

# Chapter 5

## Precedents and programme

The programmatic precedents were studied in order to understand the relationship visitor centres should have with a UNESCO World Heritage Site itself. An understanding of visitor centres allows the architect to assess the role architecture plays in explaining and interpreting the environment. The chosen precedents range consecutively from international, to national, to local. The facilities were assessed in terms of visitor numbers, location, facilities, purpose, aspirations, relationship with the landscape, and the extent to which visitors are allowed onto the sites themselves. The assessment then assisted the researcher in developing the programmatic requirements of the site.

### 5.1 Precedents

#### 5.1.1 Stonehenge

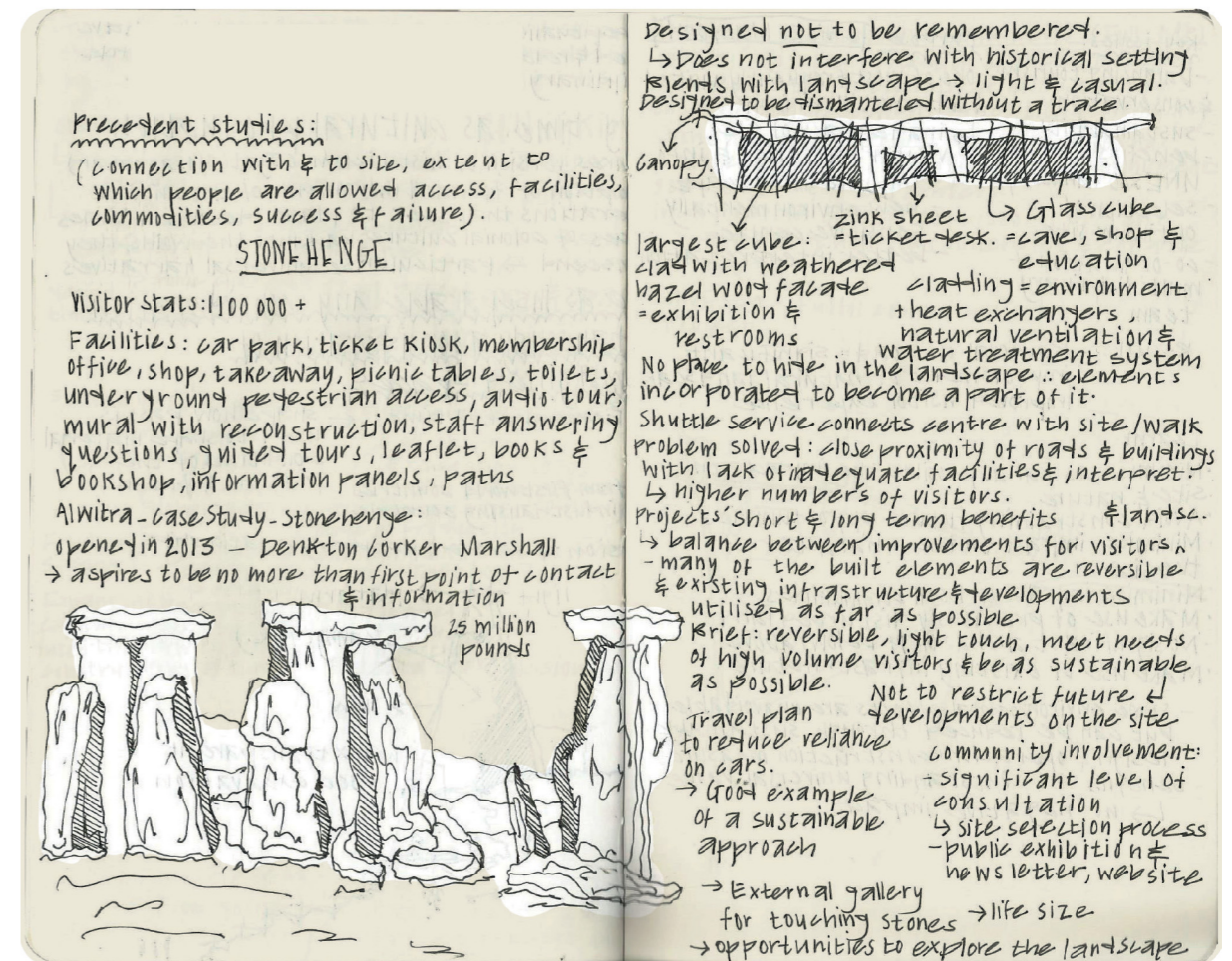
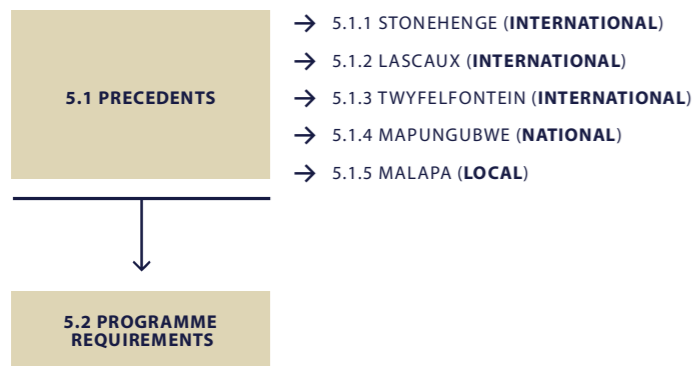
Date: 2013 | Visitor numbers: 1 000 000 per year | Context: Roads and buildings

**Facilities:** Exhibition area, rest rooms, café, museum shop and educational facilities, ticket desk, and shuttle service with pathways (Alwitra, 2015:2).

**Purpose:** The brief involved improvements to the landscape setting of the Stonehenge monument, as well as a sensitively designed and environmentally sustainable visitor centre acting as a gateway to the Stones and the wider World Heritage Site (Stonehenge Environmental Improvements (Alwitra, 2015:2).

**Aspiration:** The design of the visitor centre aspires to be no more than a first point of contact and information, secondary to the attraction in all ways. Stephen Quinlan of Denton Corker Marshall (Case Study Stonehenge Visitor Centre 2015:2) states that: "When visitors to Stonehenge go back home again remembering the stone circle but not the visitor centre they have passed through, then we will have achieved exactly what we wanted". Relationship with the landscape: The light and casual building opens up to the horizon so as to blend with the undulating landscape. The lightness contrasts with the monolithic stone circle. The whole structure has been designed so that it could be dismantled at any time without leaving a trace ((Alwitra, 2015:2).

**Visitor access:** A shuttle service connects the visitor centre with the Stones for those who prefer not to walk (Stonehenge Environmental Improvements Project 2014:[s.p.]).



### 5.1.2 Centre International d'Art Pariétal Montignac Lascaux (Lascaux IV Caves Museum)

Date: 2009 | Visitor numbers: 1 100 000 per year | Context: Farmland

**Facilities:** Car park, ticket kiosk, membership office, shop, take-away outlet, picnic tables, toilets, underground pedestrian access, audio tour, mural with reconstruction, staff answering questions, guided tours, leaflet, bookshop, information panels, paths.

**Purpose:** In 1955 evidence of damage to the rock art on the cave walls started to appear. The cave was closed overnight in 1963, abandoning an economy fully reliant on the touristic exploitation of the site. The Hall of the Bulls and the Axial Gallery, commonly known as Lascaux II, were built in 1983 as a partial reproduction of the original cave. The reconstruction reached its limits as visitor numbers of between 250 000 and 300 000 were experienced annually (Hudson, 2012).

**Aspiration:** The aim with the building is to provide the visitor with the same experience the cave would provide, while protecting the latter.

**Relationship with the landscape:** The landscape is viewed as essential to the conservation of the caves. The design responds to it in order to improve the state of the landscape and minimise construction and visual impact, while providing protection from risks such as development and vandalism. The building sits in a dip and follows the contours of the site so as to expose the intricacies of the landscape.

**Visitor access:** The facility is designed as a replica of the original cave as the original is inaccessible to the public.

### 5.1.3 Twyfelfontein

Visitor numbers: Approximately 56 425 per year | Context: Isolated rural area

**Facilities:** The visitor centre consists of a reception area with ticket office and tour guides; an exhibition area with historical and background information and visual material; a curio and craft shop; an outside café and kiosk; and paths to specific decks for viewing rock art (Rivett-Carnac, 2011:25).

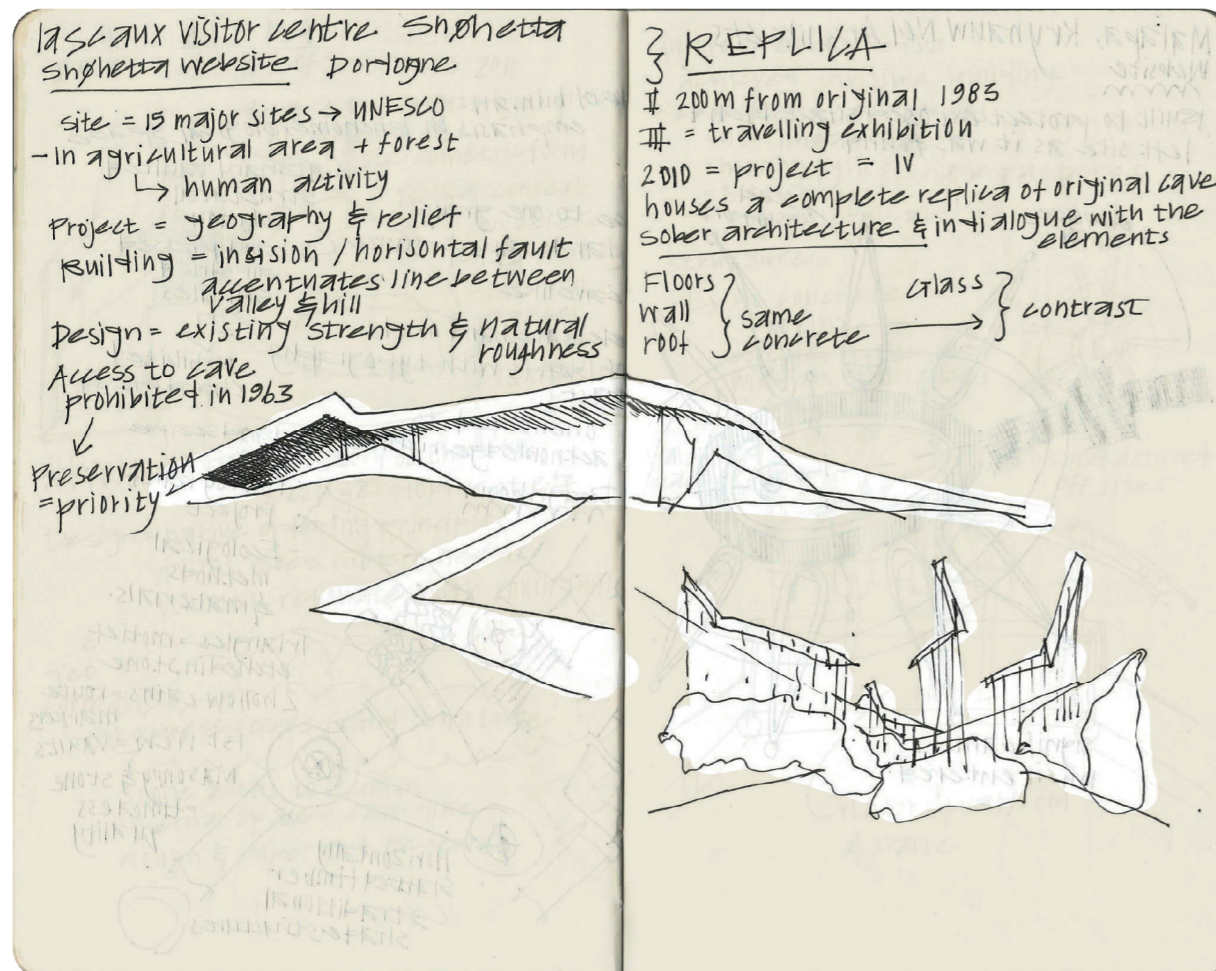
**Purpose:** Interpretation of the site and, as an effort to protect the rock art, the facility controls the extent to which visitors have access to the landscape.

**Aspiration:** The design, location and materiality of the facility blends into the landscape in order to become invisible.

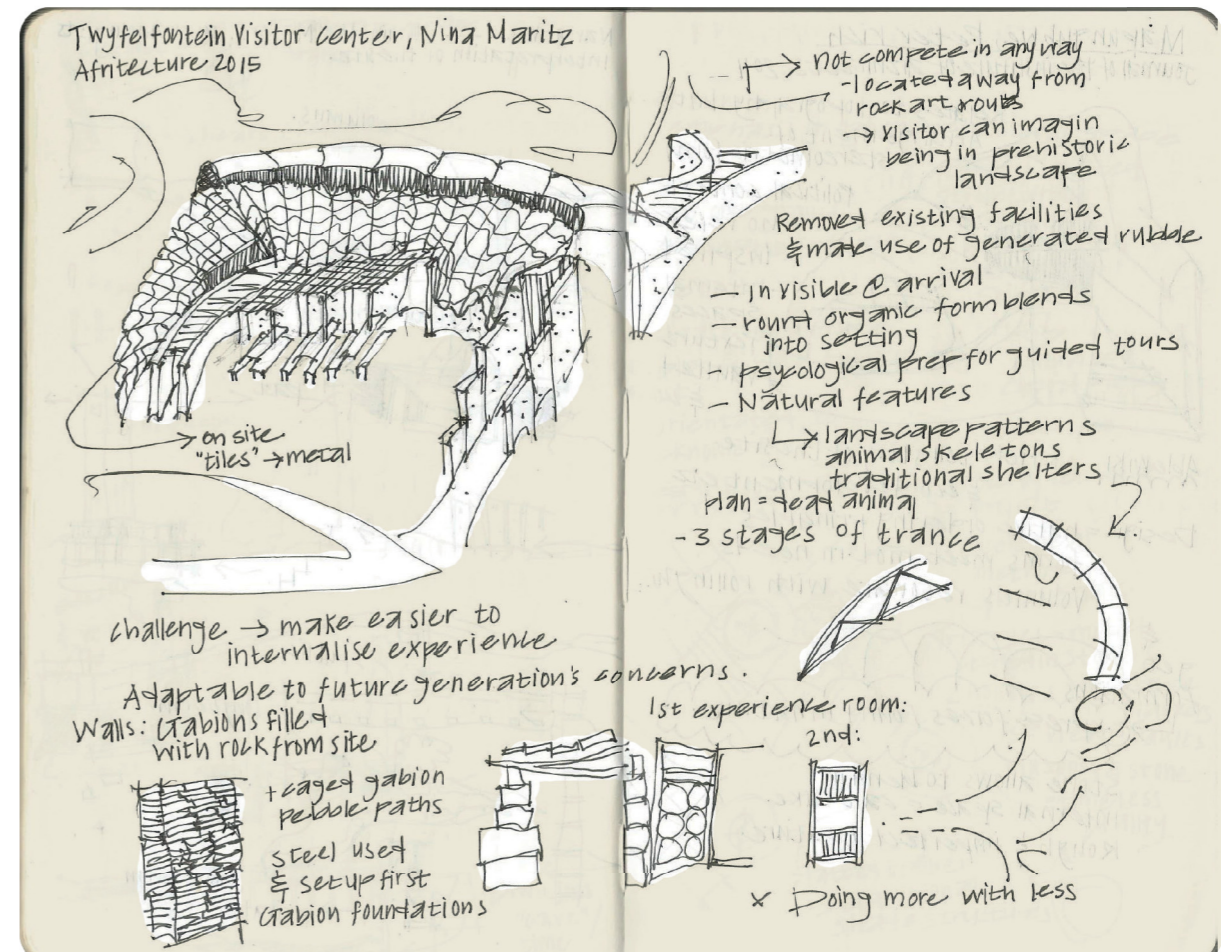
**Relationship with the landscape:** The visitor centre is located away from the rock art, with visitors being encouraged to use official tour guides to access the site, as the service is included in the ticket price. The actual rock art areas are protected by viewing platforms (Rivett-Carnac, 2011:22).

**Visitor access:** Only a few specific sites are accessible to tourists on paths developed for tours (Rivett-Carnac, 2011:22).

**Community:** The management of Twyfelfontein allows for local communities to make use of the land and draw income through their own activities. The community thus benefits directly, not only economically from the income generated by the centre, but also from enterprise fees as a levy received from providers of private accommodation in the area. Local guide training was facilitated, although the San who produced and once created the rock art aren't directly involved at the site. An opportunity has also been created for local crafters to exhibit and sell their wares at the visitor centre shop (Rivett-Carnac, 2011:21).



5.2 - Lascaux IV Caves Museum (Author, 2016).



5.3 - Twyfelfontein (Author, 2016).

### 5.1.4 The Mapungubwe Interpretation Centre

Context: A dramatic hill and stone landscape (Tall, 2013:5).

**Facilities:** Museum, introduction hall with information on the context, rooms hosting exhibits, coffee bar, restaurant, shop, offices and outdoor amphitheatre. Facilities for researchers are included in the programme (Tall 2013:3).

**Purpose:** To provide an interpretation centre giving the visitor an understanding of Mapungubwe (Tall 2013:9).

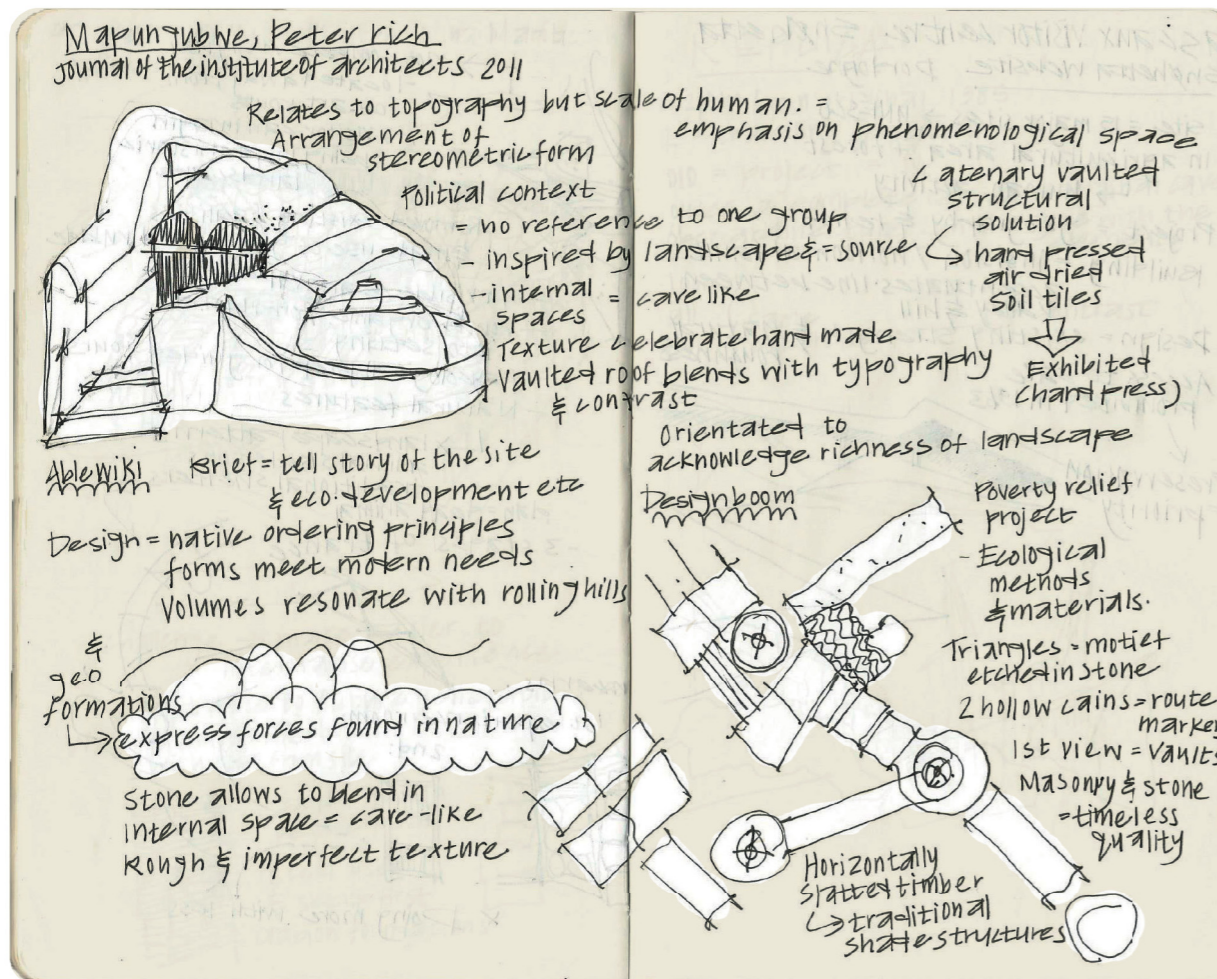
**Aspiration:** To interpret the context in the design.

**Relationship with the landscape:** The design development was inspired by the natural and social context. The volumes respond to the topography of the landscape, and trees frame the buildings. The visitor exits at a vantage point overlooking the valley (Holcim Awards, 2007:2).

**Visitor access:** At the centre the movement of visitors is controlled with a path moving through the museum into the landscape. The landscape is only accessible if accompanied by a guide (Holcim Awards, 2007:3).

**Community:** Sixty unemployed low-skilled people were hired and trained to manufacture bricks.

A hundred people were trained in construction work, while the site workers continuously used and were able to find a job on site due to this training (Tall, 2013:9).



5.4 - The Mapungubwe Interpretation Centre (Author, 2016).

### 5.1.5 Malapa

Visitor numbers: Undetermined; limited by game farm activities

Location: Malapa Game Farm, Cradle of Humankind

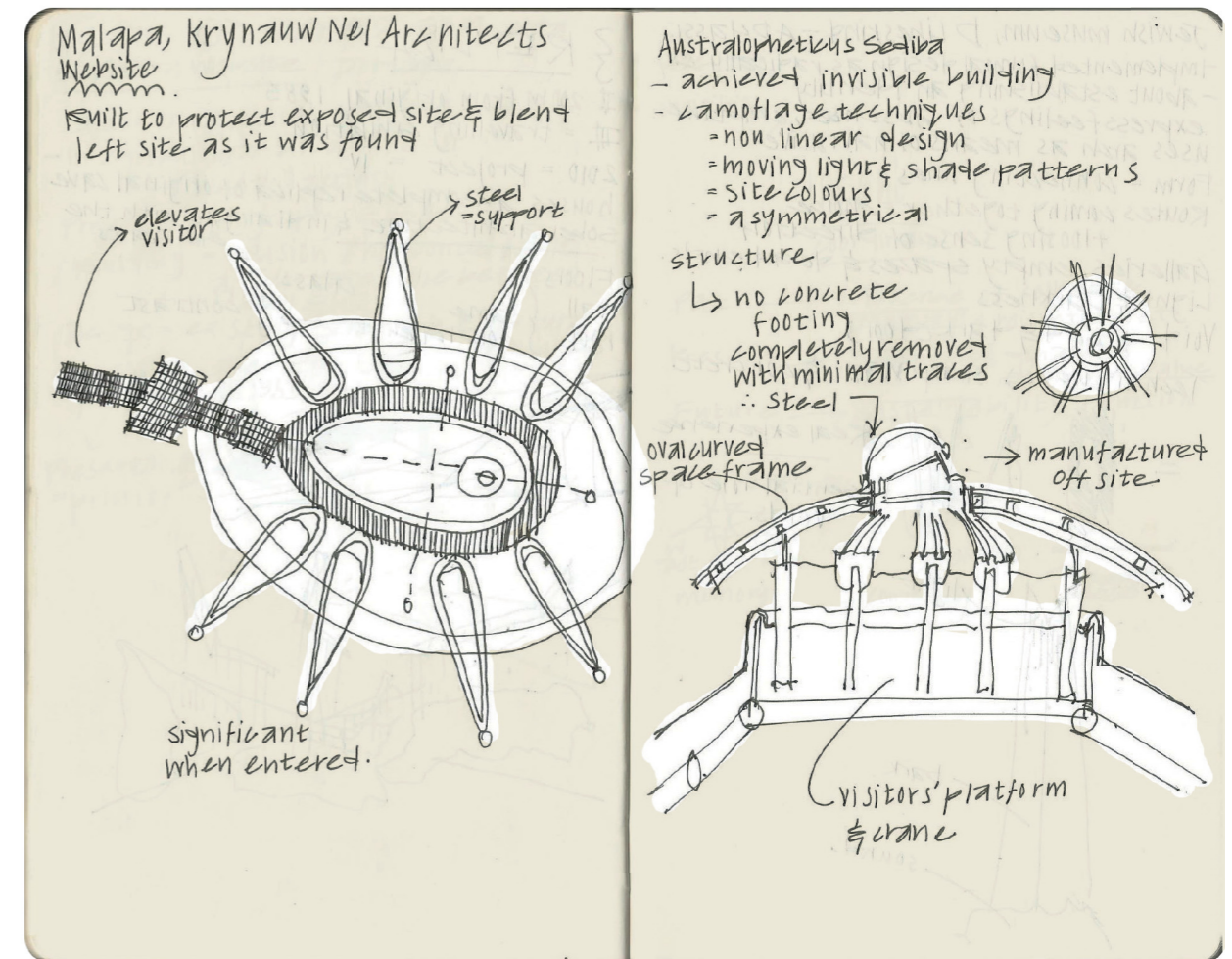
**Facilities:** A removable structure over the cave, a tourist viewing platform, and a crawl hoisting structure to lift out rocks with a mass of up to 1 ton (Malapa Fossil Excavation Site takes top honours at Steel Awards 2014:[s.p.]).

**Purpose:** To protect the site and the exposed fossils from the extremes of the weather and to allow for as much 'dig time' as possible. It also had to blend in with the 'ring of trees' and the rest of the bush on the hillside. The structure in addition imparts maximum natural light to the covered area while not hindering the movement of the natural wildlife.

**Aspiration:** In order to be sensitive to the landscape, the architecture aspires to be invisible from the exterior and visible from the interior. The structure has no concrete footings and can be removed in order to leave minimal traces. Elements of the structure were manufactured off site to enable minimal construction (South African Institute of Steel Construction, 2014:29).

**Landscape:** The structure simulates the colours of the landscape and undulating topography while sitting in between trees. The structure enables the removal of visitors from the landscape so as to protect it.

**Visitor access:** The structure allows for visitors to have direct access to the site from above while experiencing the landscape.



5.5 - Malapa (Author, 2016).

## 5.2 Programme requirements

Programmatic implications concluded from the precedent study.

**Purpose:** The purpose of the research facility is to act as a map, highlighting and enhancing the various aspects of the landscape which make it of outstanding universal value. The intervention thus becomes the creation of a living exhibition and collection of knowledge. The process surrounding the excavation and understanding of the excavated materials become part of an educational programme, transferring the knowledge of the scientific community to the local community. The local community then become curators of the site and landscape.

**Aspiration:** The aspiration is for the building to be a background building but to be designed in such a way so as to remain of world heritage standard. The design is aimed towards creating an awareness of the landscape, thus making the building only a coordinating system accommodating the visitor.

**The relationship of the building with the landscape:** The strategy of contrasting with the landscape is implemented as a means of highlighting the nature of the site. A linear, unimposing and background building is envisioned within the organic and natural landscape and which frames this natural landscape. The intervention is located within the World Heritage Site itself, as the aim is to emphasise the tangible and intangible qualities of the landscape.

### The Kromdraai Cave Programme

**Programme:** Research and education centre

#### Facilities:

Restaurant and administration:

- Reception
- Reception lockers and repository
- Offices for administrative staff
- Boardroom
- Restaurant with outdoor seating area accommodating staff, locals and the visiting public
- Ablution facilities

Excavation and education:

- Site office
  - Equipment storage
  - Power access
- Sieving area
- Excavation dumping area
- Reference material
- Fossil drying area, repository and reference material

Library, exhibition space and archive

- Pavilion seating with view over excavation
- Reading material
- Samples and specimens
- Study area

Research

- Studio and workshop
- Mammal bone laboratory
- Environmental laboratory
- Microscope laboratory
- Herbarium laboratory
- Workshop and lecture room
- Casting and photography room
- Equipment storage
- Chemical storage
- Staff area
- Ablutions

#### Landscaping and management interventions

follow the updated fossil site management findings for Kromdraai (2009-2013):

- The provision of circulation routes
- The rangeland condition is improved as it has deteriorated due to overstocking, overgrazing, trampling and wildfires.
- Erosion is addressed as the site has experienced a loss of topsoil, especially due to the movement of vehicles. Parking is provided as parking occurs frequently on site.
- Mitre drains are implemented in order to rehabilitate eroded tracks, while surface ruts are restored with rocks and brushwood to break the flow of water.
- The provision of fire management
- A proper fire regime is deployed for the Brakenveld fire management strategy.
- Lists of Red Data species are compiled through surveillance and maps within the

programme.

- Invasive plants are addressed through listing invasive species and infestations through visual checks and photographic monitoring, reducing the need for controlled fires.
- The provision of infrastructure
- Caves and the ecology of the subterranean environment are incorporated into the interpretation of the site without having the general public physically entering the cave.
- The disturbance and displacement of animal resting places such as porcupine lairs and owl roosts are avoided within the programme, as these are important as modern equivalents for processes of the past.
- Ablution facilities which are suited to the environment are made available on site.
- Waste management for excavations must be implemented in the form of litter bins which are unaffected by the wind and can be collected and removed easily.
- Erosion measures must be taken in

ecologically sensitive areas and no more pathways than necessary are created.

- Water is brought to site through the addition of a swale system, with a water dispersal and filtration system.
- The lack of energy supply reduces the speed and efficiency of the excavation and thus energy is provided on site.
- Access to the bottom of the excavation is implemented to address future needs.
- The provision of security
- A security fence as a means of monitoring the site is installed to protect the site against theft or criminal activity such as property theft and the removal of rock, fossils, breccia and artefacts.
- Theft of Pelindaba stone and stromatolites are prevented through monitoring soils and patches of overturned and disturbed rocks or soils.

