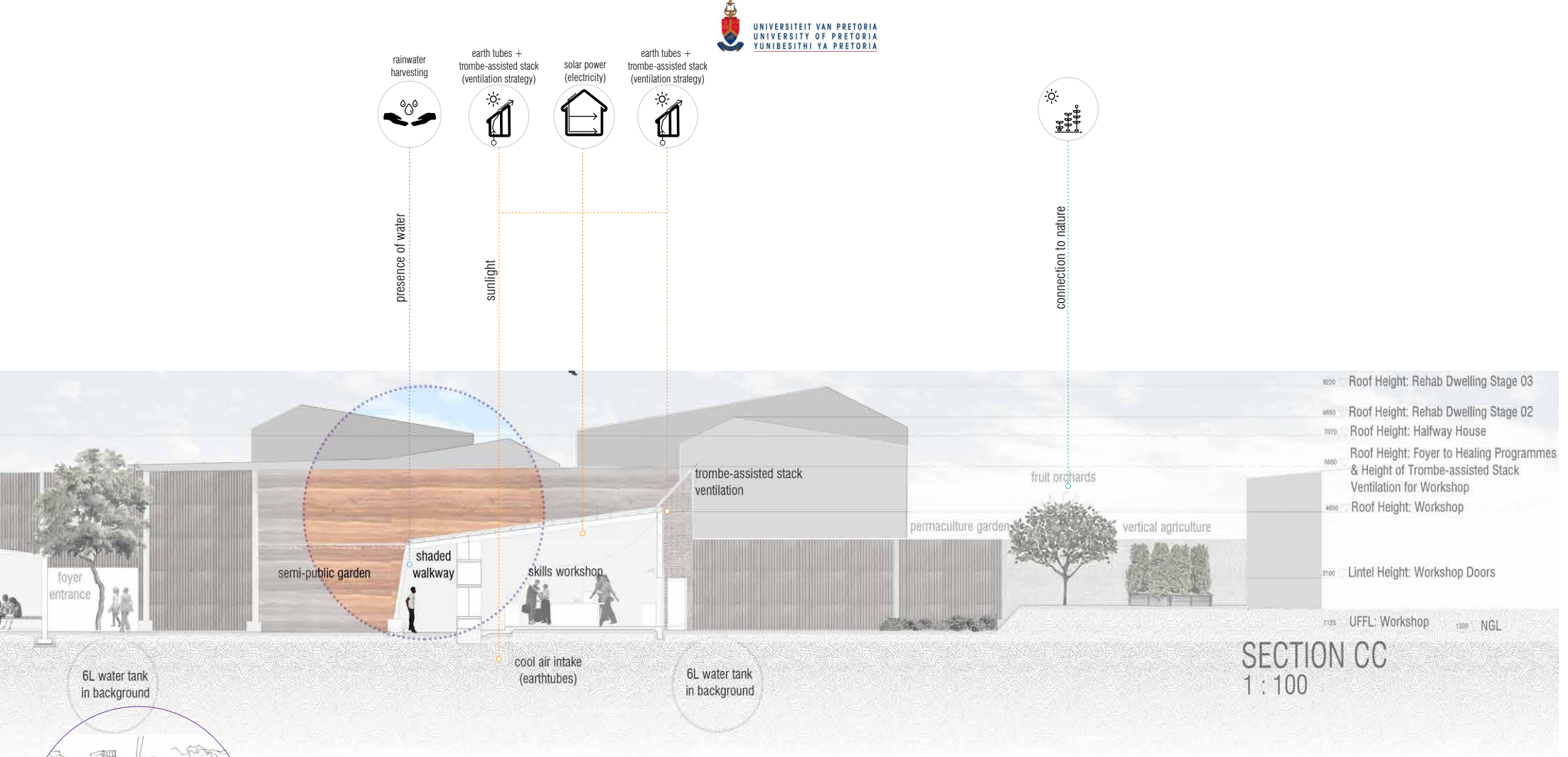
SECTION BB
1 : 100



Katlego's
Experiential Journey

Figure 107: (spread) Final section BB (nts) (Patrick: 2016)

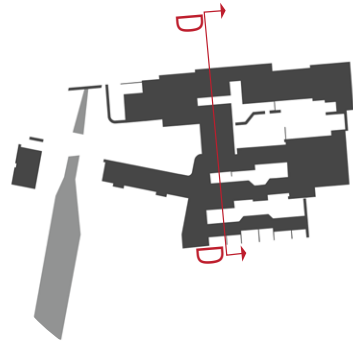


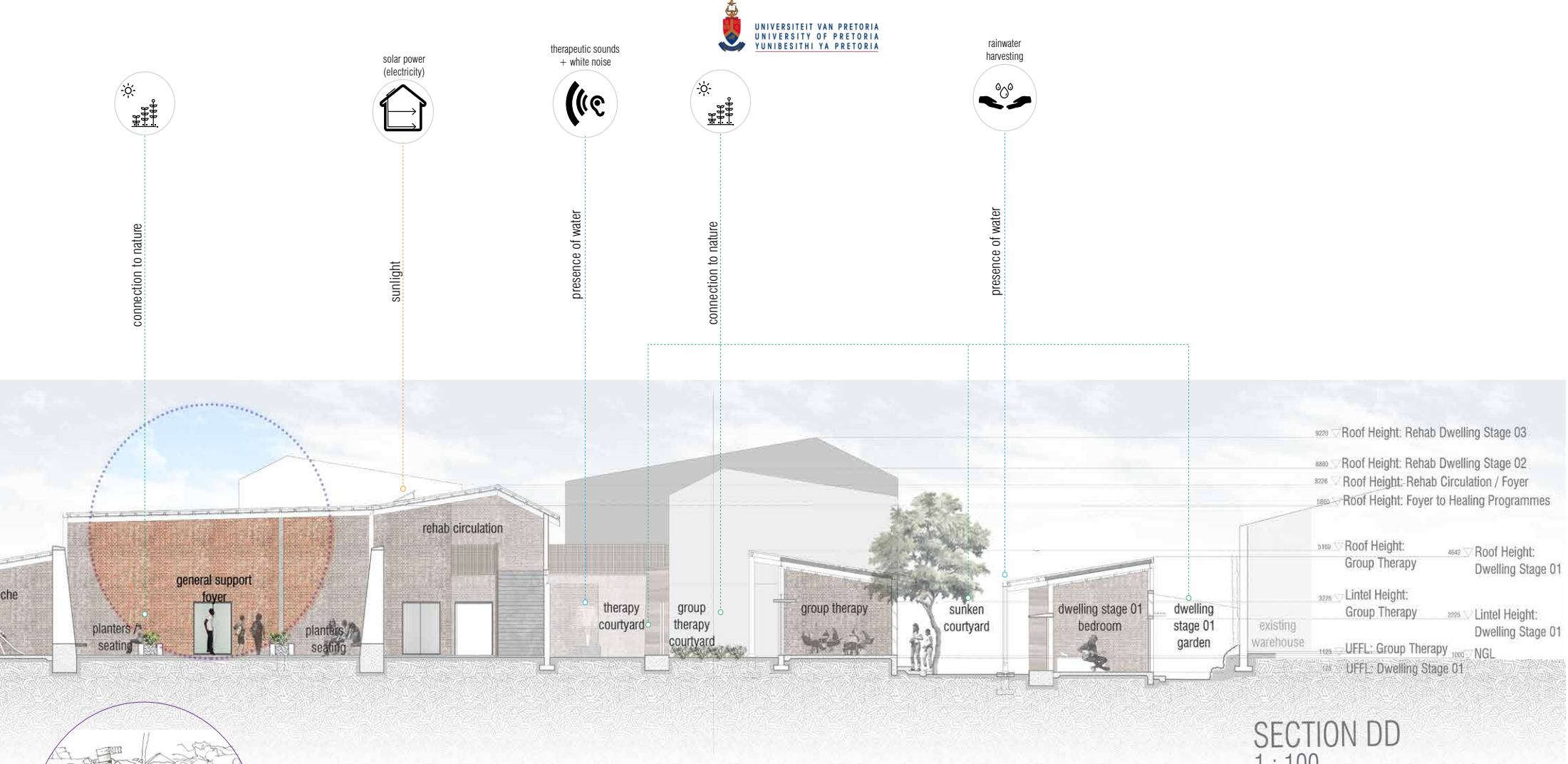


Katlego's

Experiential Journey

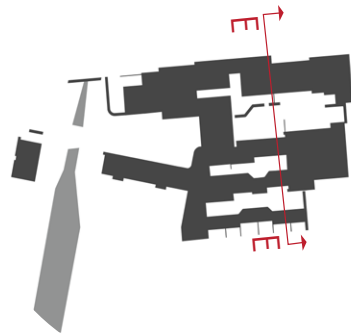
Figure 108: (spread) Final section CC (nts) (Patrick: 2016)





Katlego's Experiential Journey

Figure 109: (spread) Final section DD (nts) (Patrick: 2016)



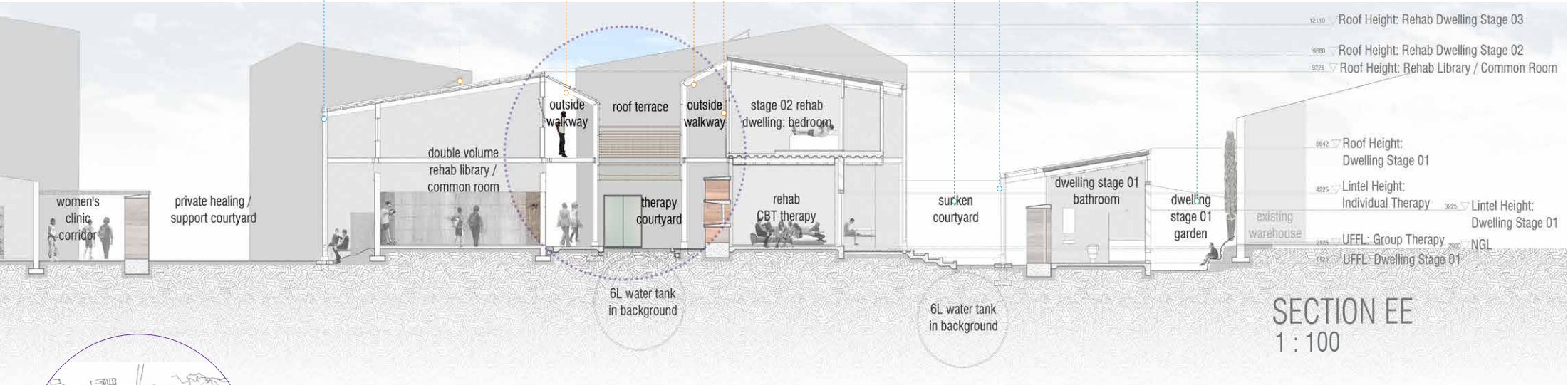


presence of water

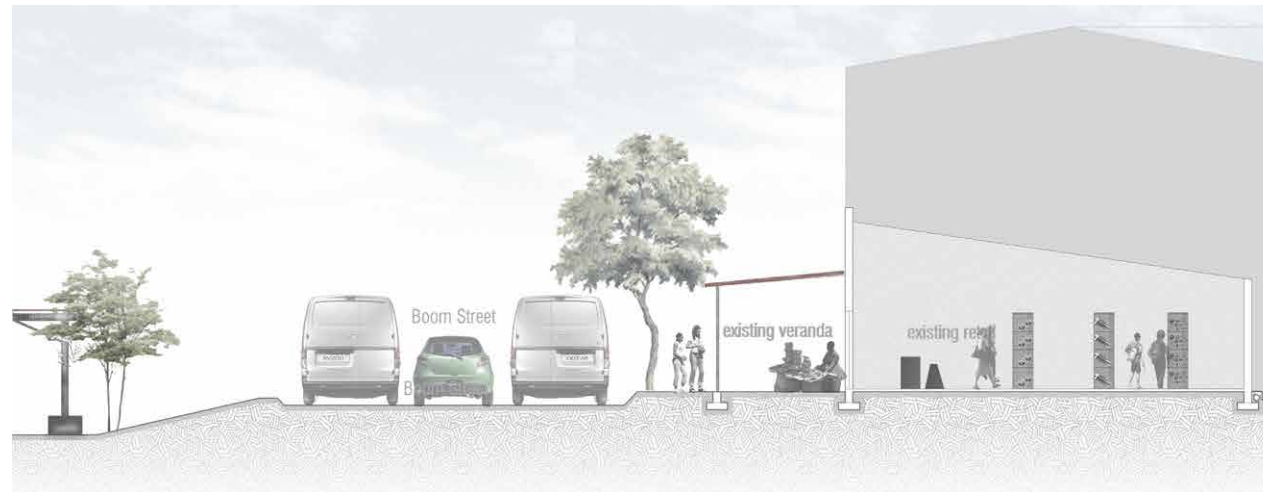
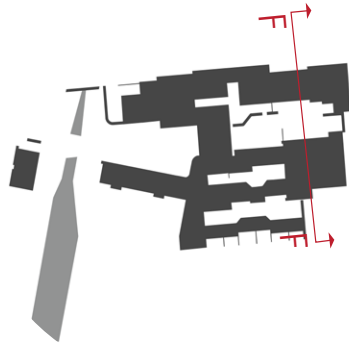
sunlight

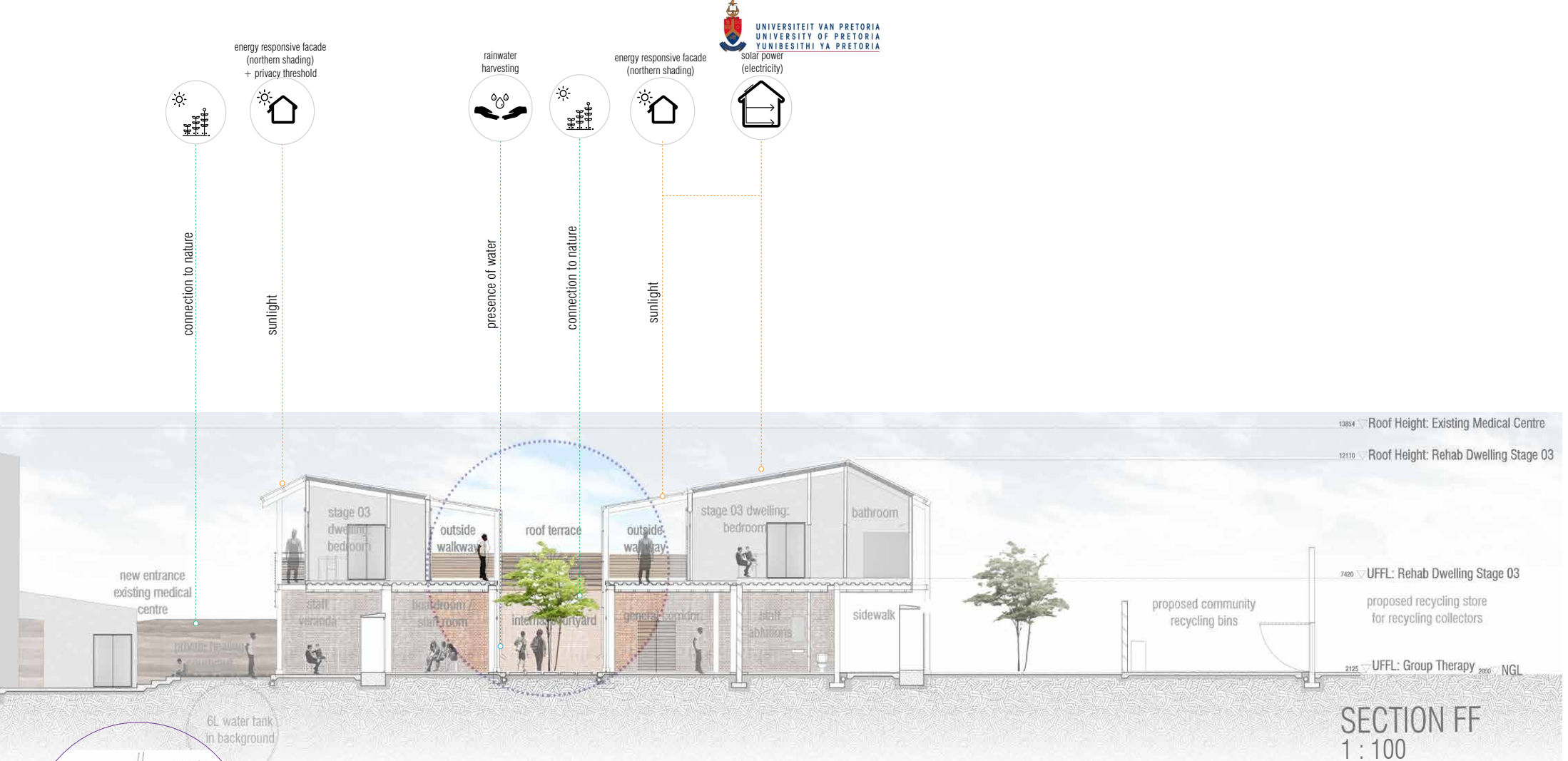
presence of water

connection to nature



Katlego's
Experiential Journey





Katlego's Experiential Journey

Figure 111: (spread) Final section FF (nts) (Patrick: 2016)



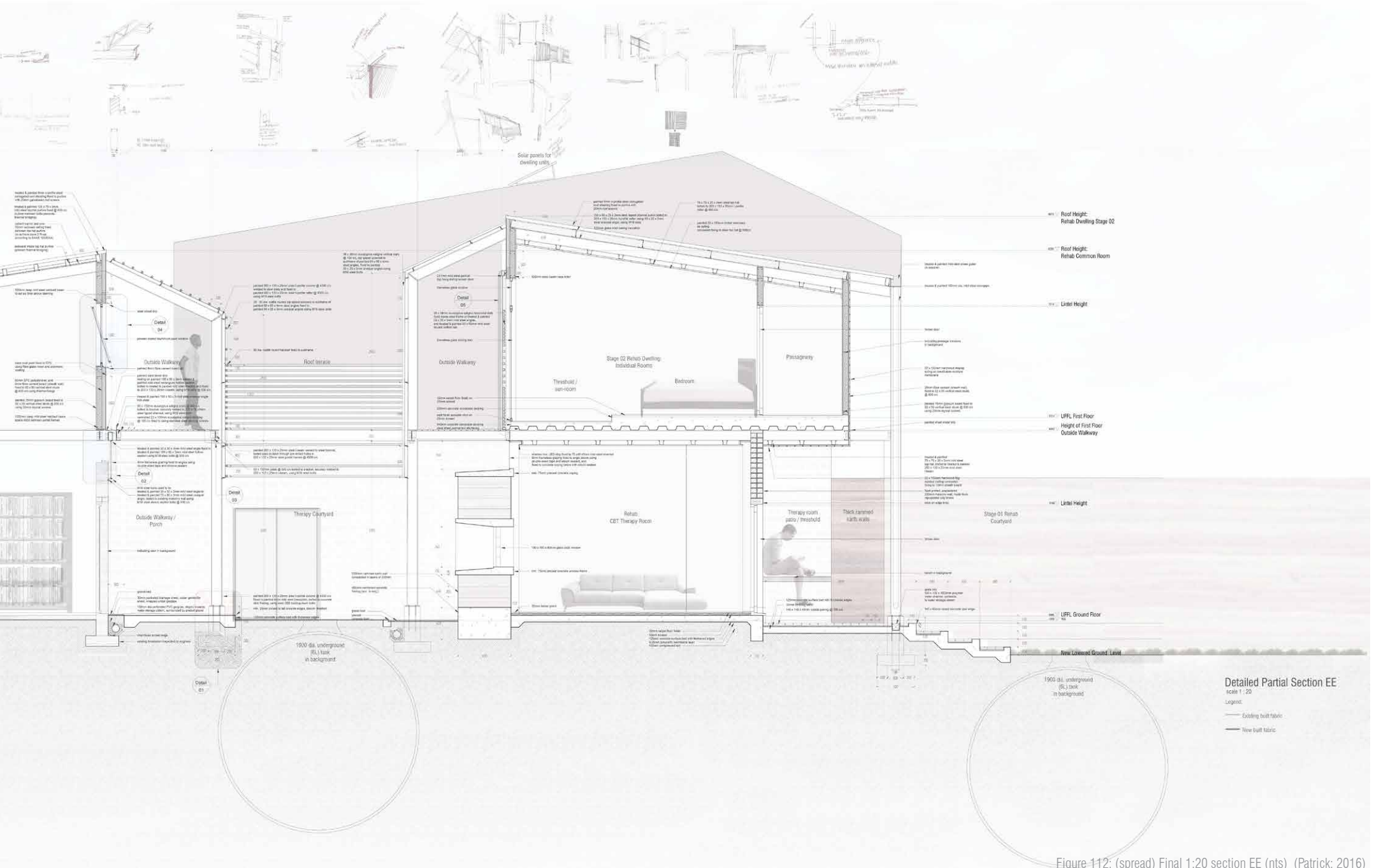
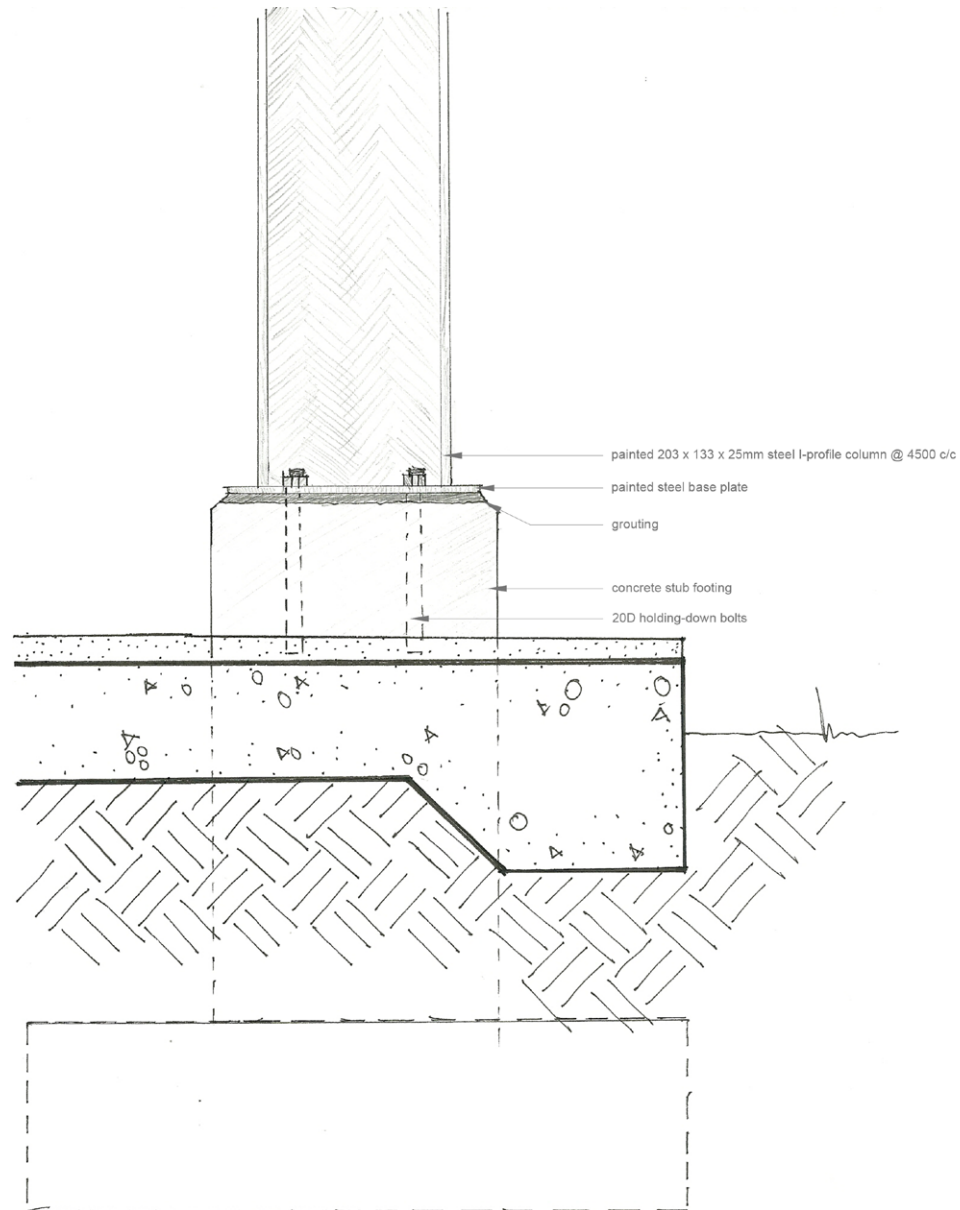
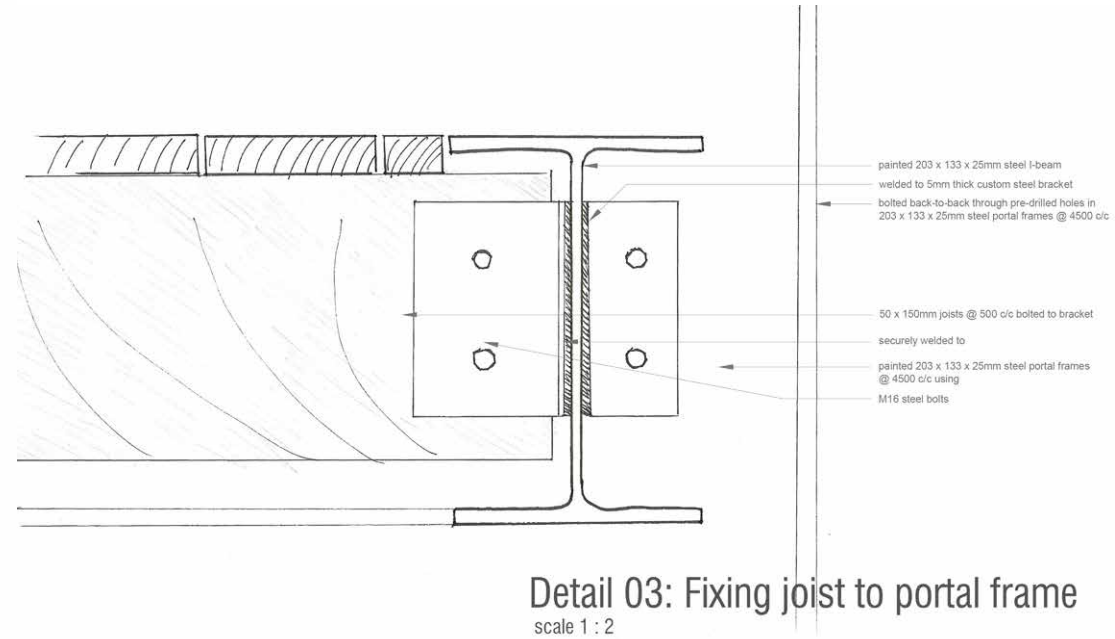
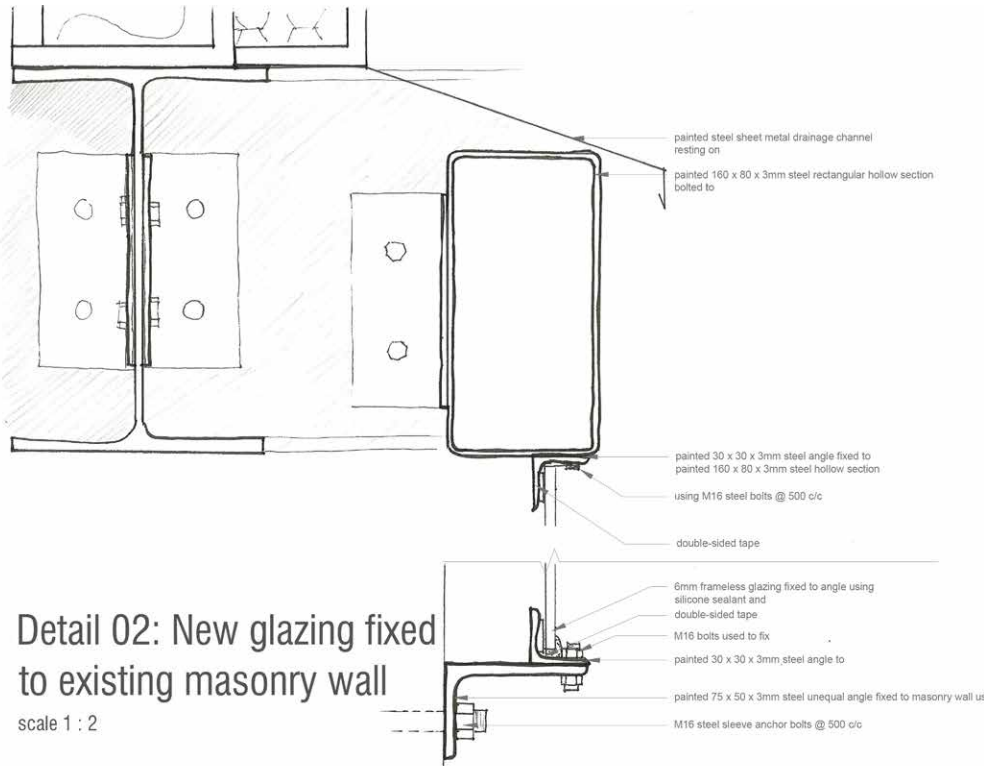
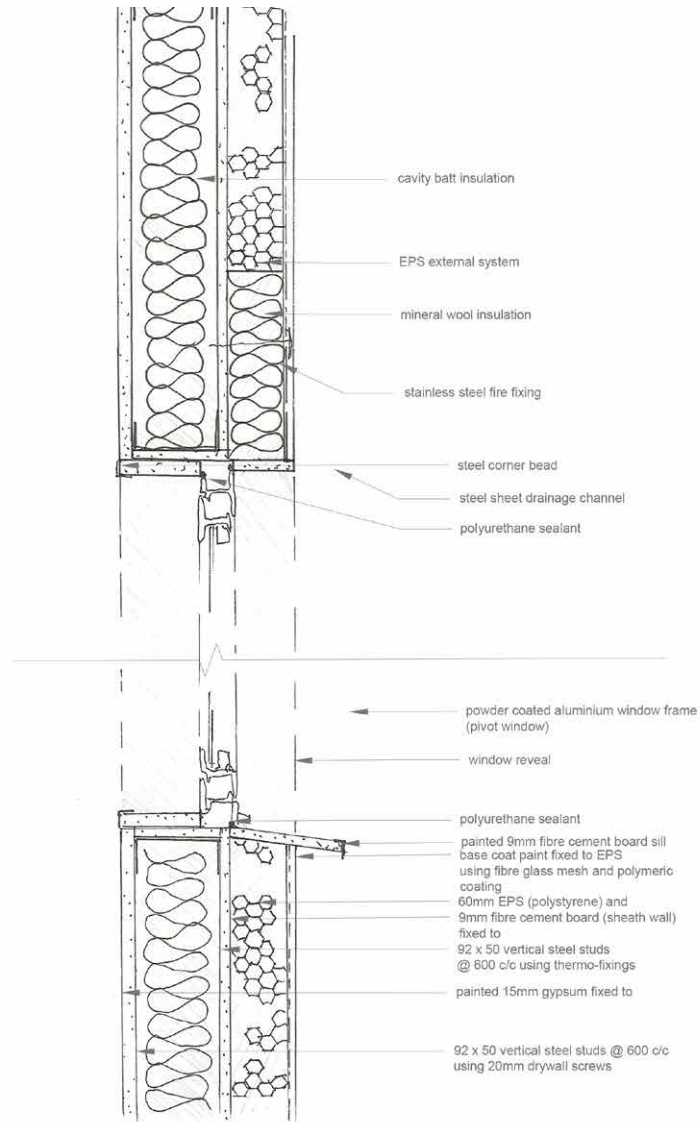


Figure 112: (spread) Final 1:20 section EE (nts) (Patrick: 2016)



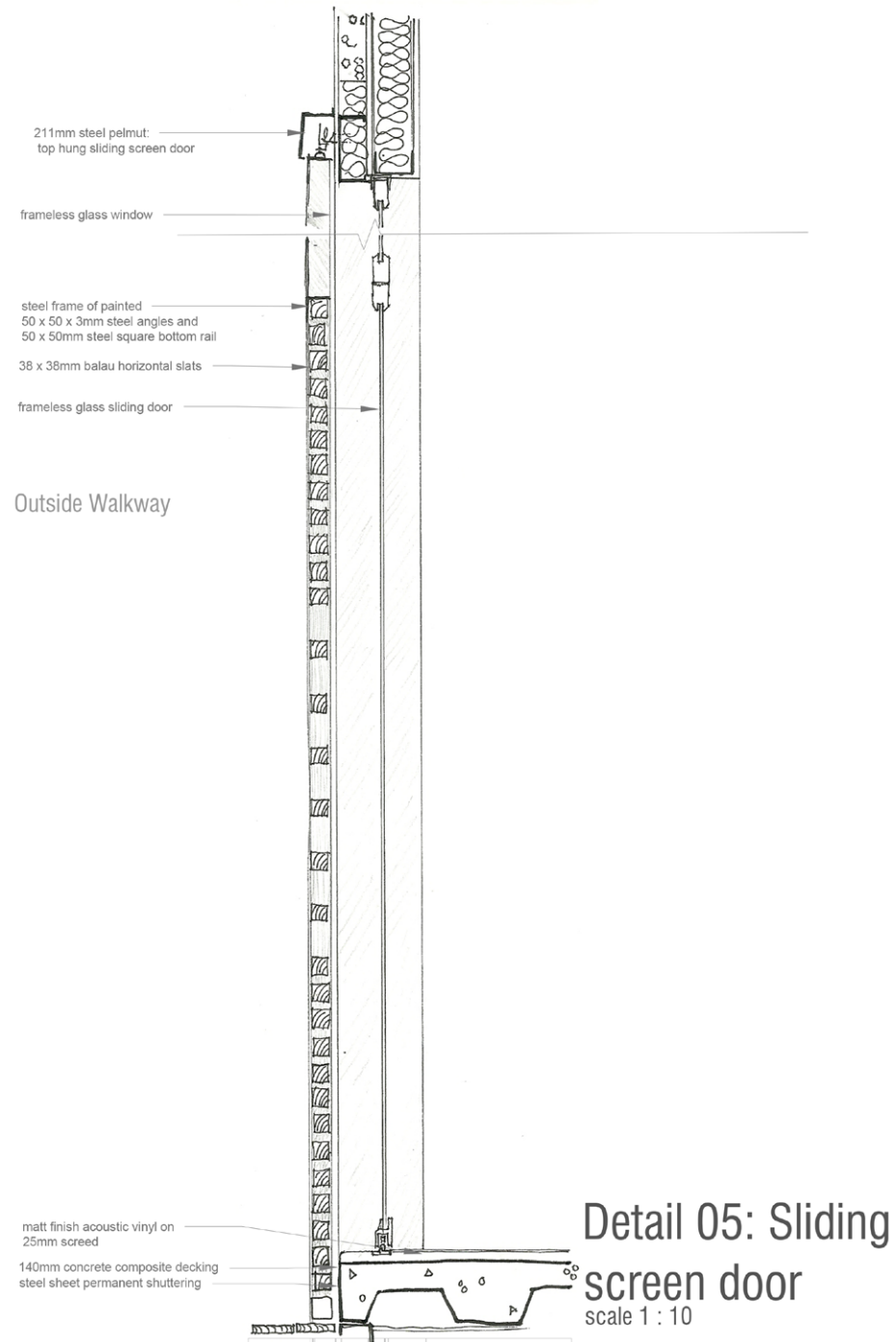
Detail 01: Concrete stub footing
scale 1 : 5





Detail 04: Drywall sill and lintel details

scale 1 : 5



Epilogue

The Narrative

Reflection

I have chosen in this dissertation, to adopt a holistic approach including the real-world issue of drug addiction with an investigative narrative, to make it possible to envisage how a potentially regenerative architecture might be achieved in reality. A collaborative effort, in a real situation within the community, is essential to the transformation process. It is important to acknowledge the intimate relationship that the local inhabitants have with the environment, as a collaborative factor contributing to the architect's vision.

Through the processes involved in this research project, an insight has been gained which could provide value and lead to possible further investigative procedures, which would 'unlock' the social and environmental systems, in the context of Marabastad.

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Appendices

1

Definitions

addiction [ah-dik´shun]

1. the state of being given up to some habit or compulsion.
 2. strong physiological and psychological dependence on a drug or other agent.
- Drug addiction** a state of heavy dependence on a drug; sometimes defined as physical dependence but usually also including emotional dependence, i.e., compulsive or pathological drug use. It is often used synonymously with drug dependence.

(SOURCE: Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition. © 2003 by Saunders, an imprint of Elsevier, Inc.)

regenerative [ri-jen-er-uh-tiv]

- 1: an act or the process of regenerating : the state of being regenerated
- 2: spiritual renewal or revival
- 3: renewal or restoration of a body, bodily part, or biological system (as a forest) after injury or as a normal process
- 4: [medical] the renewal, regrowth, or restoration of a body or a bodily part, tissue, or substance after injury or as a normal bodily process.

(SOURCE: <http://www.merriam-webster.com/dictionary/regeneration>)

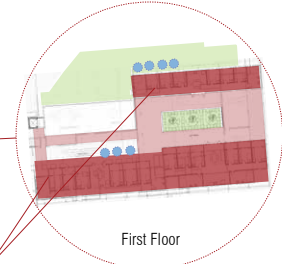
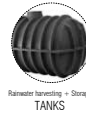
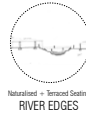
4

Technical calculations and info

Possible Cost, Time and Value Implications of Proposed Scenario



Presence of Water
Water Harvesting (Cycle)



Hallway House

- Roof Area = 502sqm
- Annual Average Water Yield = 315400ℓ (Water Harvesting)
- Annual Average Water Demand = 274700ℓ (including irrigation = total +376sqm)
- Underground tanks = 6L x 5 = 30 cubic meters

Category	Value
Roof Area	502
Annual Average Water Yield	315400
Annual Average Water Demand	274700

Soup Kitchen

- Roof Area = 836sqm
- Annual Average Water Yield = 264500ℓ (Water Harvesting)
- Annual Average Water Demand = 159900ℓ (including irrigation of agriculture = total +118sqm)
- Underground jojo tanks = 6L x 3 = 18 cubic meters

Category	Value
Roof Area	836
Annual Average Water Yield	264500
Annual Average Water Demand	159900

Skills Workshop

- Roof Area = 836sqm
- Annual Average Water Yield = 525200ℓ (Water Harvesting)
- Annual Average Water Demand = 522000ℓ (including irrigation of agriculture = total +435sqm)
- Underground Cistern tanks = 6L x 8 = 48 cubic meters

Category	Value
Roof Area	836
Annual Average Water Yield	525200
Annual Average Water Demand	522000

Dwelling Stage 01 Six Occupants

- Roof Area = 316sqm
- Annual Average Water Yield = 198000ℓ (Water Harvesting)
- Annual Average Water Demand = 169800ℓ (including irrigation of surrounding courtyards = total +150sqm)
- Underground tanks = 6L x 3 = 18 cubic meters

Category	Value
Roof Area	316
Annual Average Water Yield	198000
Annual Average Water Demand	169800

Dwelling Stage 02 & 03 Eighteen Occupants

- Roof Area = 621sqm
- Roof Terrace Area = 330sqm
- Annual Average Water Yield = 413100ℓ (Water Harvesting)
- Annual Average Water Demand = 400700ℓ (including irrigation of surrounding courtyards = total +360sqm)
- Underground tanks = 6L x 7 = 42 cubic meters

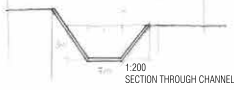
Category	Value
Roof Area	621
Roof Terrace Area	330
Annual Average Water Yield	413100
Annual Average Water Demand	400700

Hydrology

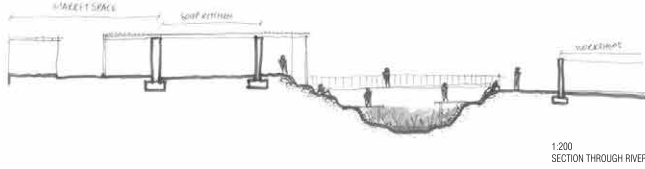
Steenhovenspruit

EXISTING SITUATION
Concrete Channel

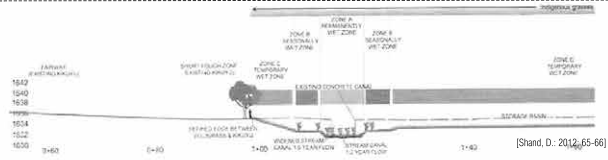
$$\begin{aligned} \text{AREA} &= (7 \times 3) - (0.5 \times 3 \times 2) - (0.5 \times 2 \times 2) \\ &= 21 - 3 - 2 \\ &= 16\text{sqm} \end{aligned}$$



PROPOSED SITUATION
Naturalised River + Public Space



METHODOLOGY
for Naturalising a Channelised River



EXISTING AREA + 20% (change in roughness coefficient "n") = NEW NATURAL AREA
 $16\text{sqm} + 3.2 = \text{min. } 19.2\text{sqm}$

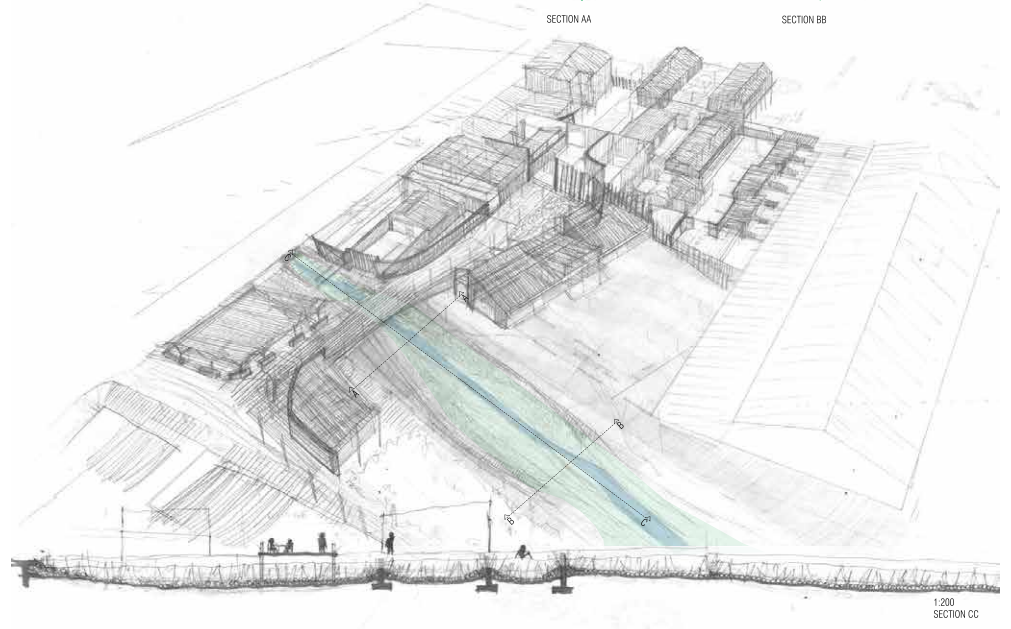
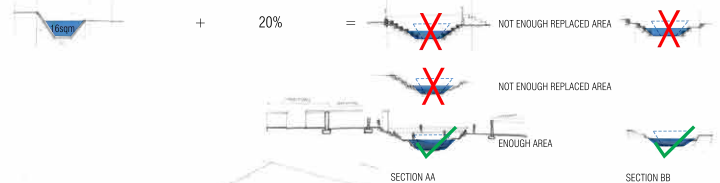


Figure 116: (far left) Water harvesting calculations (Patrick: 2016)

Figure 117: (left) Hydrology Presentation (Patrick: 2016)

3

Site Visits

Site visit to Dr Florence Fabian Ribeiro Treatment Centre, in Cullinan, on 18 May 2016.

General observations were distilled from this site visit.

The documents shown in the following pages include:

- A letter from Dr Arthur Barker requesting that assistance be granted to help the student complete the design project
- The relevant documentation required by the Department of Social Development, signed and accepted, before the site visit took place



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

department of architecture
ARCHITECTURE • INTERIOR ARCHITECTURE • LANDSCAPE ARCHITECTURE

ATTENTION: To whom it my concern

22 April 2016

Dear Sir/Madam

MASTERS IN ARCHITECTURE STUDENT: Nicola Patrick (Student no: 11050952)

The above-mentioned student is in the process of accessing information for her 2016 Master of Architecture (professional) degree project that deals with drug rehabilitation in Marabastad. I approved her research project in February of this year.

Can you please assist her with any relevant information, or access to facilities that she may need, to successfully complete her design project? Any information gathered will only be used for academic purposes and not for any commercial gain.

If you have any queries, do not hesitate to contact me.

Yours sincerely,

Dr. Arthur Barker

MProf coordinator, Archive coordinator and Senior Lecturer
PhD(UP), MSc(dist)(Bartlett), BArch(dist)(UCT), BAS(dist)(UCT) NHDAT(cum laude)(Cape Tech), PrArch
Department of Architecture
Faculty of Engineering, the Built Environment and Information Technology
+27 (0)12 420 5777 [Office]
+27 (0)12 420 4542 [Secretary]
+27 (0)12 420 5788 [Fax]
+27 (0)72 987 7238 [Cell]

APPLICATION FORM TO UNDERTAKE RESEARCH

DEPARTMENT OF SOCIAL DEVELOPMENT

DEVELOPMENT & RESEARCH
SUB-DIRECTORATE: RESEARCH

✉ Private Bag X 35, JOHANNESBURG, 2000
75 Commissioner Street, M-Floor
☎ (011) 355 7892
☎ (011) 227 0130

- (a) All applications will be considered by the Sub-directorate: Research after which approval/disapproval letter will be issued to the applicant.
- (b) Representations may be directed to the Provincial Social Development Research Panel, in the event of non approval.
- (c) All applications must be submitted in English.
- (d) Applications must be accompanied by all requested documentation.

PERSONAL PARTICULARS OF THE APPLICANT (PLEASE PRINT)

1. Name (in full): Nicola Cecilia Patrick
2. Address: 14 Nama Toru
258 Sprite Avenue
Faerie Glen, Pretoria
3. Tel number (s): 0839971828
4. Name and address of employer: N/A (student)
5. Academic qualifications already attained, and where
BSc Architecture at the University of Pretoria
BHons Architecture at the University of Pretoria
6. Registration with a professional council (specify council and number):
N/A (student)

DETAILS IF APPLICANT IS A STUDENT AT A TERTIARY EDUCATIONAL INSTITUTION

1. Name of institution: University of Pretoria
2. Full-time or part-time student: Full-time
3. Present course registered for: M(Arch) – Masters in Architecture
4. Name, address and telephone number (s) of study leader/supervisor:
Dr. Arthur Barker, Boukunde Building (University of Pretoria)
012 420 4542

5. Letter from the tertiary institution confirming the approval of the research proposal.
Compulsory letter attached? YES

DETAILS OF RESEARCH

1. Attach a research proposal according to the following guidelines:
 1. Title of research Re-integration of People and Place, Maseru
 2. Problem statement (the nature of the problem, and the boundaries of the problem area).
 3. Need for / feasibility of the research.
 4. Goals and objectives of the study.
 5. Theoretical statement / hypothesis (as applicable)
 6. Research design (research method to be followed).
 7. Method of data collection, together with copies of any questionnaires (postal, individually or group-administered), interview schedules (administered by the researcher and / or assistants, or by telephone), statistical schedules, interview focus groups themes or focus group etc, as far as possible (If not immediately available, it should be submitted when ready).
 8. Respondents (description of the research population and sample / sampling procedures to be followed).
 9. Brief time schedule of the research, including when the Department's resources will be used, (see section 2 below) and the planned date for completion and publication of the research.
 10. How the result will be published and used.
 11. A copy of the final research report must be submitted to this department.
2. Particulars of official resources to be used and costing of those resources (i.e. support needed from the Department). These should be detailed in terms of material (Acts, bills, annual reports, clients files etc.
Human resources: (Category of staff and man-hours to be spent by the official/s)
 - (a) Records (specify act bills/annual reports):

(b) Clients (specify):

(c) Personnel (specify): One staff member to guide me on a supervised walk through the Facility.

4. CONFIDENTIALITY

I (full name in print) NICOLA CECILIA PATRICK

Undertake always to follow the principles of confidentiality during my research.

I understand that this means the following:



- (a) The information made available to me is exclusive for use in my research.
- (b) I will not reveal any identifying particulars of any respondent in the research, or of any person whose particulars became known to me through official records. This applies to the publication of the research report results and any other means of communication.
- (c) Publications are subjected to the Department's approval.

Furthermore, I understand that I am solely responsible for implementing the principles of confidentiality in my research. If these are breached in any way I, and not the Department, will be held responsible for any legal action.

SIGNED AT 14:35 ON THIS 22nd

DAY OF APRIL 2016

WITNESSES

- 1. Full name: SANDEEP NICHIA  (PRETORIA)
- 2. Full name: SUZETTE VAN DER WALT  (PRETORIA)

Address:

5. UNDERTAKING

I, Nicola Cecilia Patrick (full names) agree to undertake this research according to any conditions the Department may see fit to impose.

I also agree to undertake the research without any costs to the Department that have not been approved. I agree to assume full responsibility for the research. Should it be necessary to deviate from the research programme or to terminate the research, I will inform the Department promptly.

I commit myself to a six monthly progress report which will be submitted to the Department through my supervisor.

I agree to furnish the results and a copy of the research publication to the Department after completion of the research.


SIGNATURE OF RESEARCHER

NICOLA CECILIA PATRICK
FULL NAME

DATE: 22 APRIL 2016


SIGNATURE OF STUDY LEADER/SUPERVISOR

DR. ARTHUR BARKER
FULL NAME

DATE: 22 APRIL 2016