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DESIGN DEVELOPMENT

CHAPTER 09

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9.1 BRIDGING THE CONCEPT

A space which has intrinsic soul and life must embody memory, meaning, integration and choice, as well as keeping within principles of juxtaposition, movement, tension, dialogue and texture. The design tries to stick to these basic ideologies through every aspect - from functions and their relations to its layout on site to the details and materials. It also intimately responds to, reinterprets and relates to its context. The buildings themselves act as frames and mirrors in such a way that they create contrast and excitement.

9.2 FUNCTIONS & FLOW OF MOVEMENT

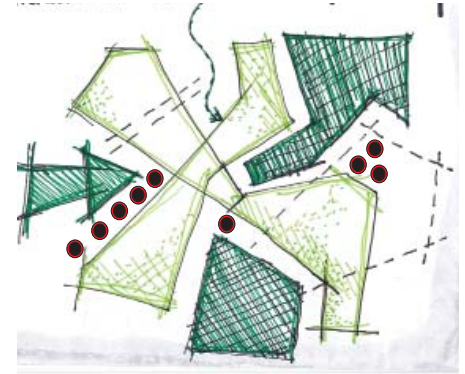
As stated in the concept chapter, the building aims to integrate itself with the surrounding community through its functions and the harnessing of social spaces. The facility aims not just to be a specialised end of term care, but rather a holistic all inclusive care package, providing choice for those with terminal conditions as well as their family members.

The Hospice aspect of the design will house 16 adult and 6 paediatric beds. This will provide in-house terminal care to an average of 277 adults and 104 children per year. Although one would think that a majority of a hospice's care happens in-house, an even larger portion of terminal patients are cared for at home. The Outpatient centre is therefore of great importance. Even patients who are eventually cared for at the facility are looked after on an outpatient basis beforehand.

The Outpatient facility includes a feeding program, counselling, home-based care office, as well as doctors' offices and a pharmacy. But the care of patients at home does not end there. The provision of an education facility will provide education to family and community member on how to care for their loved ones at home as well as the importance of nutrition, with the permaculture gardens providing further

opportunities in urban agriculture and growing one's own food. Home-based caregivers would also be provided with courses and training opportunities -allowing for expansion, training and job provision in the future. This would support not only the individual, but the families and community as well.

Management and Fundraising are also provided for in the offices, conference facilities and functions hall. The hall would provide space for exhibitions, meetings, sports and funerals etc. while creating a community asset in the heart of the area. The ability for the Hospice to accommodate community functions allows it to be further integrated, helping to dispel the taboo associated



132. Concept Diagram

with the dying process. Reintroducing such a natural process into the everyday. The building as a hospice needs not only to be a space filled with life, but on a practical level it still needs to function smoothly and have a good flow of process around site.

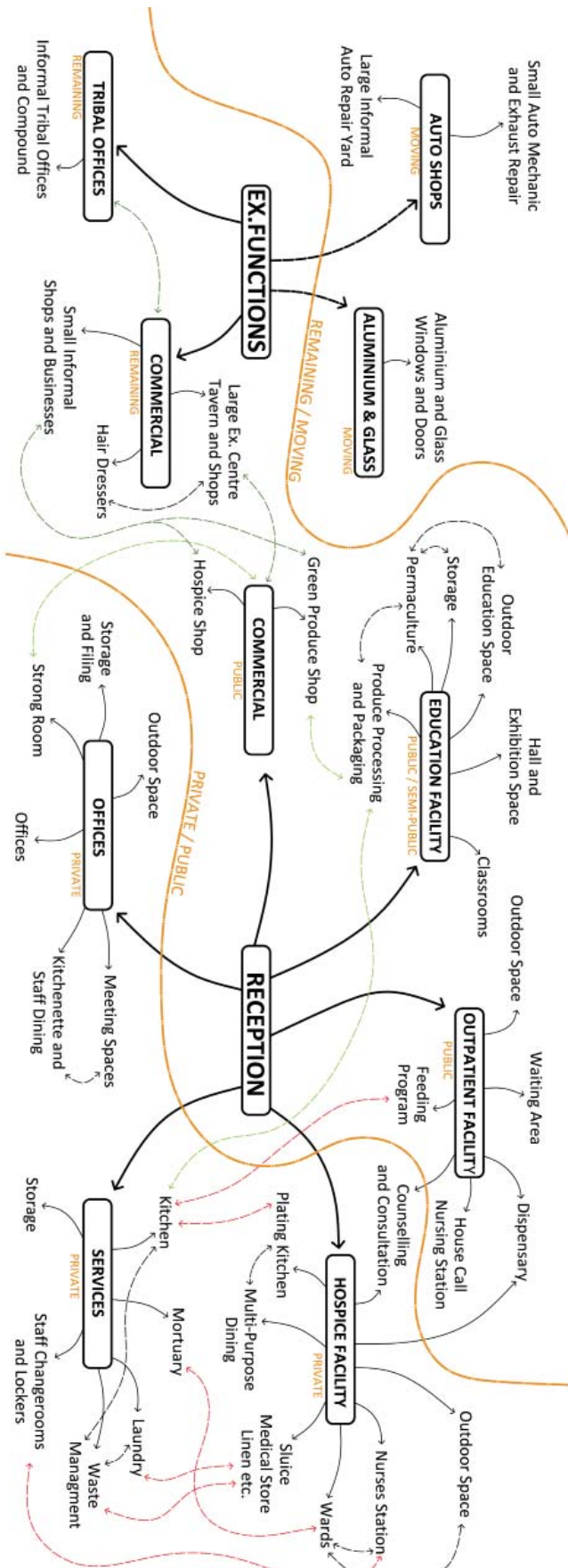
Hierarchy of spaces is also of great importance. So the definition of public, semi-public, private and semi-private also need to be taken into account when the functions are laid out. In order to help the understanding of the complicated functions and their relationship a functional relationship diagram has been arrived at.



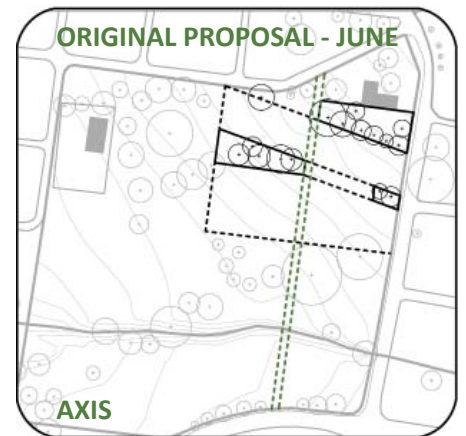
133. A caregiver bathes a patient receiving home based care



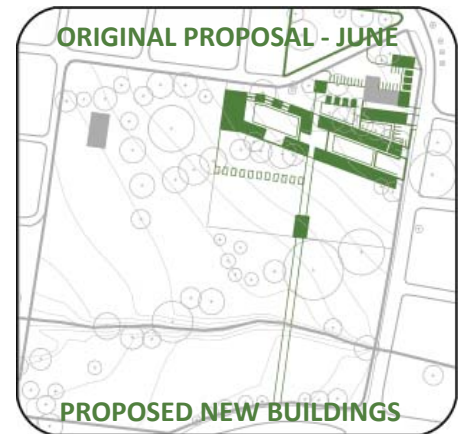
134. Functional Relationship Diagram



135. Original Proposal - June - Sacred Space diagram



136. Original Proposal - June - Axis diagram



137. Original Proposal - June - proposed new buildings diagram



138. Original Proposal - June - Model of Facility in Context

FUNCTIONAL RELATIONSHIP DIAGRAM

9.3 THE PROCESS

The Design began with the demarcation of sacred spaces defined by the trees, and the planning of the inside/outside spaces which are defined and edged by the buildings themselves. Each of the buildings becomes an axis. These axes have been defined by the natural surrounds, such as the trees, as well as the existing grid along which Mamelodi and the previous functions on site have been aligned. This works with and embodies the memory and heritage of the site, while still striking out with something new.

The internal/external spaces are designed to have various levels of privacy, but none are inaccessible from the others. Rather, passive design principles such as changes in level, walls, ramps and stair cases have been used to break them up and dissuade people from entering the more private spaces - unless they have a reason to be there. In essence they create the threshold of the spaces. Yet many of the spaces have visual links with each other in places to create and maintain connection.

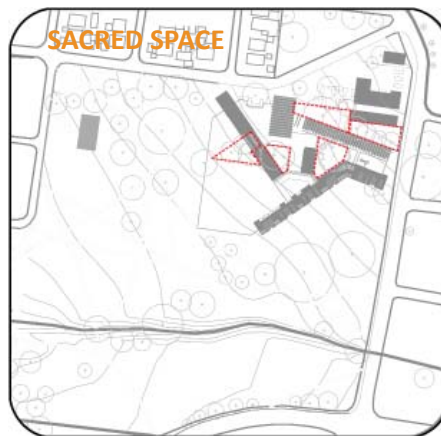
The buildings themselves, through form and hierarchy again, are defined by the opposing forces of the natural, as well as the existing. This leads to a juxtaposition of form, spaces and functions in and around site.



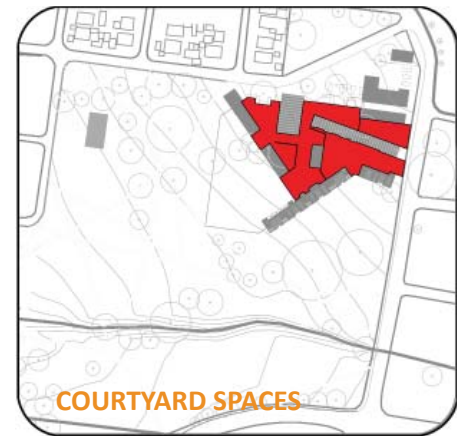
139. Diagram of Buildings being retained



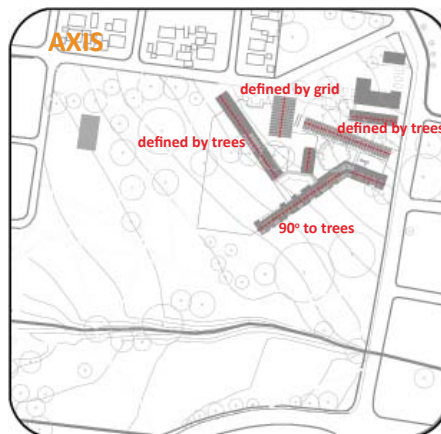
140. Diagram of proposed new buildings



141. diagram of sacred space



142. diagram of courtyard spaces



143. diagram of axes



144. diagram of community activity



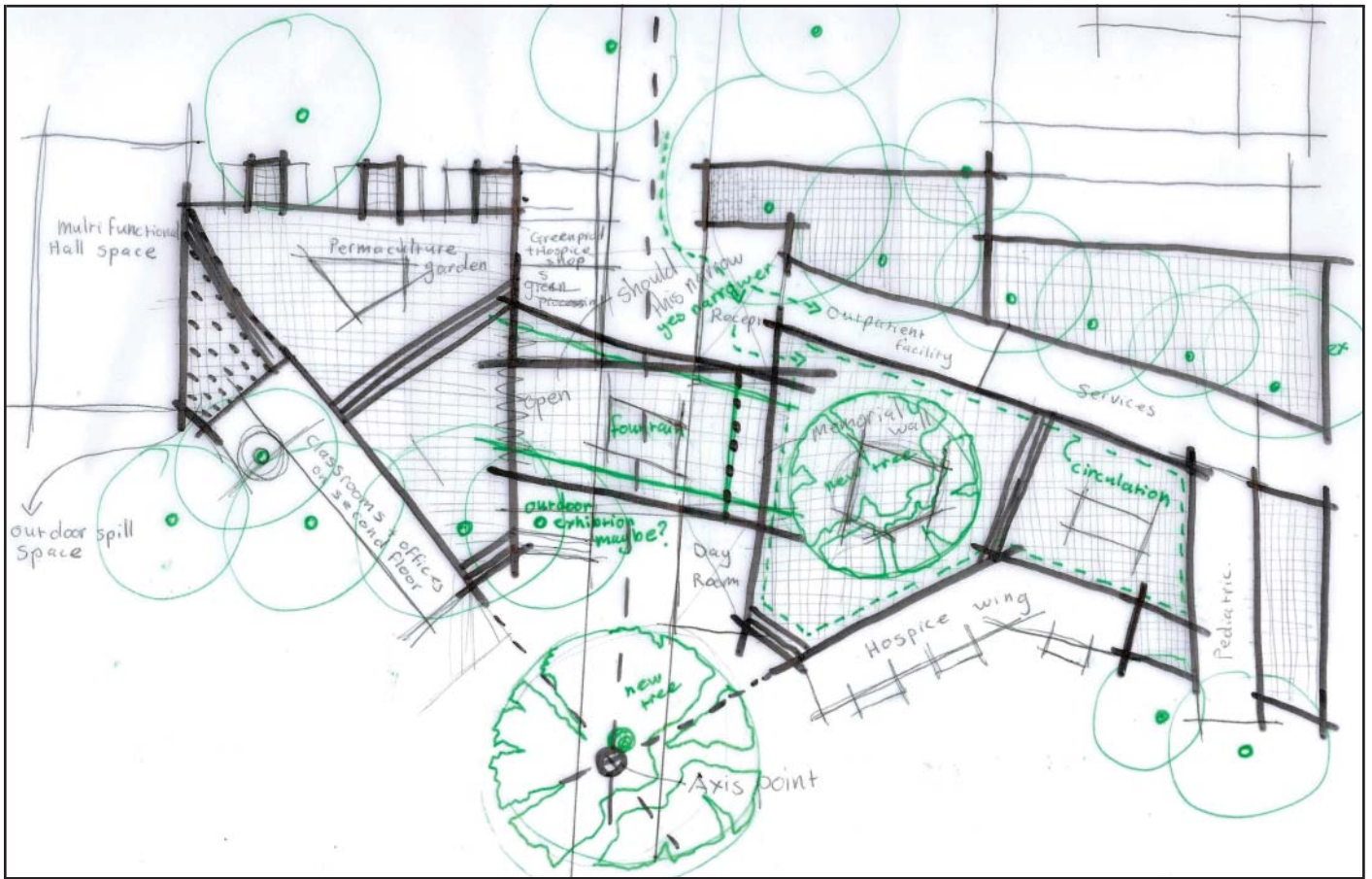
145. structural model through the hospice wing - external of ward



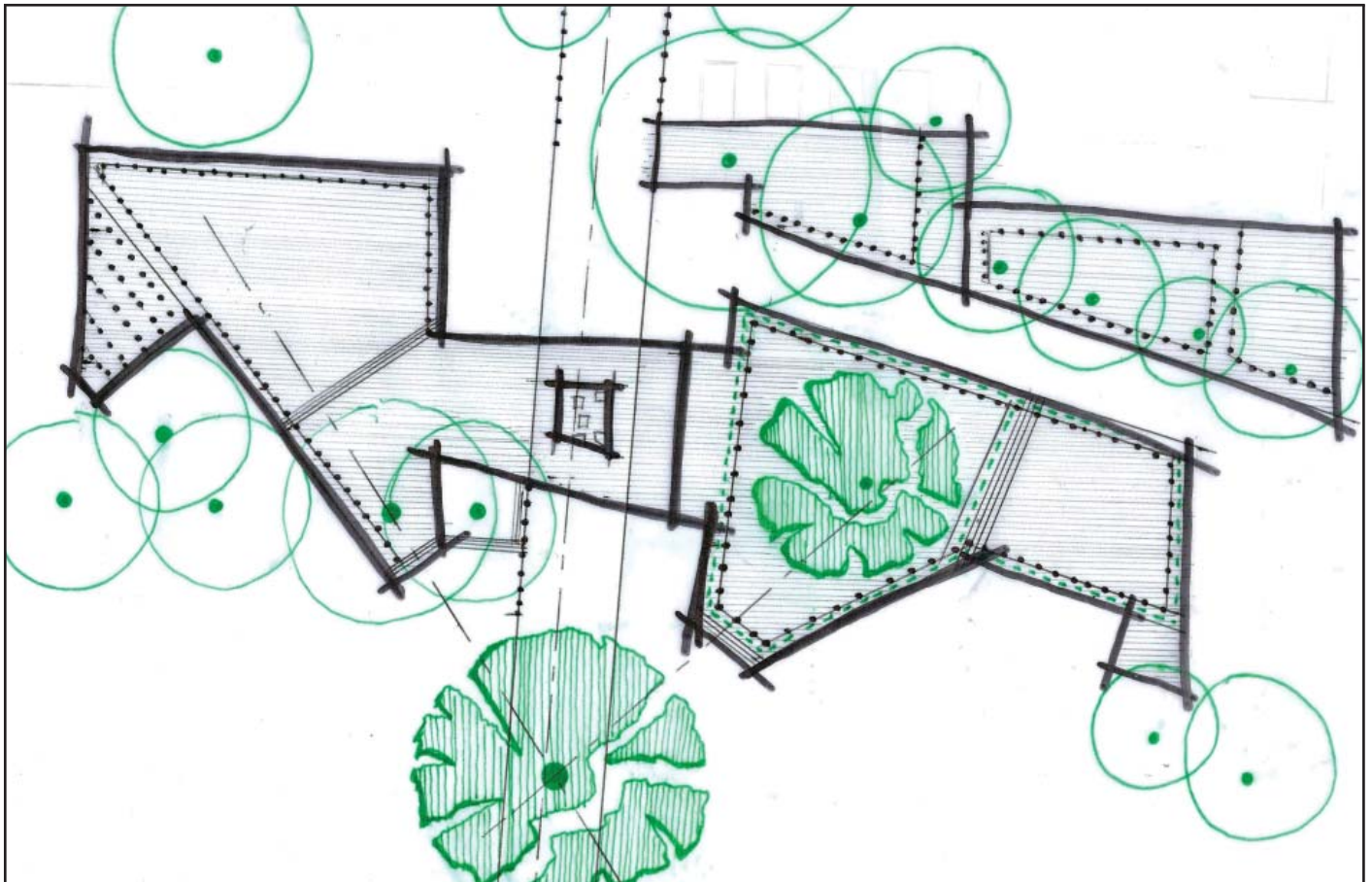
146. structural model through the hospice wing - Internal of ward



147. structural model through the hospice wing - external



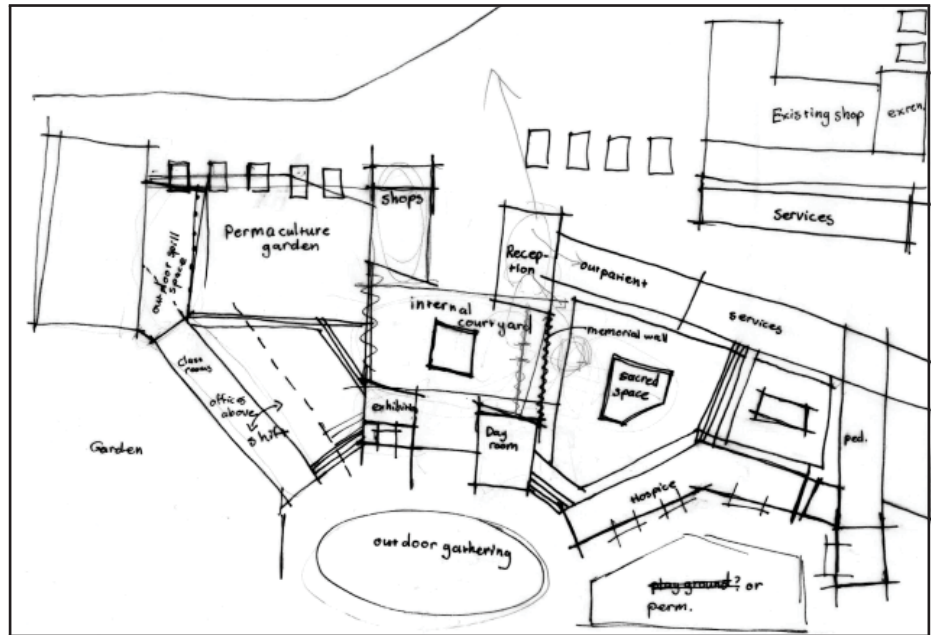
148. Study of courtyards and sacred spaces 1



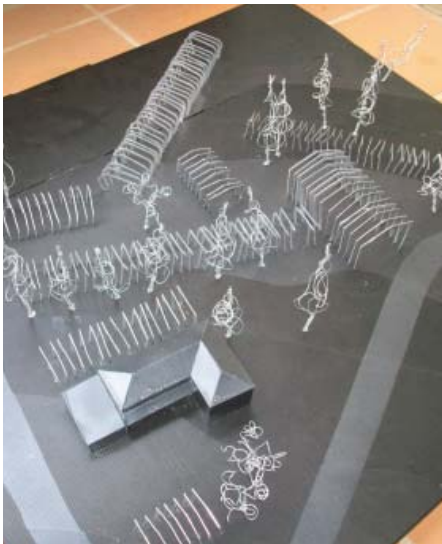
149. Study of courtyards and sacred spaces 2

The design evolved from a very rectilinear form, as can be seen in Fig. 137. But the spaces were too straight edged and institutional. The plan as well as the form began to open up to its surroundings creating instead dynamic interaction.

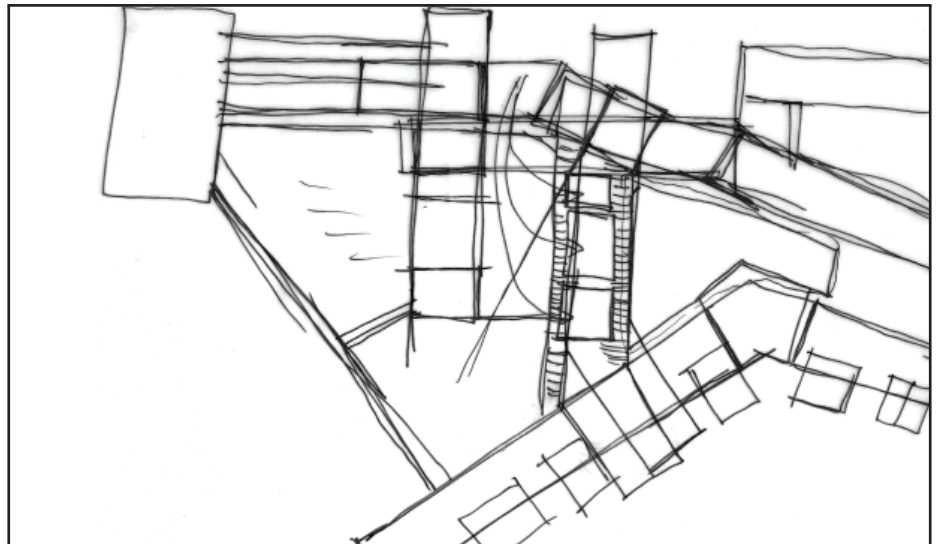
Studies of the voids or courtyard spaces began to influence the design by opening it up, and separating it off in alternating areas. Manipulating space to the point where the buildings themselves slowly separated to make statements of their own.



150. Sketch plan showing zoning of functions



151. Structural bay model photo 1



152. Rough sketch plan



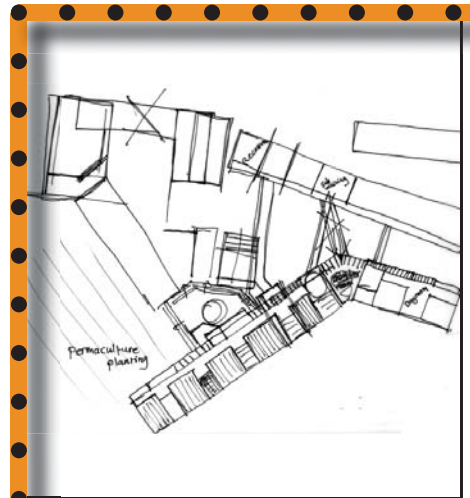
153. Structural bay model photo 2



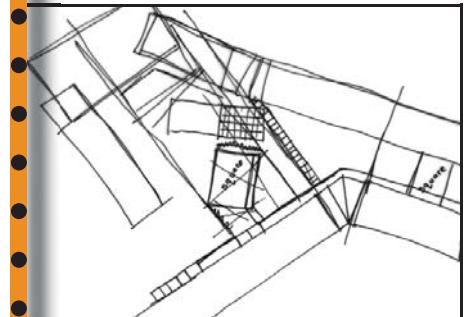
154. Sketch plan with external circulation



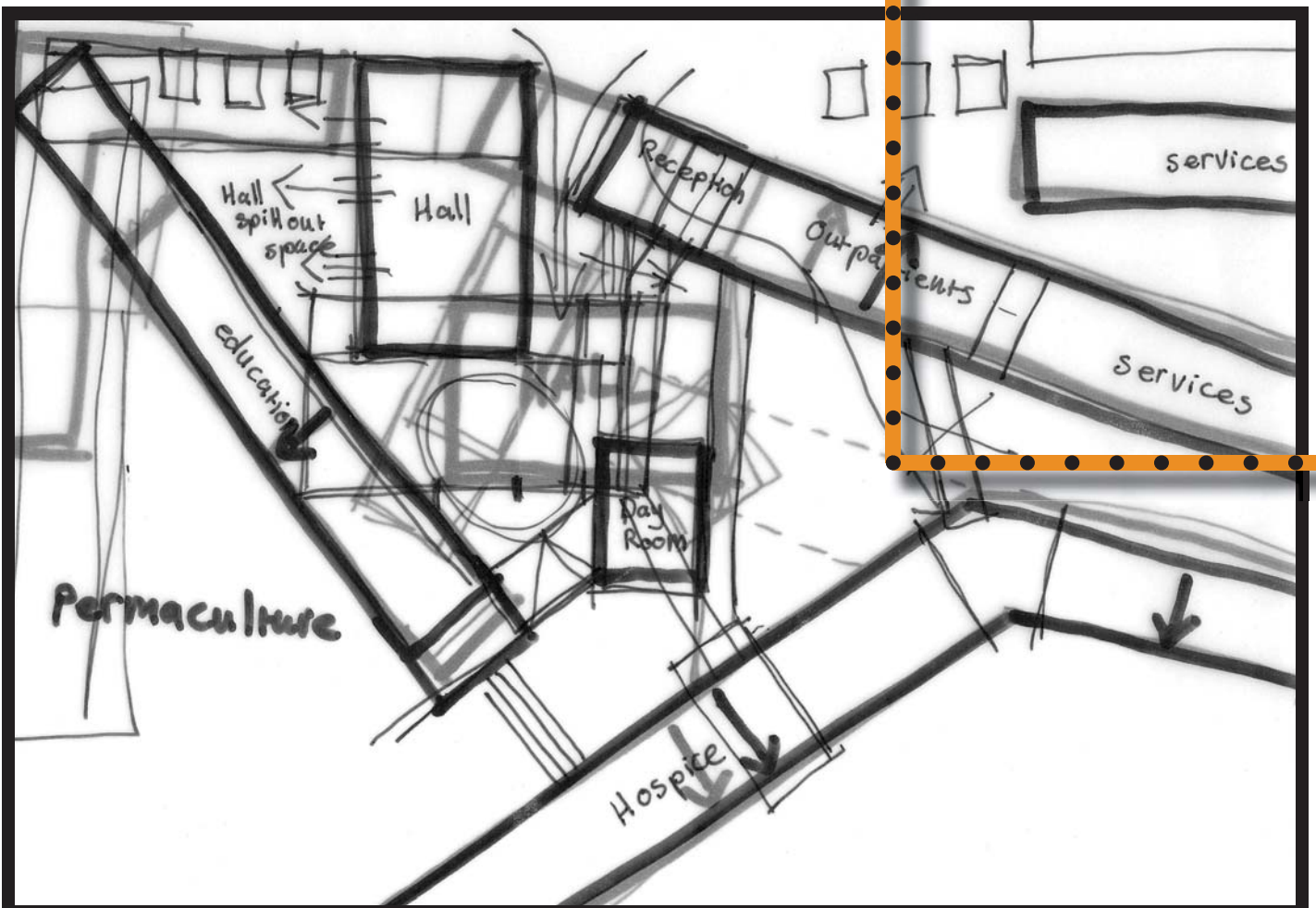
156. Structural bay model photo 3



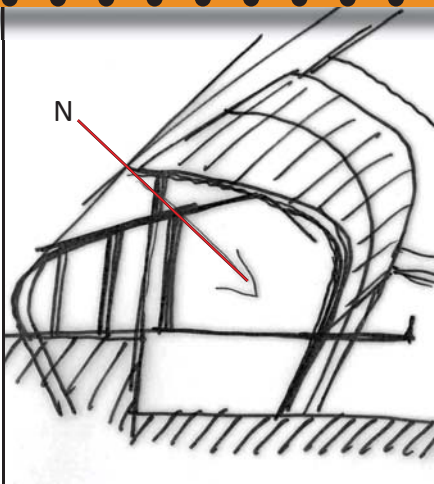
155. Sketch plan



157. Sketch plan



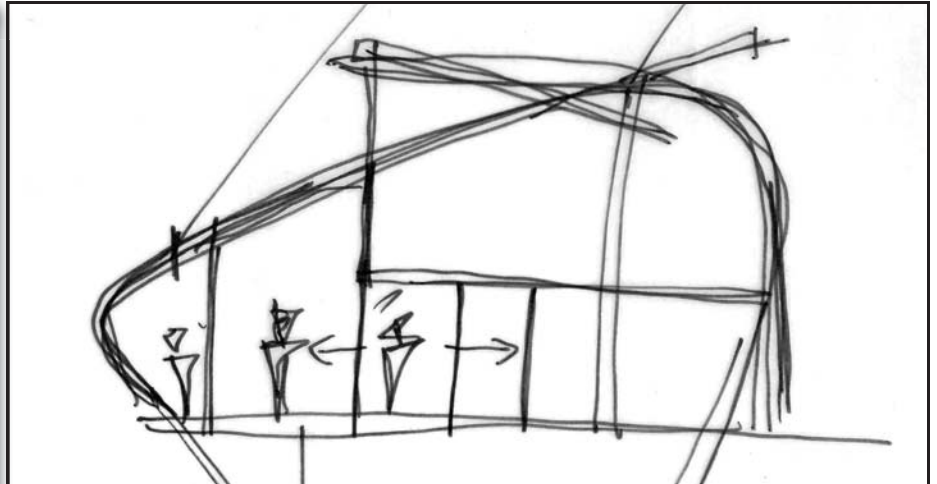
158. Final sketch plan



159. Concept sketch - clerestory lighting

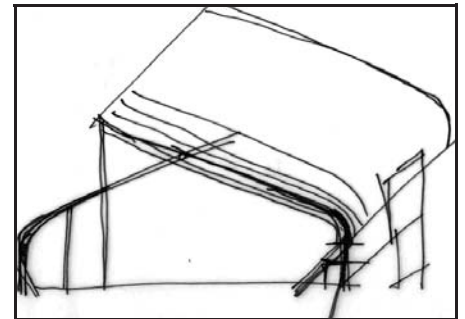
The design began to formalise around the juxtaposition of the existing and the natural. The curvilinear form crept into aspects of the building until finally it began to dominate the section.

The form broke up and modulated into voids, solid and permeable elements, incorporating flat planes that could

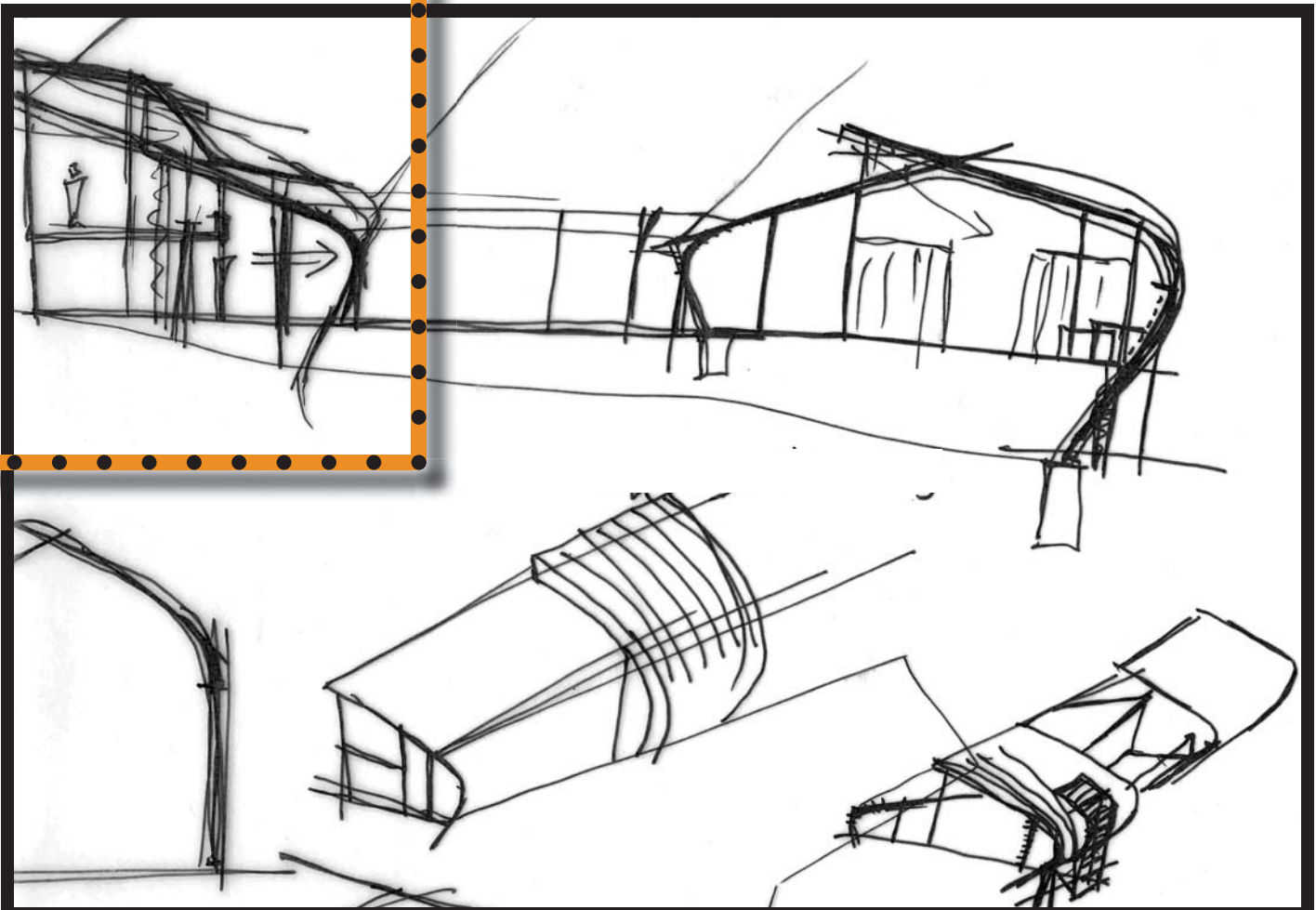


160. Concept sketch - spacial flow

adapt to use and functions, as well as its surroundings and situations. The exercise became one of the adaptation and expression of the form in varying ways that responded to the users needs such as to how it would relate to balcony spaces as opposed to wards and how would it differentiate between the two yet still both speak of the same essence.



161. Concept sketch - form



162. Concept sketches - development of form

9.4 CREATING JUXTAPOSITION

In order to create a life-filled architecture we can no longer create unambiguous rectangular spaces. Christopher Day says:

“Hard mineral matter, hard lines, hard corners, repetitive unambiguous form. We can’t live in such places without something else to sustain us. This abstraction and artificiality feeds alienation. Add other ‘shut-off’ factors and it becomes easy to walk with open eyes blank past an accident, past a cry for help.” (DAY, C. 2008: 88)

Well then we must create a design which stands out, thinks outside of a linear, rectangular box and embodies the natural, as well as at the same time juxtaposing it - creating the tension that is life.

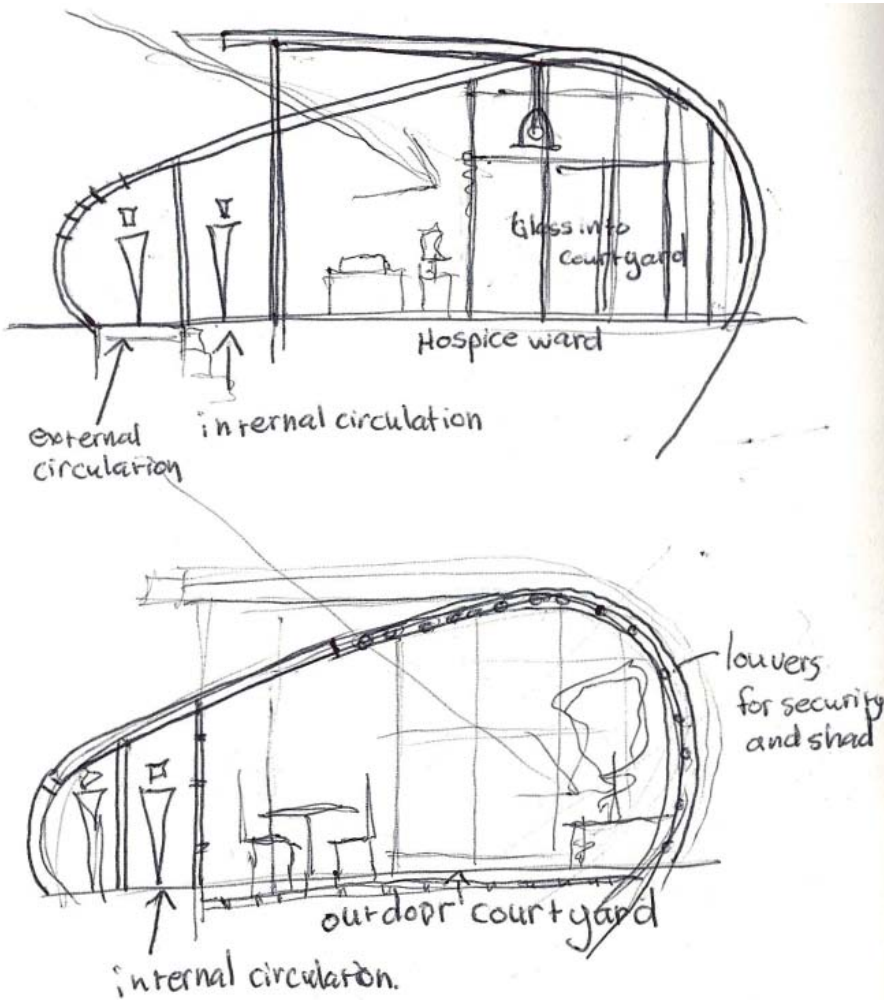


163. Concept Sketch

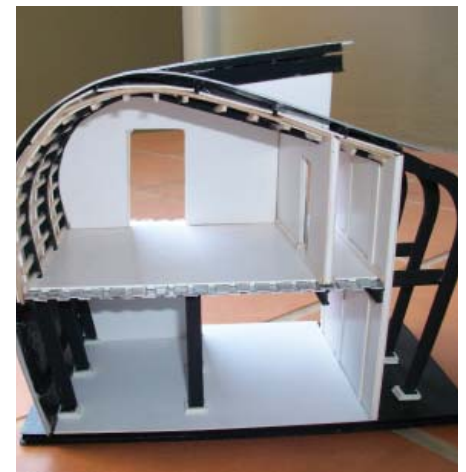
As stated previously in the theoretical discourse chapter, Alexander and Day both look to the natural, and various architectural elements, such as light and texture, when trying to embody meaning and life into architecture. Yet these can become too limiting in terms of the architecture that they can

produce - when used as a recipe. What is common to both architectural and to artistic theory is that two overriding elements should be present to create the perception of life: movement and visual interest.

The design takes the natural of the site



165. Concept Sketch of differing conditions through the building



164. structural model through the hospice wing - side on



166. structural model through the hospice wing - curved I beams



167. Precedent - Wheatsheaf House

and expresses it through its curving arching back. The curve creates movement. The human eye is naturally drawn to curves and diagonals - creating a sense of movement within the field of vision. The curve also implies a more innate sense of shelter which is reinforced through the use of natural

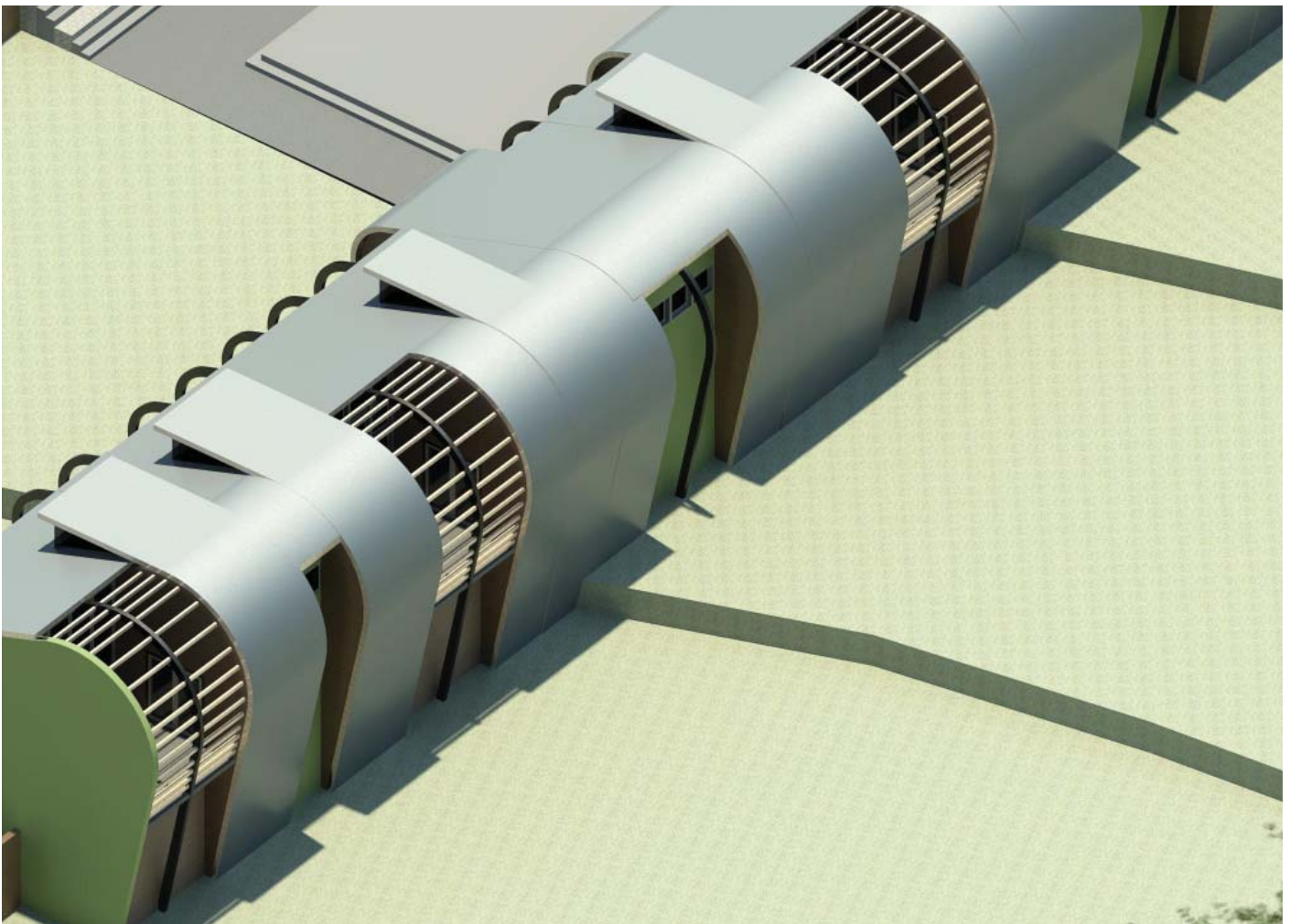


168. Precedent - Avenell House

material on the internal treatments.

But while the design takes something as elemental as the curve from nature, it also creates opposition - holding itself apart from what is natural. In the process it accentuates and frames both its surroundings and itself as can

be seen in the precedents above. The design achieves this through texture, in the wooden screens, industrial material usage and window treatments. Yet where the design does not only interact with the natural, it flattens out into planes that do not jar with the existing buildings.



169. 3D rendering of Hospice Wing

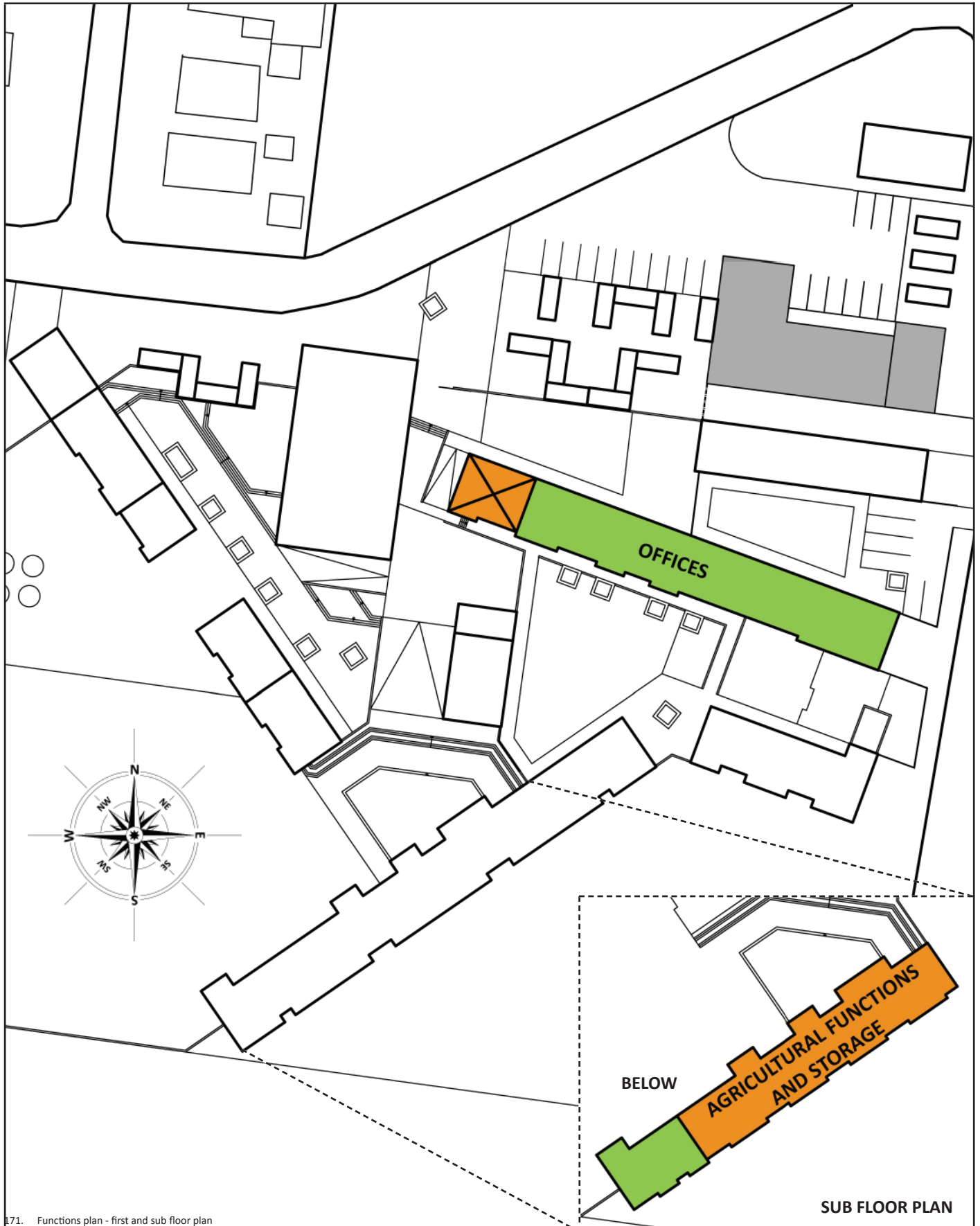


FACILITY FUNCTIONS - GROUND FLOOR PLAN



170. Functions plan - ground floor

FACILITY FUNCTIONS - FIRST & SUB FLOOR PLAN



171. Functions plan - first and sub floor plan

9.5 THE DESIGN

The buildings jut out into the landscape capturing views, enclosing spaces and responding to both the sacred and heritage of the site.

The building predominantly curves towards the natural spaces and around those that most need to embody shelter and protection. While the spaces relating to the existing or community functions respond to the existing by incorporating elements and forms from the surrounding context.

This shows the delicate balance between green space and the surrounding context, coming to an amalgamation and marriage of both, in a way that is still respectful and practical.



172. 3d render of site - South West



173. 3d render of site - South South West



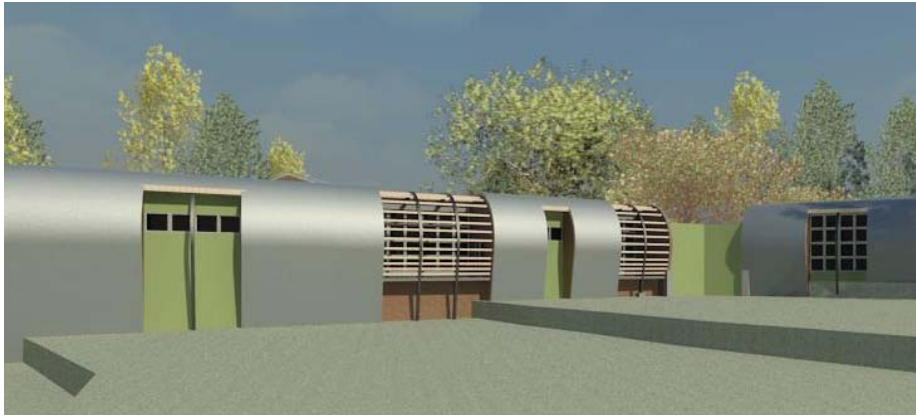
174. 3d render of site without trees - North East



175. 3d render of site - North west

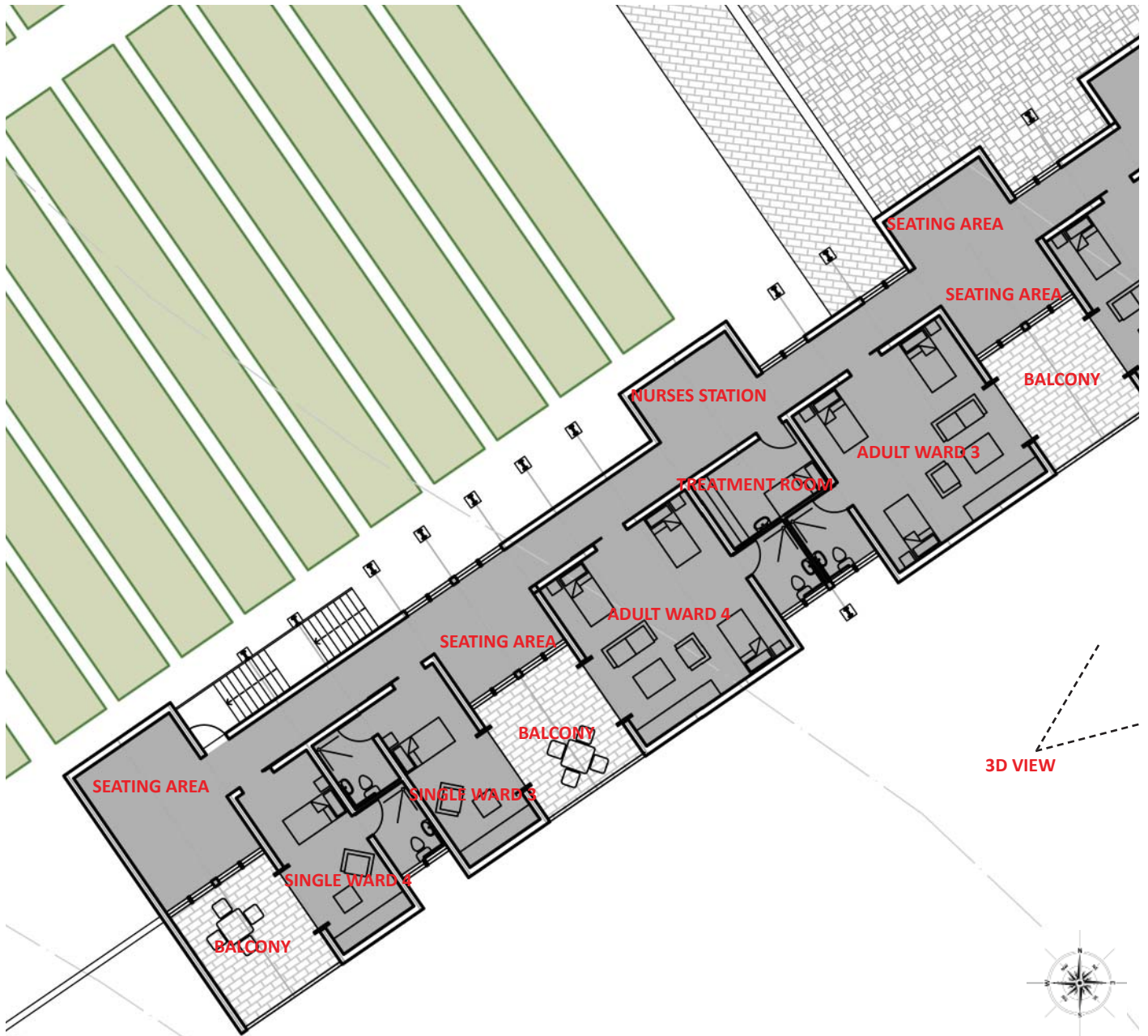


HOSPICE FACILITY - ADULT WARDS



The hospice facility responds to the function, the natural surroundings as well as the security issue presented by the surroundings. The slatted balconies not only break up the form creating more interest, but also provide a connection to the natural while being an aesthetically fitting security solution. Helping the patients to feel safe and secure - a must in a hospice environment.

176. 3d render - hospice building



177. Ground floor plan - hospice

HOSPICE FACILITY - PAEDIATRIC WARDS & COURTYARD

The paediatric building is separated from the main hospice building in order to provide a secure environment that caters to the needs of the children, which includes the internal play space and day room. The building form is picked up and reflected in the opposing building, so that the complex speaks to its various elements.



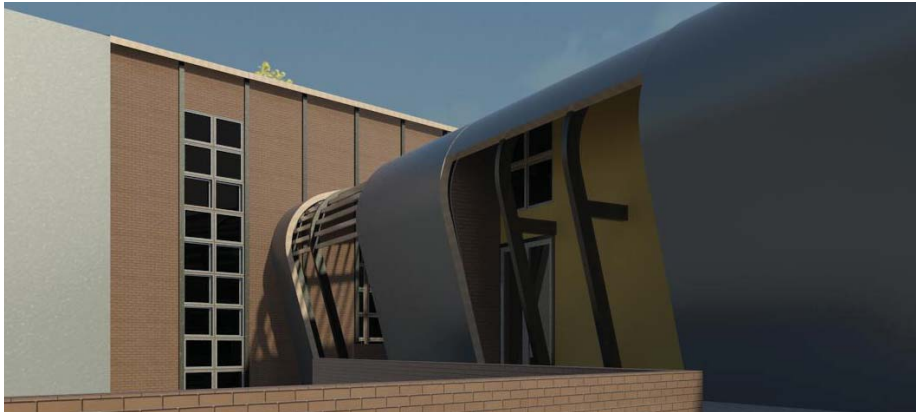
178. 3d render - paediatric courtyard



179. Ground floor plan - paediatric building



RECEPTION & OUTPATIENTS FACILITY



The reception and outpatient's facility are positioned in the most public area of the site just as you enter the facility's grounds. The building extends its form into that of the hall in order to create an entrance and threshold, not only to the hall but to the rest of the site. It frames views and encloses in such a way that it becomes a gateway.

180. 3d render - reception - hall junction

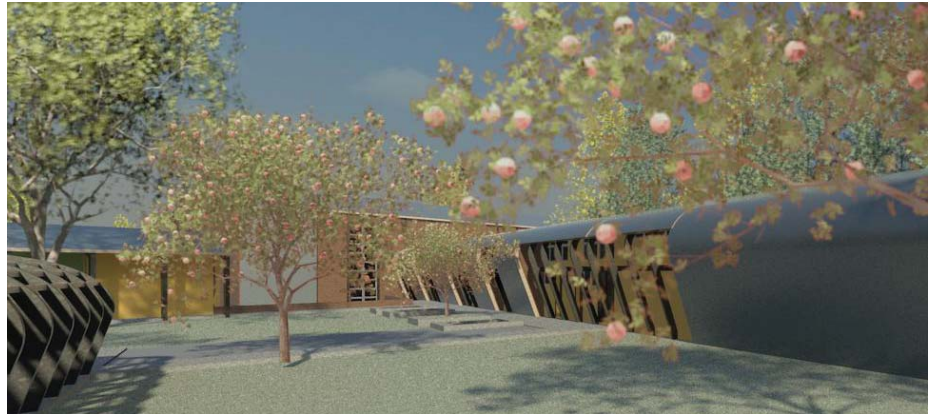


181. Ground floor plan - reception and outpatients

OUTPATIENT FACILITY & SERVICES

The services are tucked behind the existing building in order to both screen the Hospice from the existing, as well as to capitalise on the existing service area.

While the trees in the staff courtyard screen the main facility, defining its edge and creating beautiful shaded areas and views for the offices and outpatients.



182. 3d render - courtyard view



183. Ground floor plan - services and staff courtyard

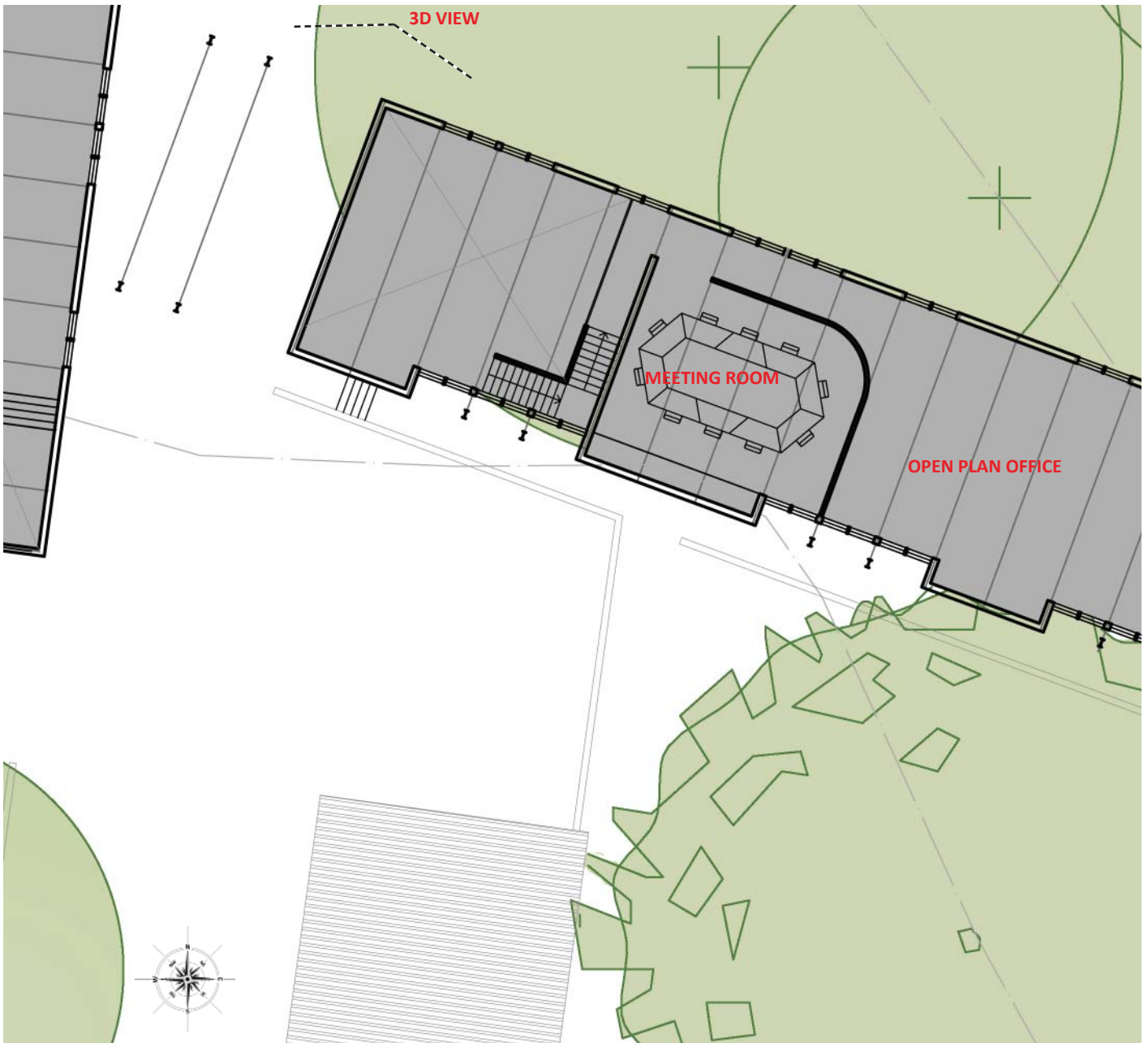
OFFICES - MEETING ROOM & OPEN PLAN OFFICE



184. 3d render - office and reception

The offices, conveniently positioned on the first floor of the outpatient facility, share the main reception.

The Northern side of the building flattens out and becomes more rectilinear to respond to the existing surroundings and buildings on and around the site. While the Southern edge curves towards the hospice and paediatric courtyard.



185. First floor plan - offices

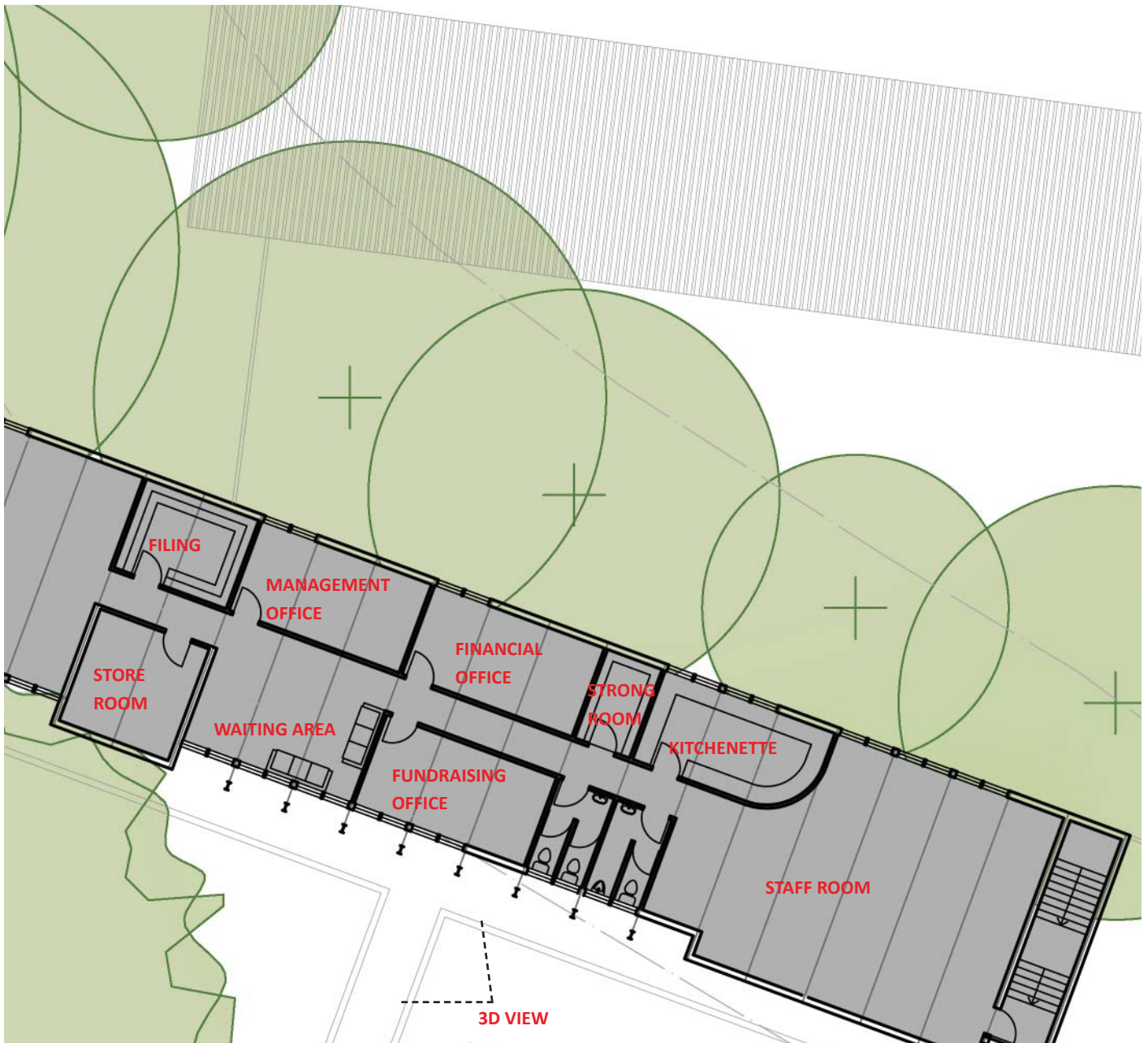
OFFICES & MAIN STAFF ROOM

A sub-waiting area is provided for the main offices. This space breaks up what would have been a long passage otherwise and provides more variety of spaces available for use.

The staff room has separate access into the staff courtyard and parking allowing for easier access for staff on a break or on their way to work.



186. 3d render - hospice courtyard



187. First floor plan - offices and staff room



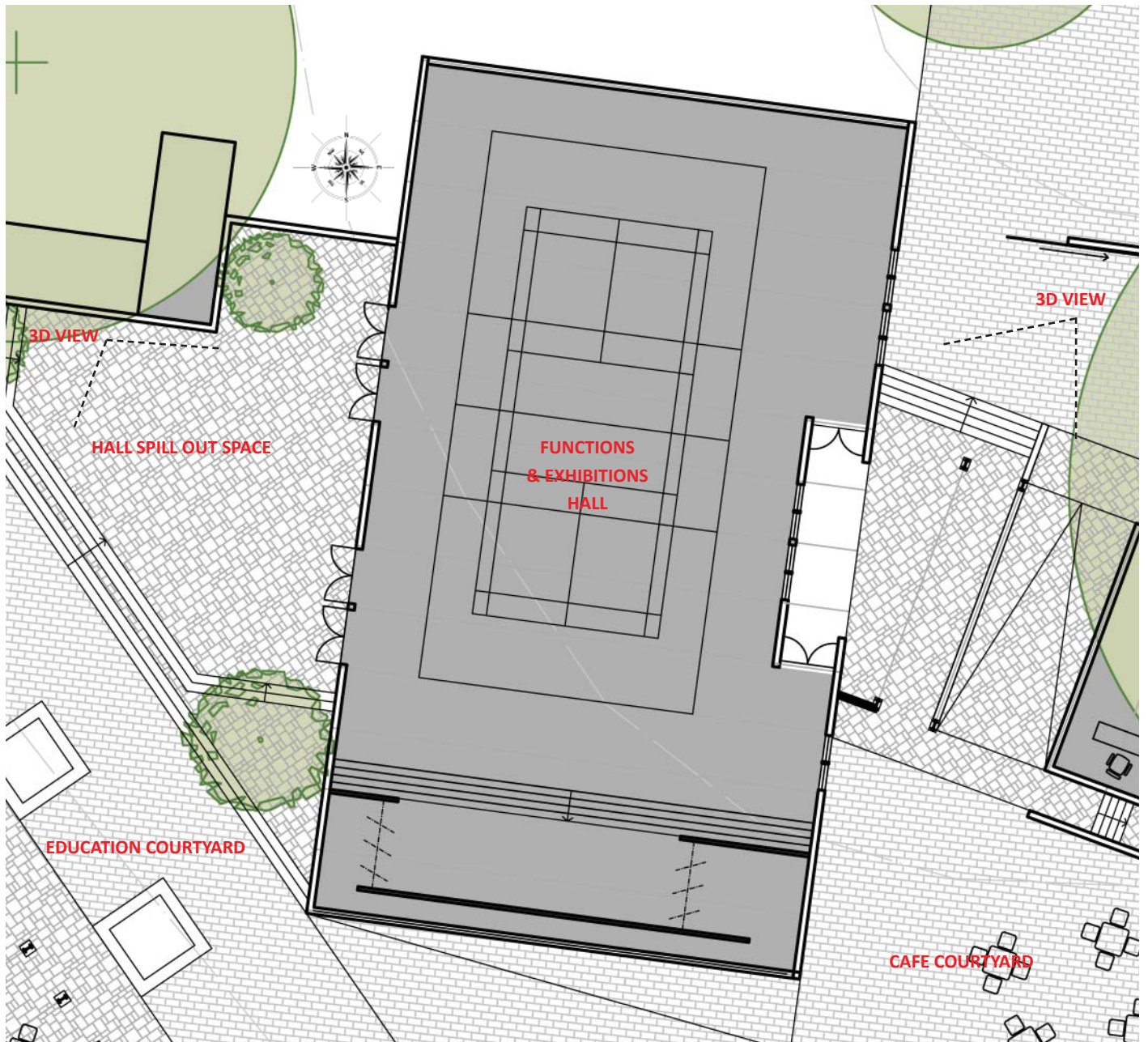
FUNCTIONS AND EXHIBITION HALL



188. 3d render - educational courtyard

The hall provides for multiple functions from funerals, events, exhibitions to sports such as volleyball and badminton.

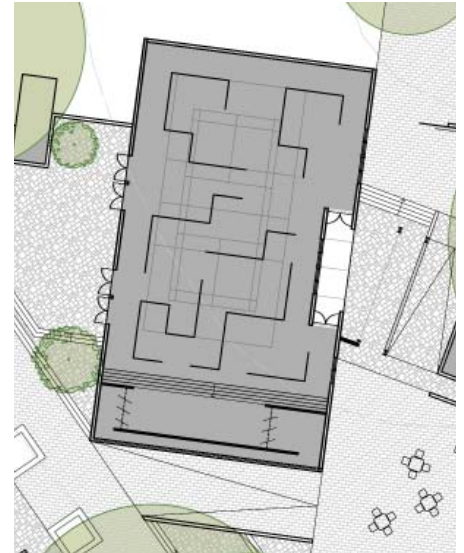
The hall is entered through the porticoed space on the Eastern side of the building. It also provides spill out space for larger functions into the Western educational courtyard. While a cafe in the central space could potentially cater for functions as well.



189. Ground floor plan - Hall set up for sport



192. 3d Render - Hall entrance and threshold



190. Ground floor plan - Hall set up for an exhibition



191. Ground floor plan - Hall set up for an event



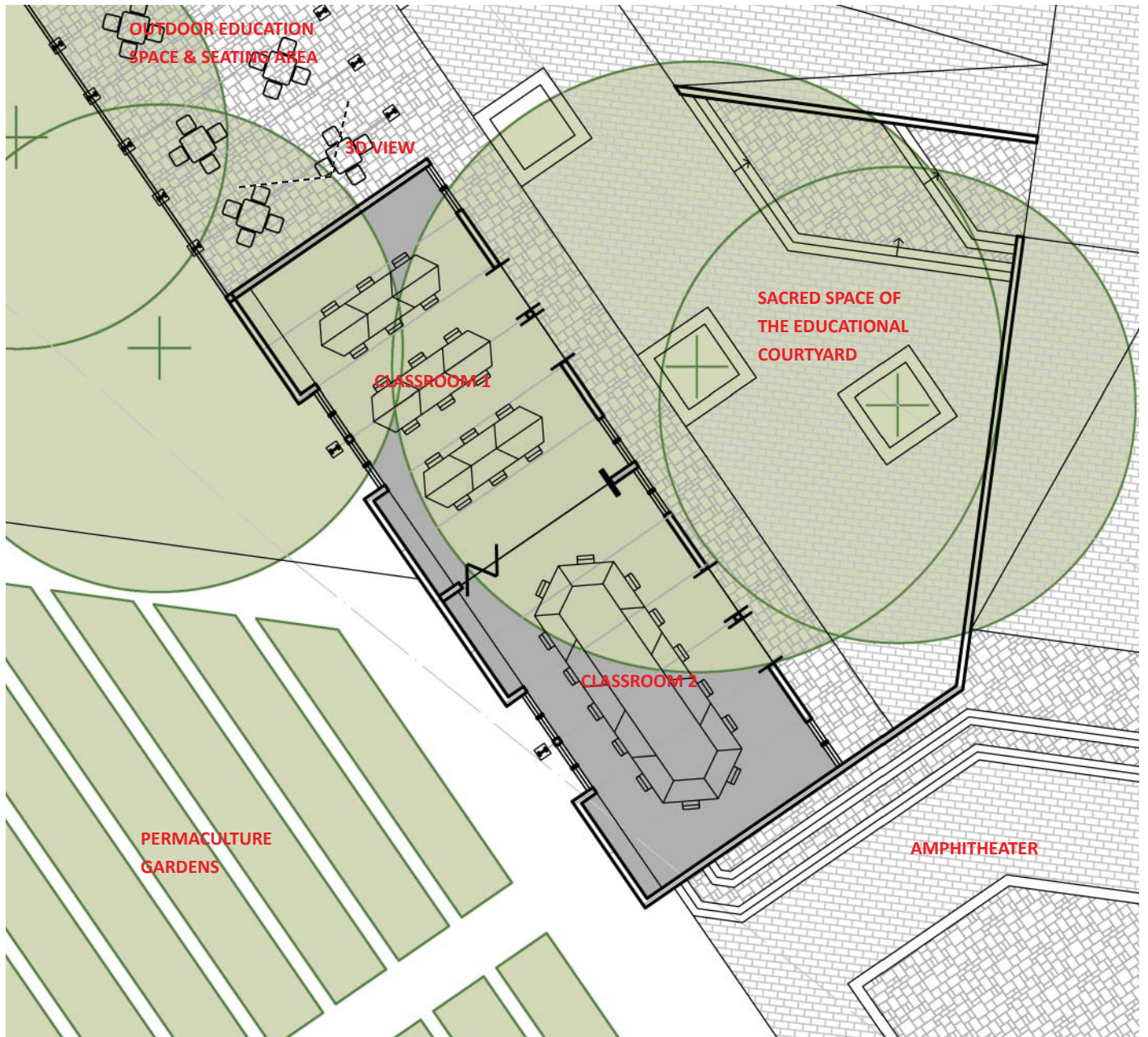
193. Ground floor plan - Hall set up for conventional seating

EDUCATION FACILITY - CLASSROOMS



The education celebrates a very tangible connection to the natural. With a curvilinear shaded seating area that looks out onto the permaculture gardens, as well as bordering the more formal educational courtyard and the sacred space created by the existing trees.

194. 3d render - Outdoor education and seating area



195. Ground floor plan - Classrooms

EDUCATION FACILITY - CONFERENCE CENTRE & HOSPICE SHOP

The formalised courtyard is broken into separate spaces through level changes and allows for impromptu seating along fountains and planters as well as shaded steps.

Subtle changes in paving also delineates between the covered walk way, steps and open areas.



196. 3d render - educational courtyard



197. Ground floor plan - conference centre & educational courtyard