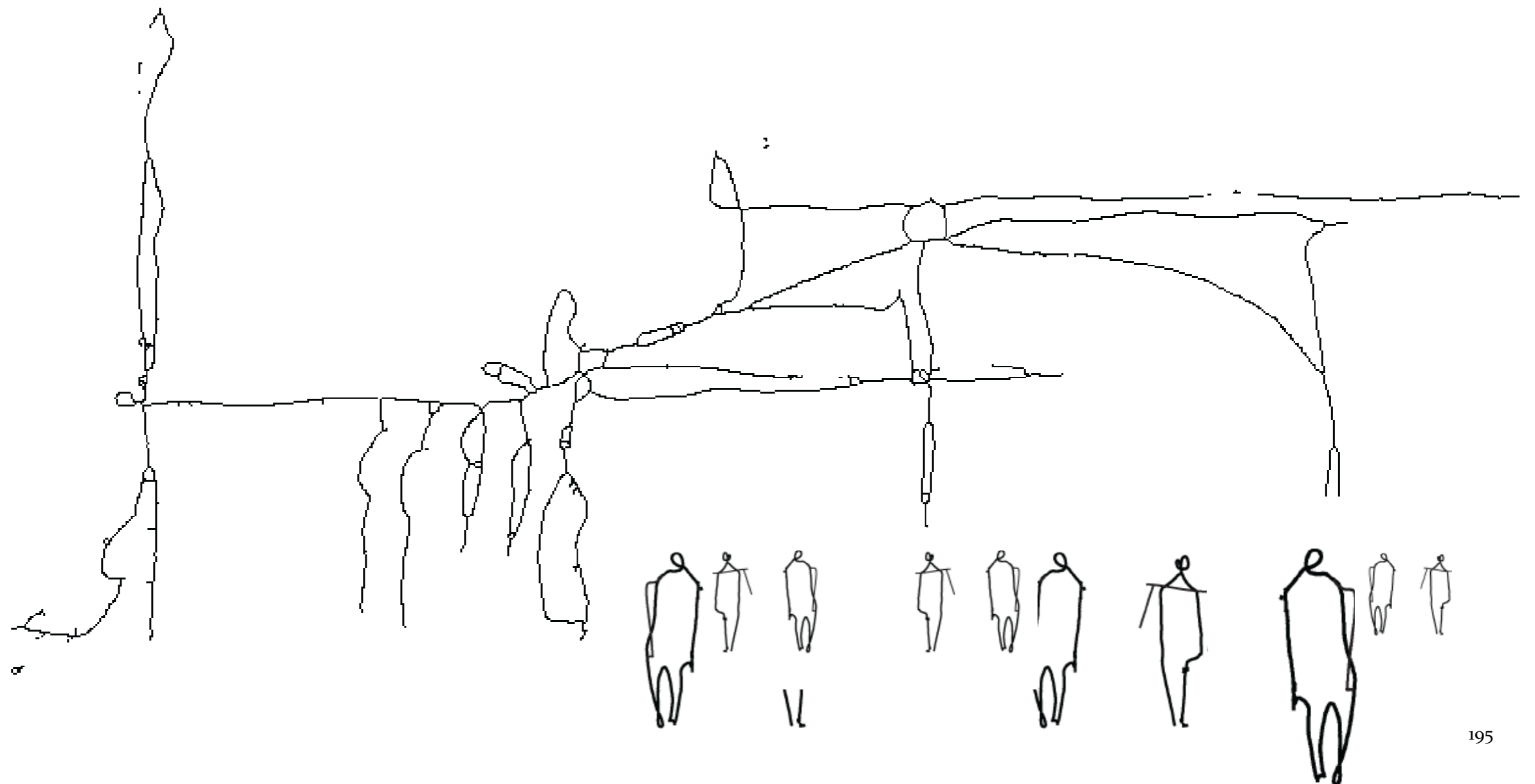


## 6 Technification



This chapter covers the last component of the design process. It consists of drawings encapsulating the theory, the concept, and the refined design development. The concept of the design should be carried through to the finest details. It is the details that contribute greatly to the sense of place and ensure robust, functional spaces. As the user moves through the site, he/she should be confronted by abstract shapes, forms, and materials, all speaking of Pretoria West. The site captures experiences, spaces, and

materials that are observed when moving through greater Pretoria West.

The material palette has been distilled to a set of hard structures and to species of soft vegetation. This selection of materials is not only functional but binds in with the concept of creating abstract elements reflecting the unique character of the greater Pretoria West. Materials typically found in and around Pretoria West gain preference with the selection of the material palette.

## BILBAO EFFECT PRINCIPLES

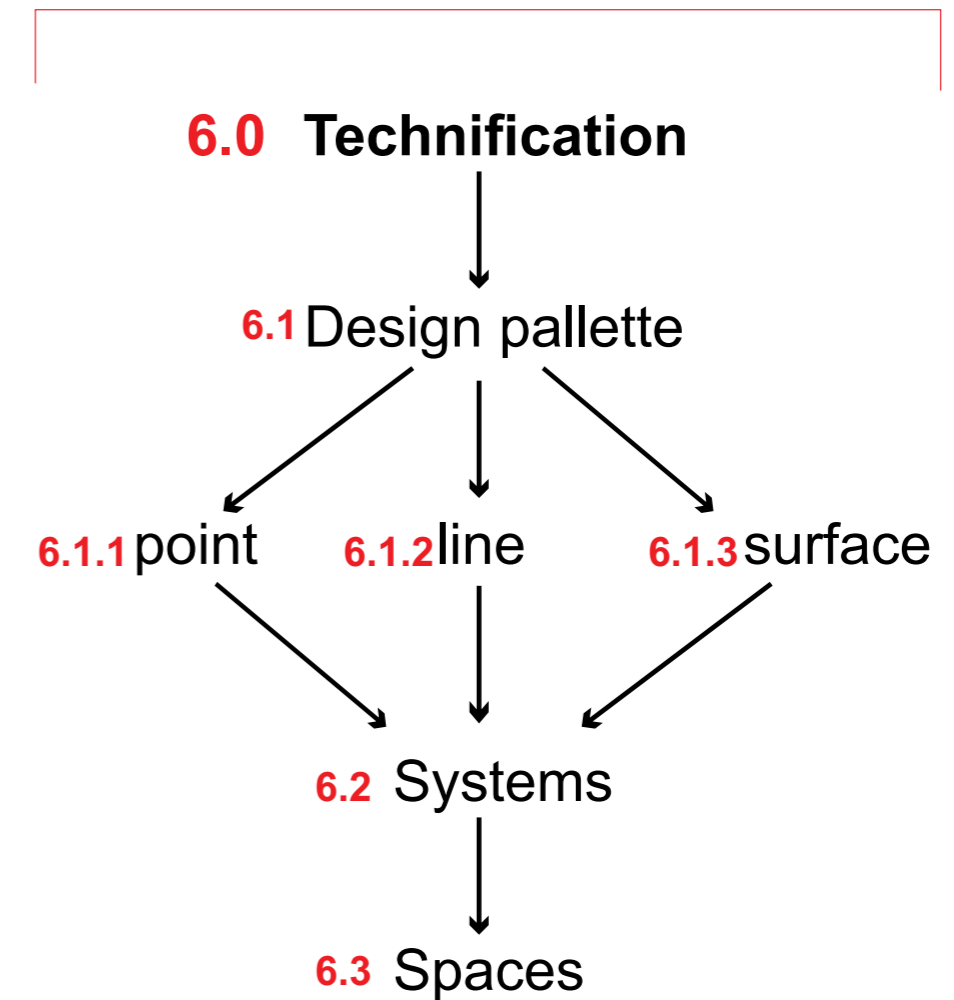


Figure 6.1: Flow diagram showing the chapter outline

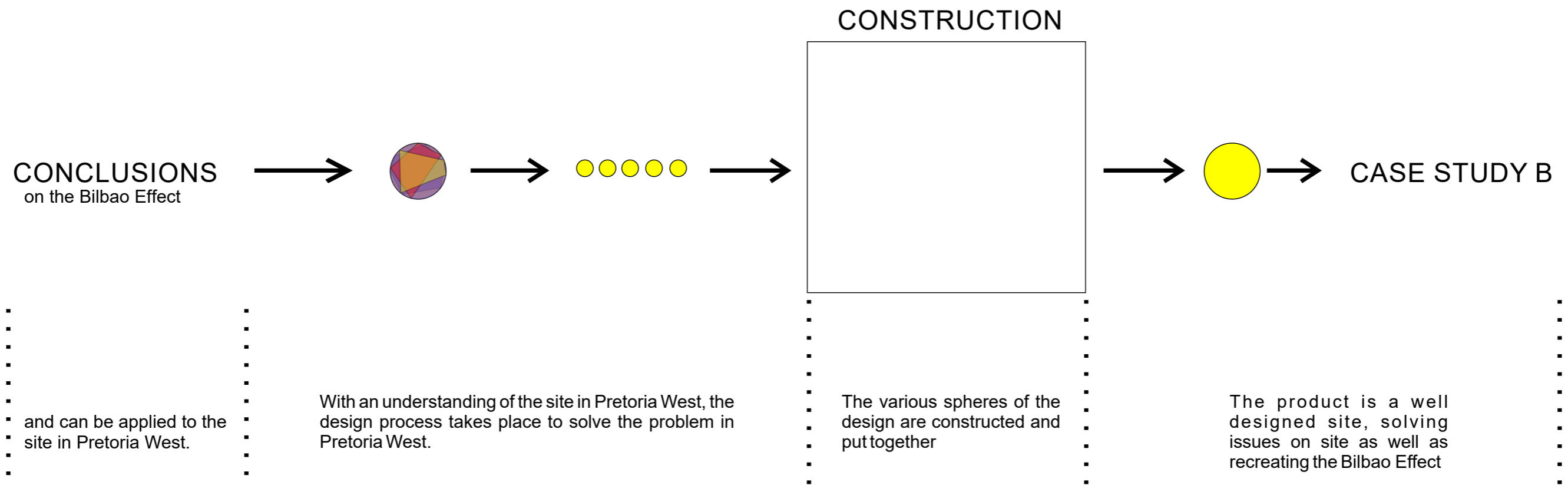
To better understand Figure 6.2, one must refer to Figure 2.2 on page 36. Figure 2.2 showed the process of analyzing the case studies, deconstructing them and lastly presenting them in info-graphics to draw conclusions from them. In chapter five the various spheres of the design process came together to create spaces with the intention of recreating the Bilbao Effect (Figure 5.18 on page 172). It is now at this stage where spaces, ideas and visions are

manifested into a combination of materials. Figure 6.2 summarizes the idea of taking an object, deconstructing it and putting it back together for it to be perceived differently than before. Chapter four (Figures 4.41 - 4.48) are conceptual compositions explaining what essentially is going to happen in this chapter. All analyzed and deconstructed materials are put together to create a unique, context relevant park.

Inspired by Parc de la Villette (Figure 2.94 - 2.106), the technical information and details will be presented within Bernard Tschumi's deconstructed palette, namely, point line and surface. The design was put together from various elements, it organically developed into a site very similar to the approach of Bernard Tschumi. Point, line and surface.



**Figure 6.2:** A basic diagram showing that all the deconstructed elements will now be put together to create new, innovative and exciting spaces



**Figure 6.3:** Flow diagram showing the construction of the deconstructed

## Planting Strategy

Firstly, it is important for the planting strategy to tie in with the overall concept of the park, enhancing it to the finest detail. The intervention attempts to create compositions within the landscape derived from agricultural architecture principles of greater Pretoria West. The forms can thus be placed within the stance of deconstructivism, divorcing the function and aesthetic of certain perceived everyday objects. The planting strategy is sub-divided into the following three elements;

Ecology + pattern + space

### Ecology (Figure 6.4)

It is a prerequisite that a planting design contribute to the local/ global ecological significance. The datum of the site consists of numerous abstract geometries. The design will focus more on pattern and space than it will on ecology, but nevertheless the beauty of the planting design will rest on the integration between “manmade” compositions and the horticultural, ecological, success of the vegetation. It is an integrated approach of ecology, pattern, and space.

### Pattern (Figure 6.5)

As there are already numerous superstructures creating compositions, the planting design will link into these man-made structures. Plants will not simply be planted to soften up the landscape and create different spaces; they will also be an exhibit and will be deconstructed so that the beauty of the natural experience can be appreciated, both in terms of artistic compositions, and as a functional ornament within the landscape.

### Space (Figure 6.6)

The spaces created by the planting design will create destinations and focal points,

tying in with the concept of attracting people to the site. In order for the planting design to attract people from all over the country, it must be innovative in nature.

It is proposed that the site be managed as a corporation; the program of hosting numerous events will generate an income to be used in maintaining the site. The vastness and size of the spaces on the site will be utilized to cater for the planting of large fields. Namaqualand is successful as a tourist attraction because of the panoramic views of fields of flowers; people enjoy flowers. It is planned that large fields of wild flowers be planted on the site to be enjoyed from different viewpoints (from the designed architectural structures as well as growing in the large fields).

The preliminary sketch plan of the area, as indicated in Figure 5.35, illustrates the two proposed main components (folly and flowers).

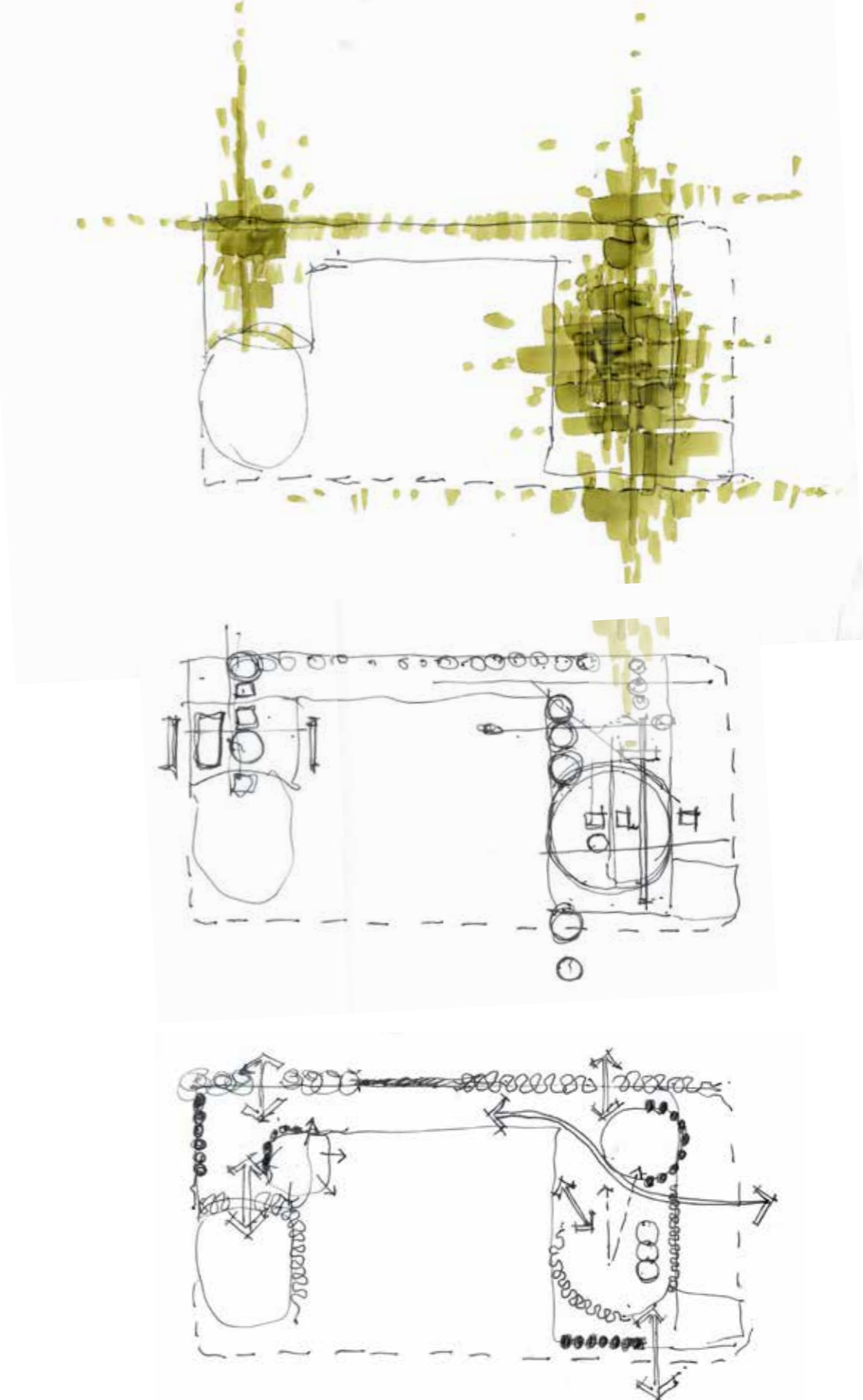
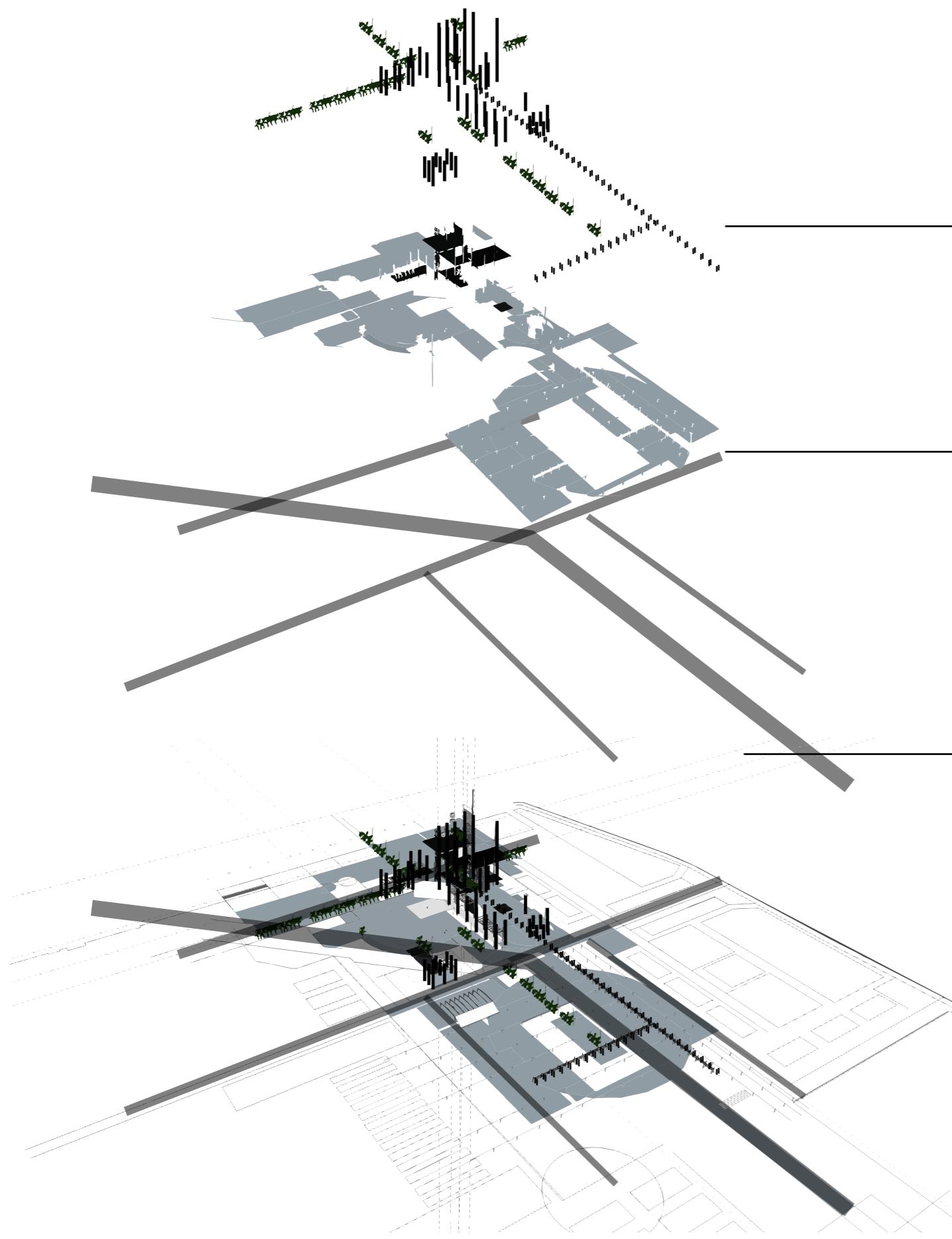


Figure 6.4 (top): Diagram explaining how the planting design will contribute to the region's urban ecology

Figure 6.5 (middle): Diagram explaining how the planting design will create abstract compositions

Figure 6.6 (bottom): Diagram explaining how the planting design will contribute to the space



*Dombeya rotundifolia*



*Celtis africana*



*Rhus magalismsontana*



*Polygala rehmannii*



*Polygala virgata*



*Castalis spectabilis*



*Cenchrus ciliaris*



*Themeda triandra*



*Monocymbium cerasiiforme*



*Eragrostis gummiflua*



*Gazania krebsiana*



Walkways

The design is dependent on the relationship between the soft (planting) and hard (folly) structures. This diagram best explains how the soft landscaping comes together. Different species combining to create not only artistic compositions, but also spaces connecting the user with these natural elements. The following pages show how the folly is put together.

**Figure 6.7:** Point, line and surface diagram communicating the synergy of the selected plant species

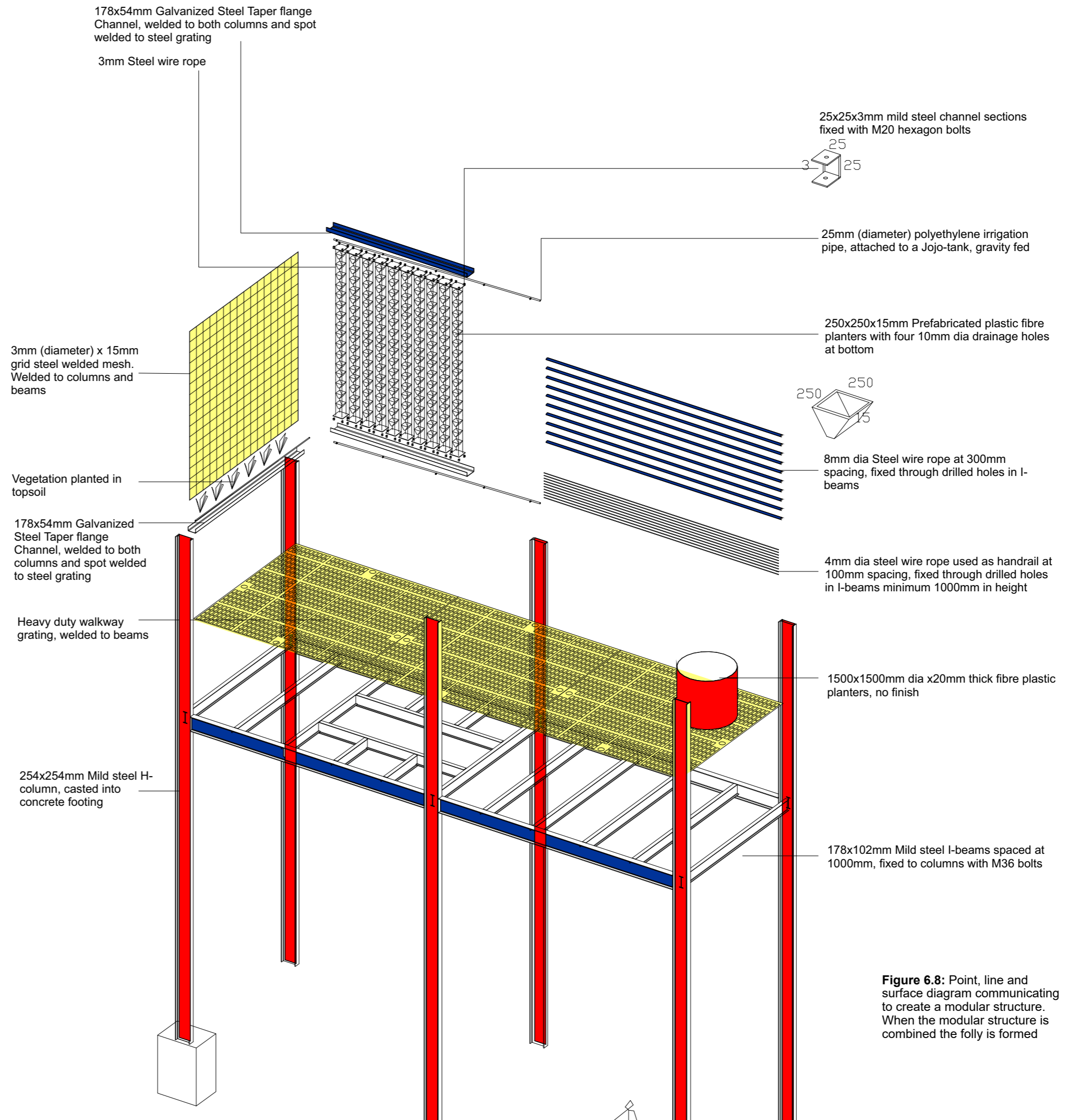
## The Superstructure

The folly will, as mentioned before (Figure 20), not only pose in the landscape as a sculpture, but will also create a welcoming platform to attract the user. Figure 5.19 is a preliminary concept for the approach to the technification on the folly.

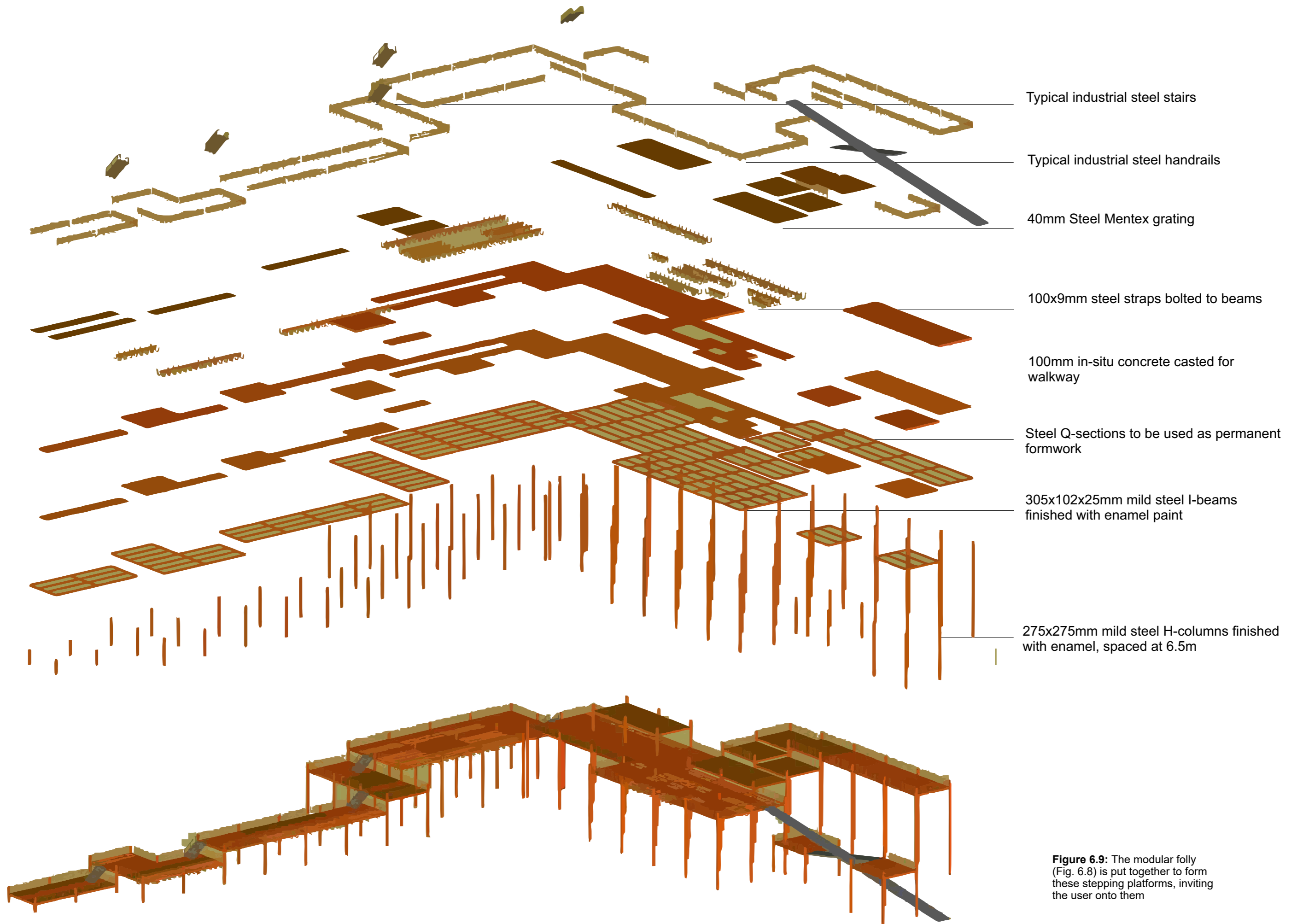
As shown, the idea is to create a modular set of industrial and agricultural materials to create a variety of spaces. These spaces have different functions assigned to them. Even when no event is taking place at the folly, it will still contribute to the visual experience of the site. Materials used to construct the folly reflects the agricultural and industrial elements of greater Pretoria West (Figures 4.2-4.40).

Figure 6.8 illustrates how the folly will be put together. Once the folly is constructed there is still a final layer to be added. Functional agricultural products will be fitted on the folly to complete the composition as well as creating comfortable spaces for the users to enjoy.

Steel H-columns are used as the main points injected into the site (casted in concrete footings). The H-columns will create support for platforms to be bolted to them. The exposed H-columns gives the folly an industrial agricultural feel. All materials used on the folly are extremely functional (the reason it is used in typical structures in Pretoria West). The beauty of this is how this palette of functional materials combine to create an artistic element, rooting the folly into it's unique context.

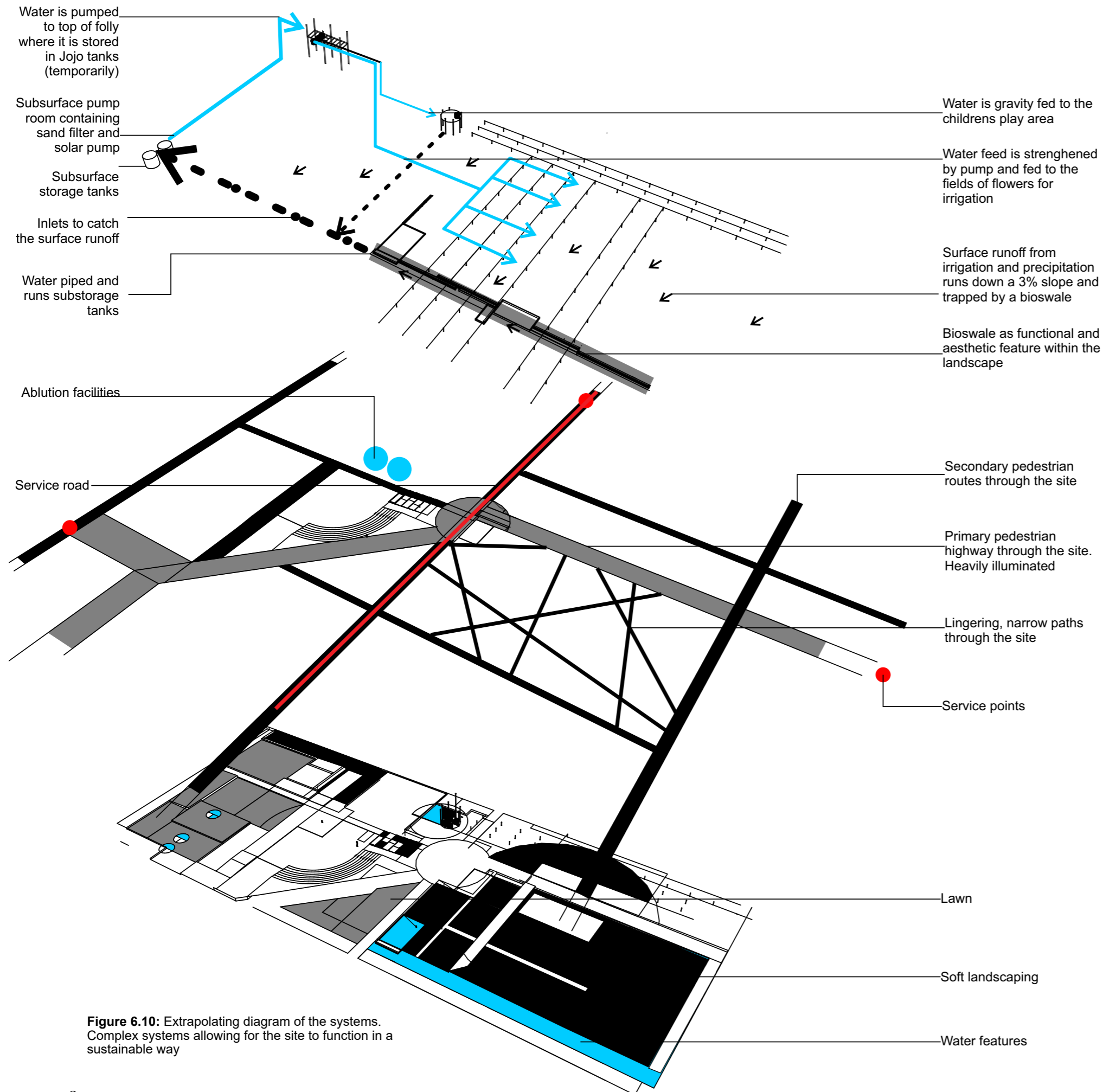


**Figure 6.8:** Point, line and surface diagram communicating to create a modular structure. When the modular structure is combined the folly is formed



**Figure 6.9:** The modular folly (Fig. 6.8) is put together to form these stepping platforms, inviting the user onto them

## 6.2 Systems



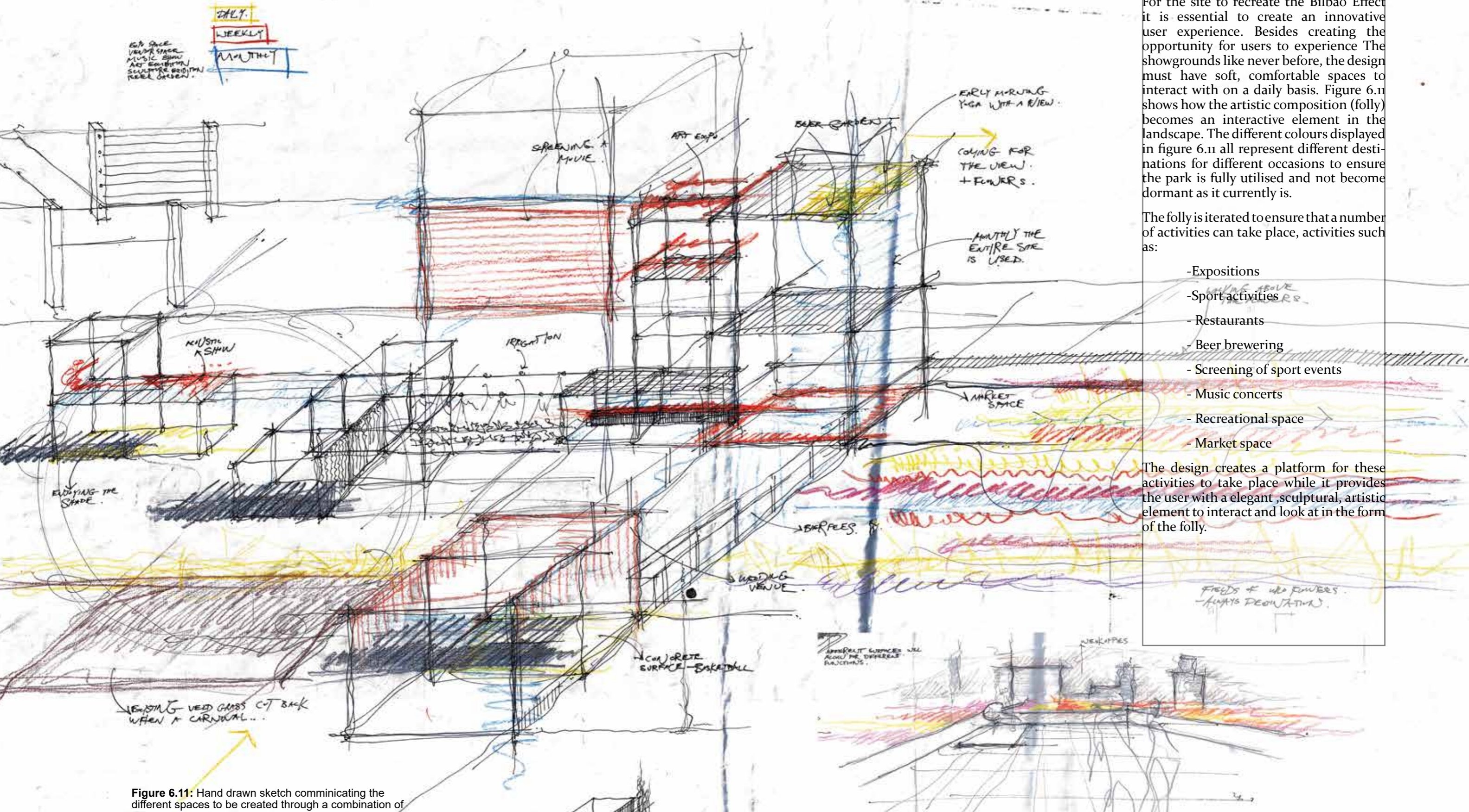
### Systems

The water system, movement patterns, surfaces (biodiversity) and different programs work in synergy to ensure that the design functions performs as sustainable as possible. The park is a recreational landscape, not a productive landscape. The intent of the systems are to sustain what is needed to recreate the Bilbao Effect. The water system taps into the masterplan strategy. Water is harvested, filtered and used for recreational play areas, irrigation and grey water. The movement patterns on site caters mostly for pedestrians. The only vehicles to enter the site are emergency vehicles and service vehicles. The main pedestrian route allows for vehicles to access the park the in the case of an emergency. Once a week the municipal services will enter the site to collect unorganic trash.

**Figure 6.10:** Extrapolating diagram of the systems. Complex systems allowing for the site to function in a sustainable way



## 6.3 Spaces



### Spaces

For the site to recreate the Bilbao Effect it is essential to create an innovative user experience. Besides creating the opportunity for users to experience The showgrounds like never before, the design must have soft, comfortable spaces to interact with on a daily basis. Figure 6.11 shows how the artistic composition (folly) becomes an interactive element in the landscape. The different colours displayed in figure 6.11 all represent different destinations for different occasions to ensure the park is fully utilised and not become dormant as it currently is.

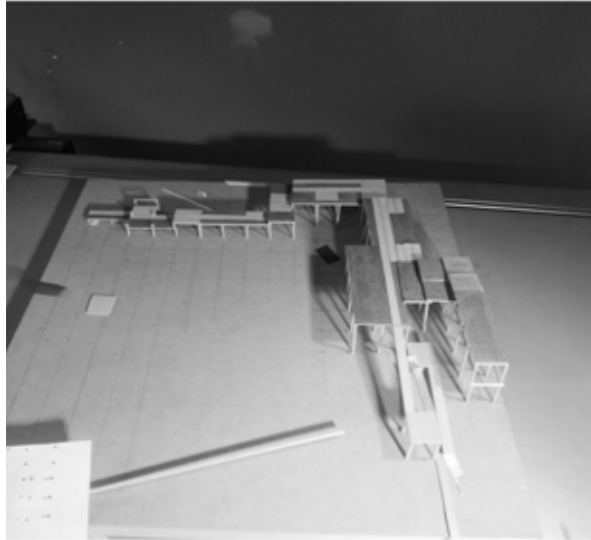
The folly is iterated to ensure that a number of activities can take place, activities such as:

- Expositions
- Sport activities
- Restaurants
- Beer brewing
- Screening of sport events
- Music concerts
- Recreational space
- Market space

The design creates a platform for these activities to take place while it provides the user with a elegant, sculptural, artistic element to interact and look at in the form of the folly.

FIELDS + WILD FLOWERS - ALWAYS PERMANENT.

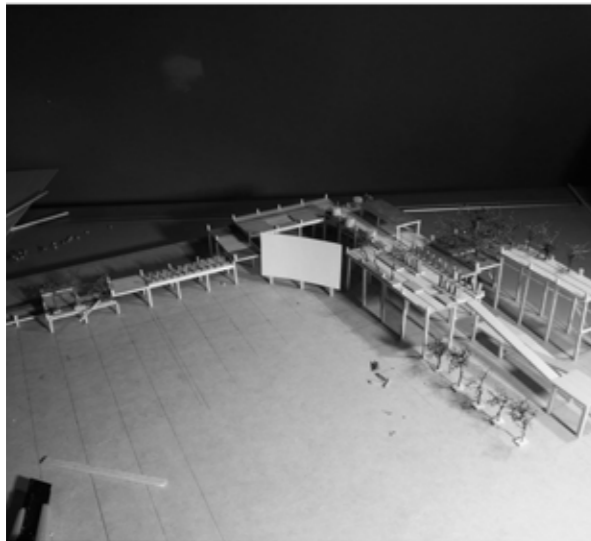
**Figure 6.11:** Hand drawn sketch communicating the different spaces to be created through a combination of the material palette and systems.



**Figure 6.12:** Model illustrating the construction phase of the folly.



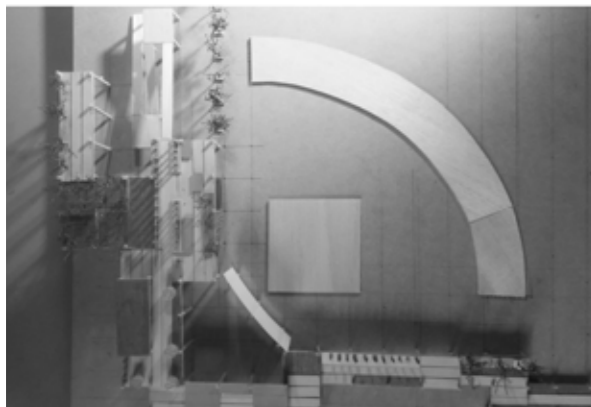
**Figure 6.15:** Model illustrating the spaces on top of the folly, creating intimate spaces as well as allowing the user to have a wonderful view of the flower fields, and Pretoria West.



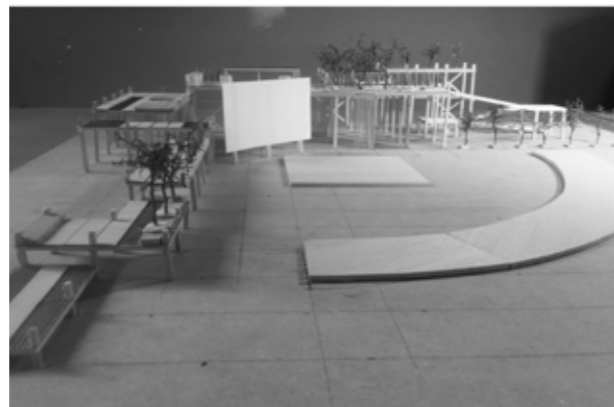
**Figure 6.13:** Model illustrating the construction phase of the folly.



**Figure 6.16:** Model illustrating the stepping platforms of the folly, inviting the user.



**Figure 6.14:** Model illustrating the aerial view of the folly. The folly defining the backdrop to the drive-in screen (amphitheatre).



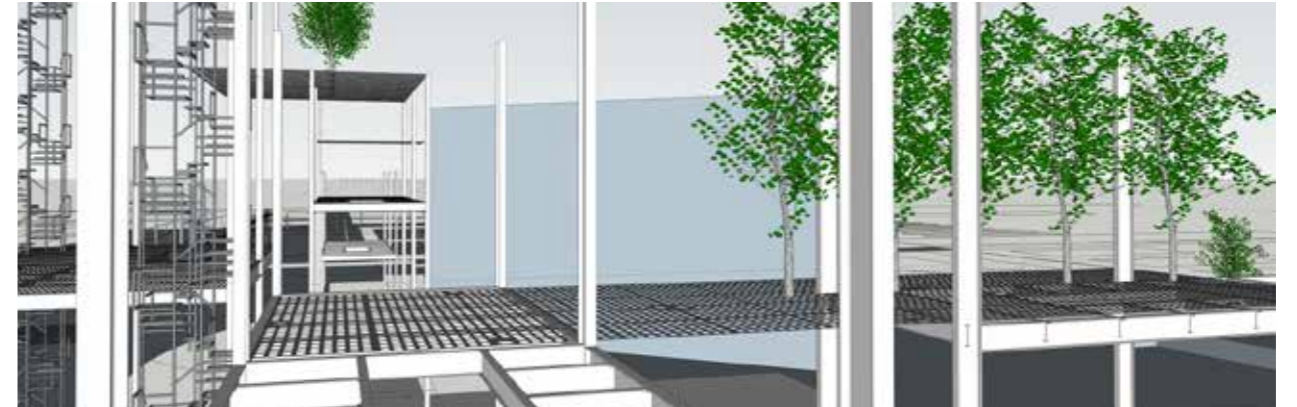
**Figure 6.17:** Model illustrating the folly with planting and the drive-in screen, contributing to the unified composition.



**Figure 6.18:** Model illustrating the various surfaces, trees and agricultural products combining with the folly to create the abstract structure in the landscape.



**Figure 6.19:** Model illustrating the shaded space created beneath the folly. Spaces such as this one will be fully utilised during markets. The H-columns creates a defining hierarchy for vendors and companies to exhibit products and services.



**Figure 6.20:** Model illustrating the view from the folly, allowing the user an innovative experience of trees.



- 1 Pocket park/bosque for passing pedestrians
- 2 Recreational lawns
- 3 Folly/structure within the landscape
- 4 Amphitheatre seating
- 5 Childrens play area
- 6 Central gathering node
- 7 Recreational lawns
- 8 Small paved pockets within the field of flowers
- 9 Fields of wild flowers and veldgrass
- 10 Paved strips allowing for pedestrian movement
- 11 Existing veldgrass framed by wild flowers

**Figure 6.21:** The final sketchplan communicating the materials and systems combining to create different spaces for different functions within the park

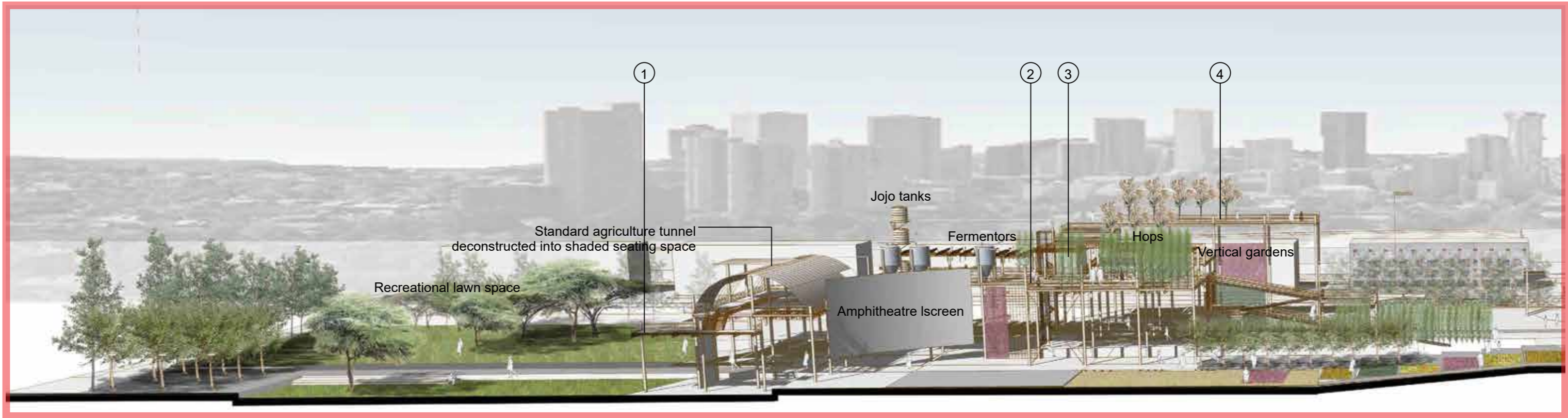


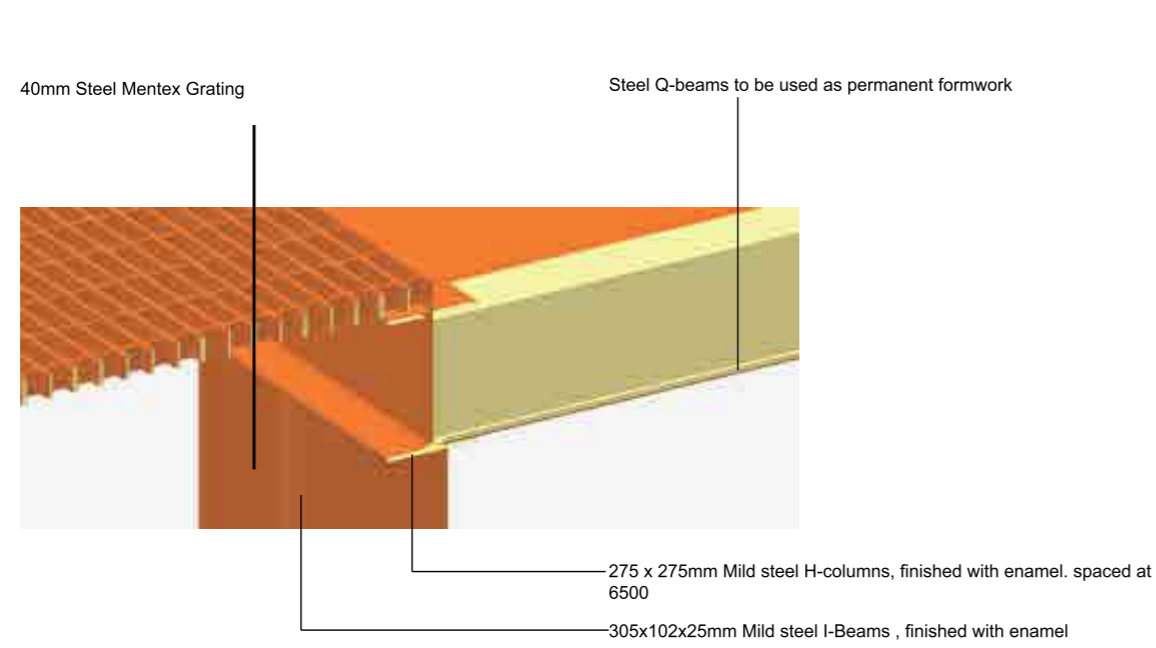
Figure 6.22: Section cutting through the entire site (Author)



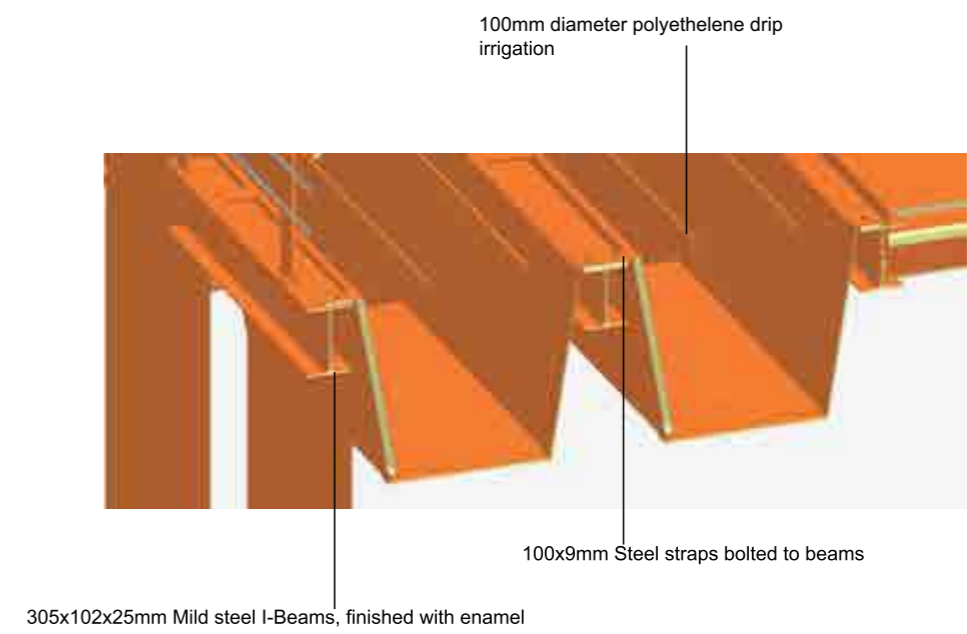
Figure 6.23: Section cutting through the entire site



**Figure 6.24:** Section cutting through the folly showing the details as well as the spaces being formed on the folly



**Figure 6.25:** Typical detail section cutting through walkways and Mentex Grating



**Figure 6.26:** Typical detail section cutting through the planters fitted on the folly



Figure 6.27: Perspective of the agriculture tunnel space on the folly

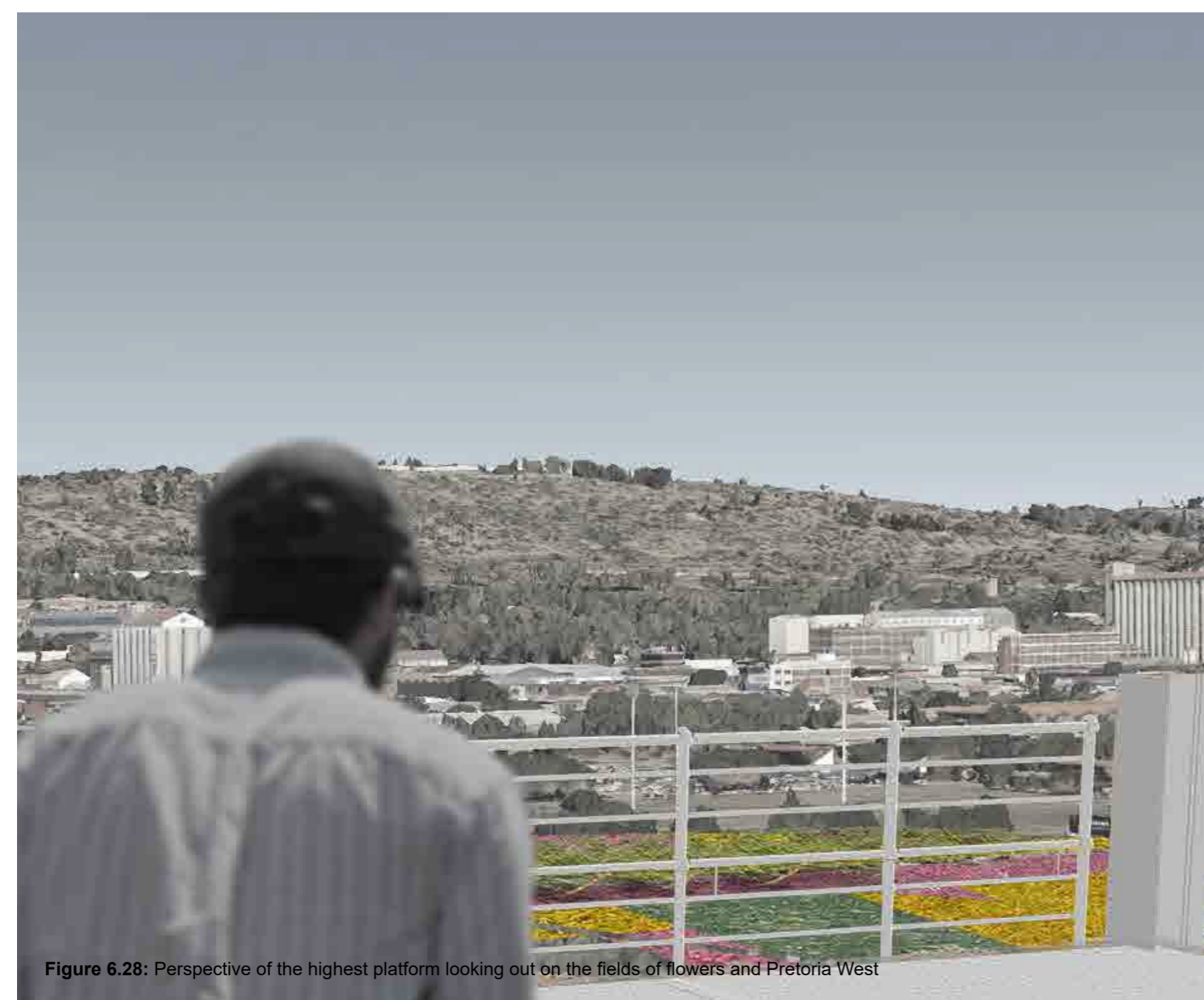


Figure 6.28: Perspective of the highest platform looking out on the fields of flowers and Pretoria West