Figure 87. Edited photo of model.
6. ARCHITECTURAL INTERVENTION

The following chapter aims to serve as an introduction to the physical architectural intervention and how it responds to context, form, function and the beginnings of technology.

6.1 RESPONSE TO CONTEXT

As the Zoo is the main element that the intervention has to relate to in terms of context, the proposal aims to re-connect the built environment to the natural surroundings in the Zoo. This is done by creating public green space, not just in the square, but also inside the building. The green space inside is represented by a green belt running throughout the first floor, with planted areas creating seating and areas of rest. In the retail court, the planted area links up to a double volume aviary cage that connects the proposal to the animal component of the Zoo. The offices on the upper floor are celebrated with green verandas that overlook the natural environment of the Zoo.

Focus is drawn to the State Museum to the East of the proposal by removing the Western wall of the Museum, and highlighting the passage to its entrance with public green spaces. The information centre is set lower than the Museum as not to draw any attention away from it.

The heritage houses next to the flats link up with the heritage route that runs through the entrance and into the Zoo. The biggest link with the South is the pedestrian bridge crossing over Boom Street. This link originates in Andries Haasbroek's building and connects with the proposal on top of the informal trade stalls. The roof of the stalls act as a walkway that leads visitors into the building, but also gives them a preview of the activities and natural environment inside the Zoo.

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figure 90. proposal response to context

figure 89. response to early site plan development
6.2 RESPONSE TO FORM

The layout of the proposal is a direct response to the natural elements on site. The building is rotated to give visitors the best view of the Zoo while inside the building.

The North and West wing creates a public square around the trees on site; this gives the offices views over the square and the Zoo. The form of the North wing accentuates the importance of nature by stepping back on the North façade, creating open public viewing areas. The West wing also steps back from the square as the Western façade becomes a viewpoint to the gateway as visitors approach the Zoo precinct from the West.

The scale and permeability of the South wing is of a pedestrian nature, allowing easy flow of visitors on both the ground and first level, while still relating to Boom Street.
Figure 92. Section through trade area showing permeability and scale.
figure 93. Sketch of proposal from NW corner showing materiality and vertical structures in proposal
The notion of an open design is continued throughout the first level, as visitors are able to view the Zoo through the building, breaking away from the previous hard edges that discouraged activity in the region. The sloping grass banks that form the Southern façade of the information centre are continued through the building to create a feel that the building is a part of its natural surroundings.

Various spaces, such as the Southern restaurant, retail shops, the bathrooms and the main stairwell on the North are vertically extruded. These solid forms throughout the building represent the city and the built fabric that the proposal finds itself in. These spaces also create a sharp contrast to the open flowing floors and green areas inside the building.
6.3 RESPONSE TO FUNCTION

INFORMAL TRADE AND CURIO STALLS

These structures are permeable to allow views of the Zoo and flow of people through them. They will give great focus to sidewalk activity, as this is where all the trading will take place, while acting as a transition to the more formal public square.

PUBLIC SQUARE

The Square is the heart of the proposal and all other functions and areas are accessible from here. It binds the proposal to the natural environment and to the city. The trees on site and the pergolas over the restaurant areas create shade for people in the space, while the square provides recreational space for visitors.

RETAIL SQUARE

The retail square forms the biggest area on the ground floor and serves as an open market. Similar to the Red and Blue shed in the V&A Waterfront in Cape Town, shop owners can rent stalls and display goods. The concept is to keep the area as open as possible to create the opportunity to rent out the entire area as an exhibition or performing space. The restaurants on the ground floor open out onto the square, creating an open feel to the retail development, with services hidden away behind the building on the Western façade.
REPTILE ENCLOSURES

The reptile enclosures create another open space that the public can enjoy without entering the Zoo. The glass enclosures and open pools and planted areas unwraps the Northern façade and creates a zoological backdrop for visitors inside the square. Due to the level difference on site, this area is set lower than the retail square. The solution to this is an amphitheatre for school groups to gather for briefings, before entering the Zoo, or for the public to enjoy during lunch.

OPEN FIRST LEVEL

The first level is the barrier between the public and private sectors in the development. It creates an open area for the public to move through and enjoy views of the Zoo, the aviary cage, the reptile enclosures, interactive zoological displays and various smaller retail shops. It links the main building with the view deck on top of the information centre, while the Northern area also serves as an exhibition space for the Zoo.

OFFICES

Two floors of offices will enjoy north light, as well as natural ventilation. They enjoy views of the Zoo, and are joined by green verandas. Services for these offices are grouped together and circulation is central to the two wings.
6.4 THE DESIGN

6.4.1 PLANS

The following sub-chapter contains floor layouts of all the levels in the proposal.

SITE PLAN

The site layout is based on relations to context around the site. Natural context is taken into consideration through the orientation of the proposal, to maximise views of the Zoo from anywhere in the proposal.

The proposal also creates views for the block of apartments across the street, and is turned off the North-South axis to maximise Northern exposure to the office levels.

Heritage houses to the South of Boom Street line up with the historical route crossing through the entrance into the Zoo. The State Museum’s side entrance links up with the public square, from which the rest of the development is accessible.
6.4.1.1 LEVEL -1 & 0

The ground level, and lower entrance level becomes the transition from public street interface to Zoo programme. Visitors move through informal trade, to a public square and open market. From here the reptile enclosures, information centre and new entrance is structured around the square, and visitors can freely move between these spaces as they please.

LEVEL 0 & -1
scale 1:500
Figure 103: Diagrammatic layout of level 0 and -1 showing relation of spaces

Figure 104: Level -1 and level 0 plan with materials
6.4.1.2 LEVEL 1

Visitors who park in the new Zoo parkade across Boom Street will enter the proposal on this level. Edge conditions have been kept open to provide users with the maximum view of the surrounding Zoo environment. Sections of the floor have been kept open where circulation is located. This creates an double volume space above the market, and the opportunity for visitors to view the activity on the floor below. The level slopes down to the view deck above the information centre.
figure 107. diagram plan of level 2 showing layout and transparent sections

figure 108. diagram plan of level 2 showing office arrangement and cubicle design
The first of two office levels are allocated towards NGOs associated with the Zoo. Sections of the layout have been kept open or transparent to avoid blocking off views of the surroundings. Circulation and services are grouped in the North-West corner of the proposal. A balcony over the aviary on the Southern end of the building creates ample recreation space. Office cubicles are grouped around open plan office arrangements.
Figure 110. Diagram plan of level 3 showing layout and transparent sections

Figure 111. Example of office cubicles
6.4.1.4 LEVEL 3

The top office floor is dedicated for new offices for the Zoo. The layout is based on the level below, with the exception of the double volume space in the middle of the West wing. The two office levels are internally connected with stairwells on the South corner and next to the service core in the North-East corner. An open deck wraps around the Northern portion of the office floor.
The following sub-chapter depicts the materiality of the proposal through the documentation of the elevations.

- re-used brick gabion walls
- off shutter concrete
- glazing
- planted wall
- ecowood cladding
cromadek steel sheeting

figure 113. south elevation with museum context
figure 114. north elevation with materials

- steel mesh around aviary
- ecowood louvres
- ecowood posts
figure 116. west elevation with materials