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re + treat |ri'trēt|

a community based hotel development in the Lesotho highlands

Tumo Senoana

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re + treat |ri'trēt|

verb [intrans.]

- move back or withdraw, esp. so as to remove oneself from a difficult or uncomfortable situation: *“the advent of a dam forced the community to have to retreat from their current environment”*.
- change one’s decisions, plans, or attitude, as a result of criticism from others: *“given the effect on rural communities the Highlands Water Authority have retreated from their position on the relocation of communities”*.
- to change ones view of something and apply a renewed process or a substance to (something) to protect or preserve it or to give it particular properties: *“re-treating their approach to relocating communities could turn the threat of the dam into opportunities for the local peoples”*.

noun

- a quiet or secluded place in which one can rest and relax: *“by proposing a hotel retreat, the tourism intervention provides a new source of income for the community”*.



Abstract

“ A critically regionalist approach to ever changing environments, the scheme questions current policies that negatively affect locals with regards to a dam development in a remote area of Lesotho. In so, it proposes a framework in which the various communities affected by the dam can utilise new and existing resources to realign their livelihoods to one that ties in with the development. Within this framework, a hotel/lodge is proposed as an income generating initiative that capitalises on the new dam and the Maluti Mountains as tourist attractions”.



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Communities of Ha Konki and Tsekong

Ntate Moeketsi Senaoana | Mme 'Maitumeleng Senaoana | Letalbika Senaoana | Itumeleng Senaoana

Otsile Mabusela | Thato Mahapa

Avril Paterson

Morohoane Motsamai



Dedication

“To my mother Maitumeleng Senaoana on her 50th birthday”

2nd October 2009

your loving son.



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Figure 001. [RIGHT]
Thaba Putsoa Mountain Ridge





This thesis aims to create an architectural vision for the economic and cultural evolution of Lesotho's rural communities. It acknowledges the contemporary and regards environmentally sensitive/responsive design as essential. The thesis methodology follows a critical-regionalist approach to unravel the site's inherent organizational and operational complexities.

A hotel retreat is envisioned within a resettlement framework. The development is driven by the hypothesis that an environment has the ability to adapt to changing circumstances without losing its character. Therefore the thesis strives to develop an architecture true to the region, wherein the spirit of place would play a quintessential role in defining its very identity and meaning.

In proposing a resolution for existing problems and fostering the intrinsic potentials of the site, the thesis offers a basis for communities to act collectively in developing their environments.

Adapted from CVETKOVIC, S. (2006).
Towards a healthy architecture. Watloo,
Ontario, Canada: University of Waterloo



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The thesis is to be read as two parts of a single investigation. Part 1 [chapters 1-5] represents the objective component of the thesis. The chapters address the academic research component of the study. The information gathered supports and informs the approach to the intervention as explored in part 2. Part 2 [chapters 6-10] flows from part 1 in a subjective account of the progression through the design. The reader is guided through a process of the authors investigation, design and ultimate summation with respect to the hypothesis as later outlined.

The thesis is introduced by outlining the problem in broad terms. Thereafter, a brief to approach the problem is conceived. Broad aims and objectives are set in place and a methodology to guide the research is suggested [chapter 1]. The problem is explored in greater depth highlighting the pitfalls to current responses within the

particular scope as well as in cases with similar circumstances. The problem is further unpacked by discerning and classifying problems and addressing them through aims and objectives, further building on the brief [chapter 2].

The research methodology presents a way forward, which is then, pursued in subsequent chapters, gathering and scrutinizing information to best dictate a comprehensive response [chapters 3 4 and 5]. The culmination of influential factors - historical, social, economic as well as theoretical responses relative to architecture are then applied to a site analysis [chapter 6] to come up with an appropriate response [chapter 7].

A design framework is proposed that counteracts the impacts of the impending displacement. Within the framework, a specific design intervention is focused on [i.e. the hotel retreat].

There in, the concept is developed as guided by site-specific constraints and opportunities as well as external factors such as current architectural theory and global approaches to development. And finally, through refinement and technical resolution [chapter 9], the design explores contextually applicable materials, climatic responses and sustainable servicing interventions. The ultimate eventuality being to assess this outcome against the initial objectives [Later outlined in chapter 2].

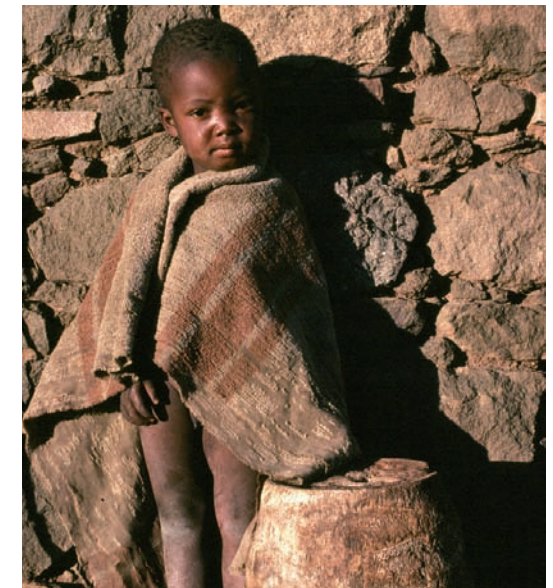


Figure 004. [RIGHT
“Lesotho boy”

Development in the third world has resulted in hardship for many people. Historically, colonization has been the main force behind this hardship, where oppressive structures and exploitation have crippled underdeveloped nations, forcing them to try to catch up with their first-world counterparts. In this endeavour, diplomatic ties have facilitated funding to develop impoverished countries and bridge the divide between the first and third worlds. More often than not, common gain is in the interest of both the developed and developing nation. One such initiative is the Lesotho Highlands Water Project [later referred to as LHWP], a collaborative project embarked on by the governments of Lesotho and South Africa. Ground-breaking in magnitude, this first-of-its-kind project proposes a series of dams in Lesotho that would supply water to South Africa and hydro electric power to Lesotho.

The project is primarily funded by the World Bank, which funds are then used to develop the water rich, yet underdeveloped nation of Lesotho [LHWP project overview, 2009].

However, in the midst of this development, the people of the Highlands where the dams are located are negatively impacted, and threads of culture and community have become displaced in this ever-urbanizing fabric.

Marginalized rural communities are forsaken and their identity is lost. As a consequence, people of rural areas have fallen victim to an urban lifestyle characterized by a struggle for economic sustainability. It has therefore become necessary to engage and negotiate the tensions resulting from the transition from the rural to the global. This can be achieved through an architecture that is true to the region.

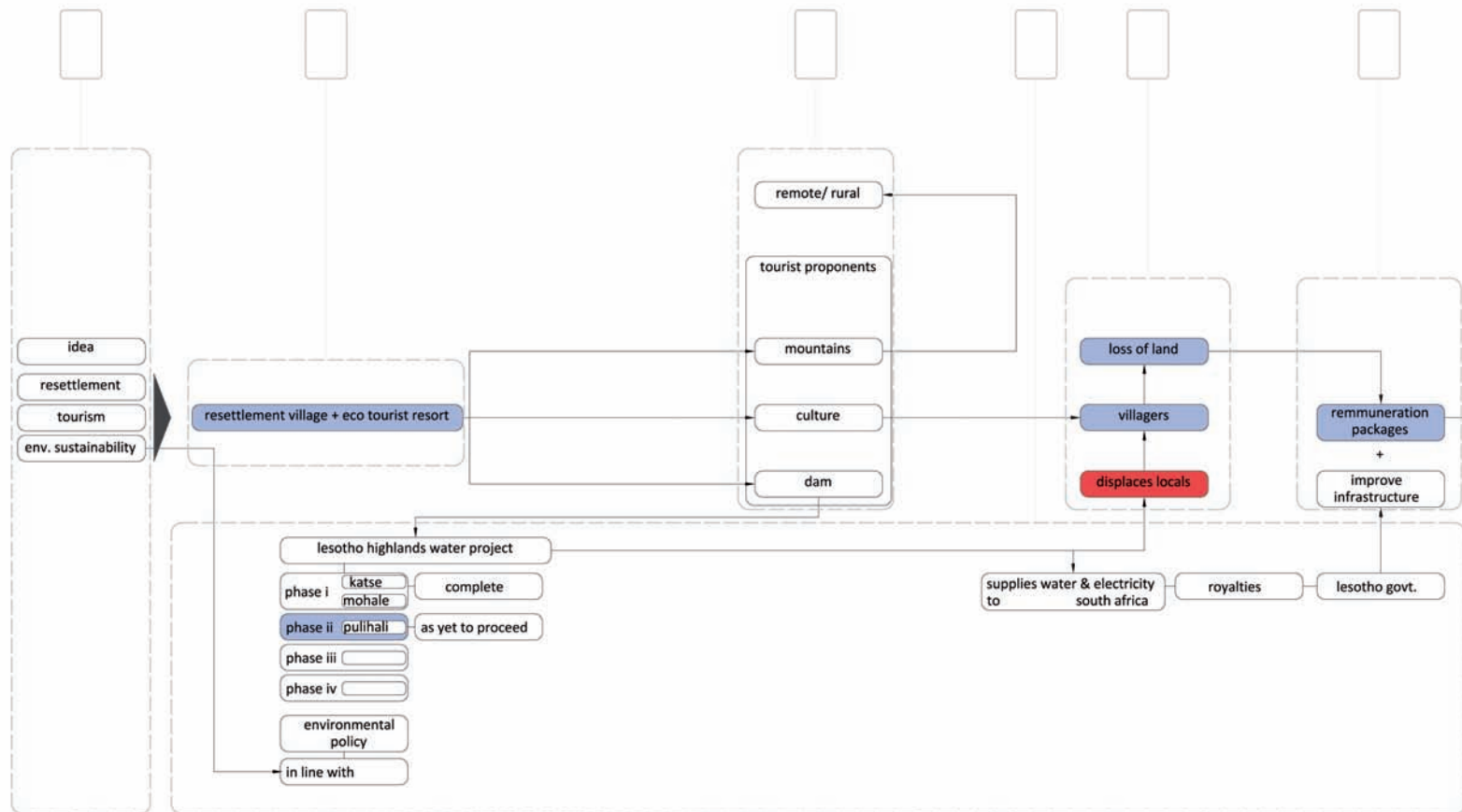
The thesis focuses on a number of communities which, to varying degrees, are affected by the building of a dam, resulting in their environment being inevitably transformed. Compelled to adjust, these communities are left few options. It is the opinion of the author that current frameworks implemented for relocation and compensation are inappropriate and an alternative is thus proposed.



103 Brief/ response

Propose a development framework that coincides with the development of the dam and counteracts the displacement of the local people. Design, as a response to the dam development, an intervention that sustains and enriches the way in which the local people adapt to their new circumstances.

Figure 005. [LEFT] "Katse Dam at dusk"



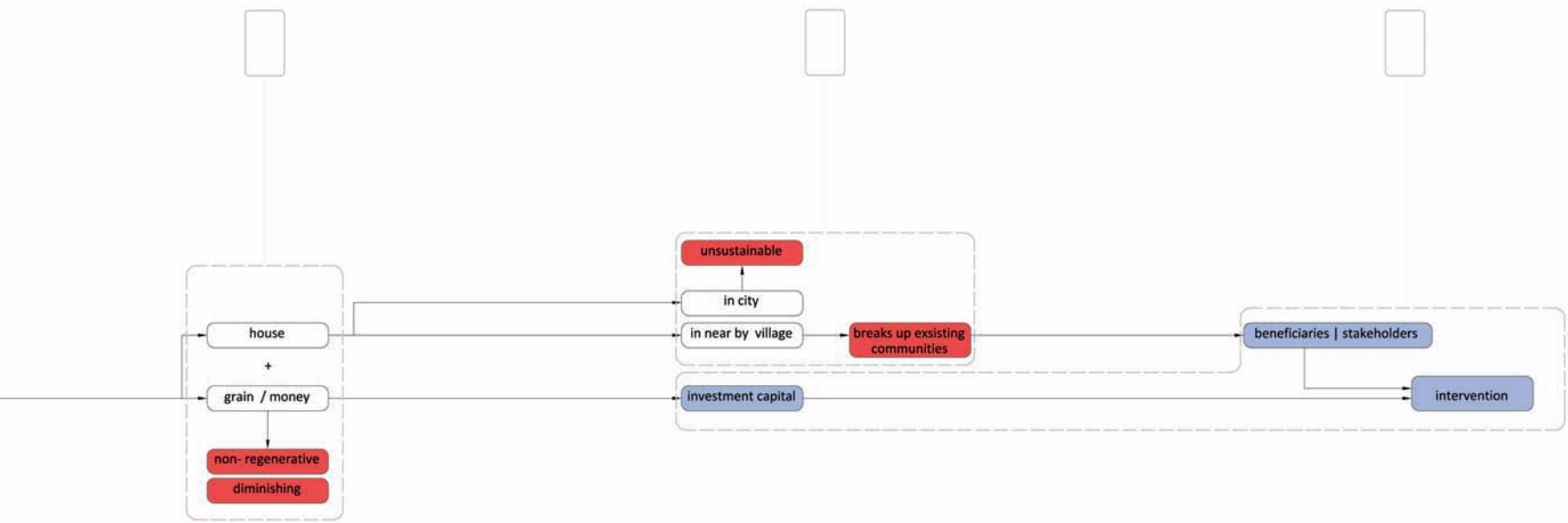


Figure 006. [ABOVE]
 “mind map” outlining the situation where the circumstances as highlighted in the background and context are experienced and the possible avenue for intervention

105 Aims and objectives

The project aims to remunerate locals through a process-driven initiative that occurs concurrently with the construction of the dam. The objective is to have the community act collectively in negotiating a reinvention of their village – a reinvention that takes their sense of belonging and their cultural values into consideration. This would result in a village that refocuses resources and the current lifestyle of the people to align with the change in their environment.

The objective is to reconcile tradition and progress, and turn the threat posed by the development of the dam into an opportunity.

106 Problem statement

How can development incorporate and remunerate the local peoples of rural environments to sufficiently empower them to make decisions that cultivate and enrich their environments and in the process allow them to develop an architectural language with an honest vernacular?

107 Research Methodology

|Analysis|

Site, locals through interviews and consultation, historical context, theoretical premise and precedent studies

|Synthesis|

Information pertinent to comprehensive evaluation of parameters of project

|Design guidelines|

Clearly defined influential elements that inform the design

|Intervention|

Approach to unraveling highlighted problems through established criterion

|Implementation|

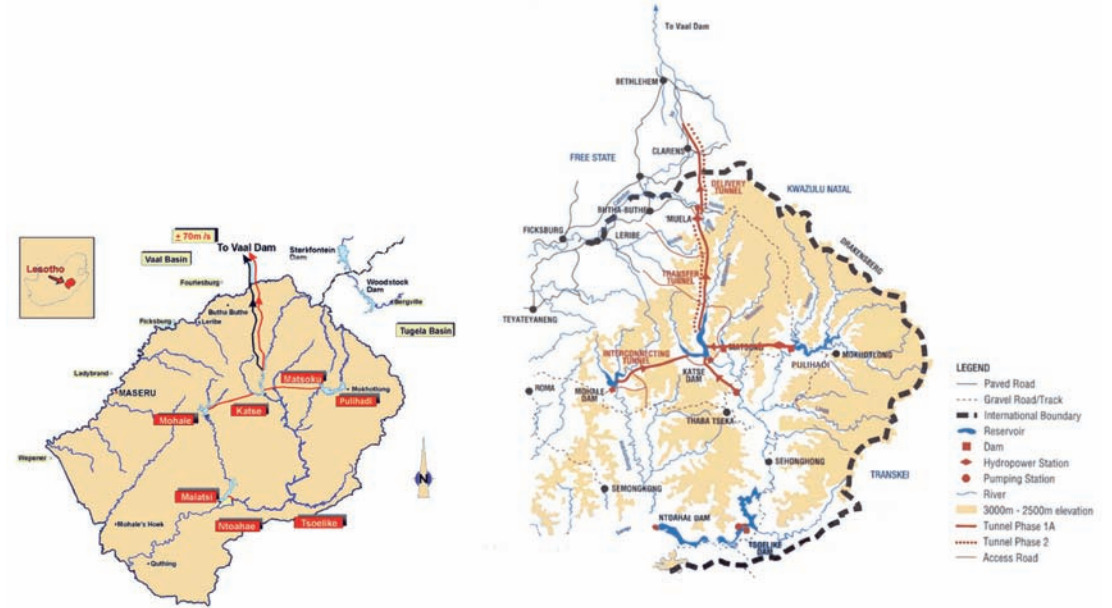
Pragmatic application of all research complied

200_brief development

- 201 Background and rationale
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201 Premise Background

The Lesotho Highlands Water Project (LHWP) was designed as a water delivery scheme between the governments of South Africa and Lesotho and is one of the five largest dam-development projects currently under construction in the world. Based on a treaty signed in 1986, the \$8 billion project is funded in part by the World Bank, the African Development Bank, the European Community, and several European funding agencies, and implemented by the parastatal Lesotho Highlands Development Authority (LHDA) in Lesotho. The water delivery scheme will include five dams linked to cross-national tunnels constructed in four phases over a period of 30 years (1987-2017). Three dams (Katse, 'Muela, and Mohale) have been completed and two others (Pulihali, formerly Mashai and Tsoelike) are currently in the formative phases (see Fig 005).



The first objective of the LHWP is to sell, transfer and deliver water from Lesotho's Senqu River and its tributaries to the Gauteng industrial region of South Africa (which includes Johannesburg). In return, South Africa was estimated to pay approximately \$55 million in royalties to Lesotho each year; however, recent reports show that Lesotho has received closer to \$18 million in average annual revenues because water levels were below initial projections. The second objective is to create a hydro-electric power station allowing

Lesotho to generate electricity domestically. In addition, an important documented obligation of the project is to not worsen the current standards of living of those affected by the project [Elsevier 2008]. The second phase (dams Pulihali and Tsoelike) will soon be underway. The Pulihali dam, the setting of the design intervention, is planned to be built in "Tloa re Bue" (meaning "move, let us speak"), 30 minutes outside of Mokhotlong, a remote town in the highlands of Lesotho. The

Figure 007. [RIGHT] "Lesotho Highlands Water Project Development Map" displaying the proposed new dams and the waterways up into south africa.

dam stands to displace some of the local people who live in the valley that that will become the flooded catchment area. As part of the project, people living within the flood plain will be relocated. In addition, they will be offered remuneration packages as compensation for the loss of their land. In rural communities, land is considered to be the peoples livelihood; their dependence on it is a reflection of its importance in rural societies.

The remuneration packages are supposed to be more than compensatory. It is intended that the relocated parties (often households) should be in a better position after relocation than before. The packages comprise grain issued annually per household for a term of 50 years. This is calculated at a rate of 10 000 kg per hectare of land. It comprises 70% mealie and 30% other grains as per dietary suggestion. Alternatively, the equivalent monetary value could be

disbursed. In the case of the housing component, a house is built for the family unit in a location of their choice.

Certain individuals opt to move to the capital city Maseru, the capital city in search of better opportunities, whilst others choose to stay in the highlands. [Elsevier 2008]

Those who opt to move to the city often choose to have homes built in areas that are unfamiliar to them. They subsequently experience difficulty in financing their new urban lifestyles. The houses that are built for the relocated families are meant to conform to the status of other inhabitants of the chosen suburb. However, having chosen the monetary compensation, relocatees may not be able to sustain their households in respect of the adjusted leap in lifestyle. The remuneration package then becomes defeatist, where the resettlers are now living beyond their means. A fortunate few have the ingenuity to have

a house built in the city while they remain in the Highlands. The city property is leased and in turn generates an income. However, being in the Highlands, the property in the city becomes difficult to manage and tenants often take advantage of the situation.

Those who remain in the Highlands join other villages and opt for the grain package, living within their means while selling some of their grain to buy other amenities. However, as family size increases the grain cannot support all members. Families are then forced to look for alternative means to support themselves. Not owning land in the new village makes it difficult to farm sustainably. Also, dependence on the grain stifles growth. People often develop a sense of complacency as they await their monthly grain packages. Once more the remuneration package becomes counterproductive.

[Interview Phakisi: January 2009]

The building of dams and their developmental impact have been the subject of much debate over the past ten decades. The focus of an assessment of the pros and cons ranges from the physical and ecological impacts to socio-economic factors such as the geographical distribution of electrical power and water resources, the administrative decision-making process, the inclusion of relevant stakeholders, and, in particular reference to the problem at hand, the relocation and resettlement of displaced inhabitants as well as the inherent disruption of social, cultural, and economic life in communities affected by dam construction.

One major example of the social impacts that large dams have is the Aswan Dam in Egypt. The Aswan Dam, a rock-fill dam across the Nile River, was completed in 1970. The dam necessitated the relocation of approximately one million Egyptian peasants and Sudanese Nubians. These people lost their homeland and were dispersed to the ‘less fertile’ government lands in Upper Egypt and Eastern Sudan. In addition to peoples losing their homes, the loss to historians and archaeologists worldwide was immense, where great Nubian monuments and historical sites were submerged and lost forever, despite ambitious rescue operations (UNESCO).

In terms of the ecology, the amount of productive land on the banks was increased, but where the annual floods used to bring rich, fertile silt down the river, there is now the danger of the Nile soil becoming unfertile.

However, the Aswan Dam does have its benefits: the annual Nile flood is now controlled by man, and the flood water is impounded to irrigate thousands of new acres of land. In addition, the dam generates enormous amounts of hydro-electricity, and the reservoir supports a flourishing fishing industry.

[Aswan Case Study, 2001]

It seems that in spite of massive benefits there seems to be a need for a more comprehensive study of resettlement schemes and their adverse effect on ecology and cultural heritage. It necessitates the need for a more comprehensive approach to development and its inherent impact on rural environments.



Figure 008. [RIGHT]
“Aswan Dam Location and Development”

Although smaller in scale, the Lesotho Highlands Water Project has internally taken the decision to amend and reconfigure its policies to become more encompassing. As it is phased, policy implementation is monitored and adjusted in subsequent phases. In Phase IA in particular, the affected people were moved up or downhill to make way for related dam construction activities such as power lines and road alignments. The valleys had previously been used mostly for farming and grazing purposes. Social impact assessment reports reflected that, while villagers embraced the new infrastructure, they expressed a sense of distrust and disappointment with the substance and execution of policy [refer to addendum 'A' Elsevier 2008 for more details]. Phase 1B proved to be more complex and subsequently required a more comprehensive policy that in many ways attempted to correct the shortcomings of policy as per Phase 1A.

In this case, specifically the setting for the intervention, communities actually lived in the valleys and gorges and oxbows that were to become the catchment area of the reservoir. Environmental Impact Studies revealed that the people would need to move out of the basin areas. The resettlement program stipulated that communities had the option to move uphill within the highland regions or to resettle in the foothills and/or even in the urban centres as pointed out in the premise background of this study. This confirmed the notion that the geopolitical structure of wealth and power disadvantaged the rural poor of the highlands of Lesotho. The increased prioritization of commercial uses of resources and reorganization of rural resources is in effect a means of displacement, leaving the rural communities to absorb the economic, ecological and social costs of their resources being re-structured [Elsevier 2008].

The LHDA is indeed taking steps to amend its policy to better remunerate rural peoples and can be expected to address the social impacts more effectively. However, it is the feeling of the author that the policies are somewhat inflexible and are imposed rather than negotiated.

203 Problem statement

Can rural environments sustain economic progress in a way that still supports the local community? Is there a way to use development to sustain local people in changed circumstances while preserving cultural heritage and the natural environment? Can phase 2 of the LHWP set a standard with regards to a positive partnership between government, rural communities and investors to enrich environments in transition?

what| where |who |how |when |why



Figure 009. [RIGHT]
“Questions sketch”

The proposed thesis scheme provides a means of sustainable development to a series of communities affected to different degrees by the building of the Pulihadi dam. It proposes a framework that comprises a series of complementary elements that would enrich the lives of the communities of the area.

- Firstly, for the 26 households of the most affected community in the village of Tsekong, a relocation village is provided. As proposed, the framework suggests environmentally sustainable housing and small-scale farming based on the existing culture as well as contemporary living and farming standards.
- Secondly, the framework proposes service amenities for the three communities in the area. These would include a sports ground, a school, a day care centre, a farm including an alternative methods learning centre. In

addition, a clinic and laundry, as well as communal spaces and infrastructure.

- Finally, the framework proposes a tourism intervention consisting of a hotel, with mountaineering and water sports facilities. The hotel portion of the intervention, which is the focus of the thesis, explores the prospect of turning the threat posed by the dam into an opportunity. The communities, as empowered by the LHDA, act in the capacity of shareholders partnered by hotel developers to develop the area into a tourist destination. The construction process – coupled with that of the dam – creates the prospect of using shared resources. Furthermore, the possibility exists of employing the villagers, maximizing their earning potential and giving them a sense of ownership through what would be a highly labour orientated initiative.



Where

The placement of the scheme is determined in many respects by the positioning of the dam and the impact it would have on the surrounding environment.

- The village cluster of Ha konki, Tsekong and Litsotsong is located east of the banks of the place known as “Meteanong”, where the river Khubelu (pronounced “kgubhedu”) meets the Senqu River. The intention of the dam development is to dam up the river valley at “Meteanong” and flood the river basin. As a result, the rise of the water line would encroach on the village cluster, impacting each village to a different degree. The proposed waterline forms a peninsular of the cluster that juts out into the dam, creating a setting for the proposed intervention.

Who

The scheme attempts to provide a sustainable alternative to current frameworks for displaced communities.

- It is primarily directed at the villages of Ha Konki and Tsekong, as they are two of the five villages in Mokhotlong affected by the dam development. They are in a keen position to use their transformed environment to their immediate benefit.
- Secondly, the usage of service amenities is extended to the village of Litsotsong through facilitation as well as job opportunities.
- Finally, the tourist acts as a subsidiary client in that the hotel should have international appeal by adhering to contemporary design standards and current hotel trends. The design will attempt to redefine local architecture and combine it with current day technologies to create a unique fusion of Basotho vernacular with western appeal.

Figure 010. [LEFT]
“Lesotho woman”

How

The communities are enabled to act collectively as opposed to individually as separate households. Highlands compensation sets a platform for negotiations that impact the community as an entity. Through a cooperative of communities as aided by the Highlands Water Authority and the government of Lesotho the following can be accomplished:

- By keeping the community [of Ha Konki specifically] together under one chief to whom the residents entrust their representation, the communities are in a position to enter into negotiations with the Highlands Water Authority. In planning their remuneration collectively, the relocation keeps them together in close proximity to the dam. As owners they can then develop their lucrative asset in the form of waterfront property.
- Firstly, the village of Ha Konki is relocated to an area where it will not be directly impacted by the water level and flood line of the dam.
- Secondly, the grain packages or the monetary value thereof are translated into investment capital to develop the area by providing service amenities and refurbishing the existing rural infrastructure.
- Land owned by the cooperative is leased to developers as the easiest means of earning a profit. Monies are either reinvested or paid out in dividends.
- Apart from the economic logistics of how the scheme will be funded and implemented, local labour will be utilized so as to encourage community participation through labour intensification. A further benefit of this would be that it would instil a sense of ownership in the community. Extensive use will be made of available resources, including materials and technologies. As mentioned earlier, the alignment of the construction processes to utilize resources most efficiently would serve to aid the implementation of the scheme.

When

The construction program of the dam forms the basis of how the development of the scheme will be undertaken. Where the construction programme is synchronised with that of the dam so that machinery from the dam can be used to excavate areas where required. Also engineers hired on the dam as well as other specialists and consultants can assist on and supervise sections of the retreats construction. The process is outlined in broad over leaf.

Why

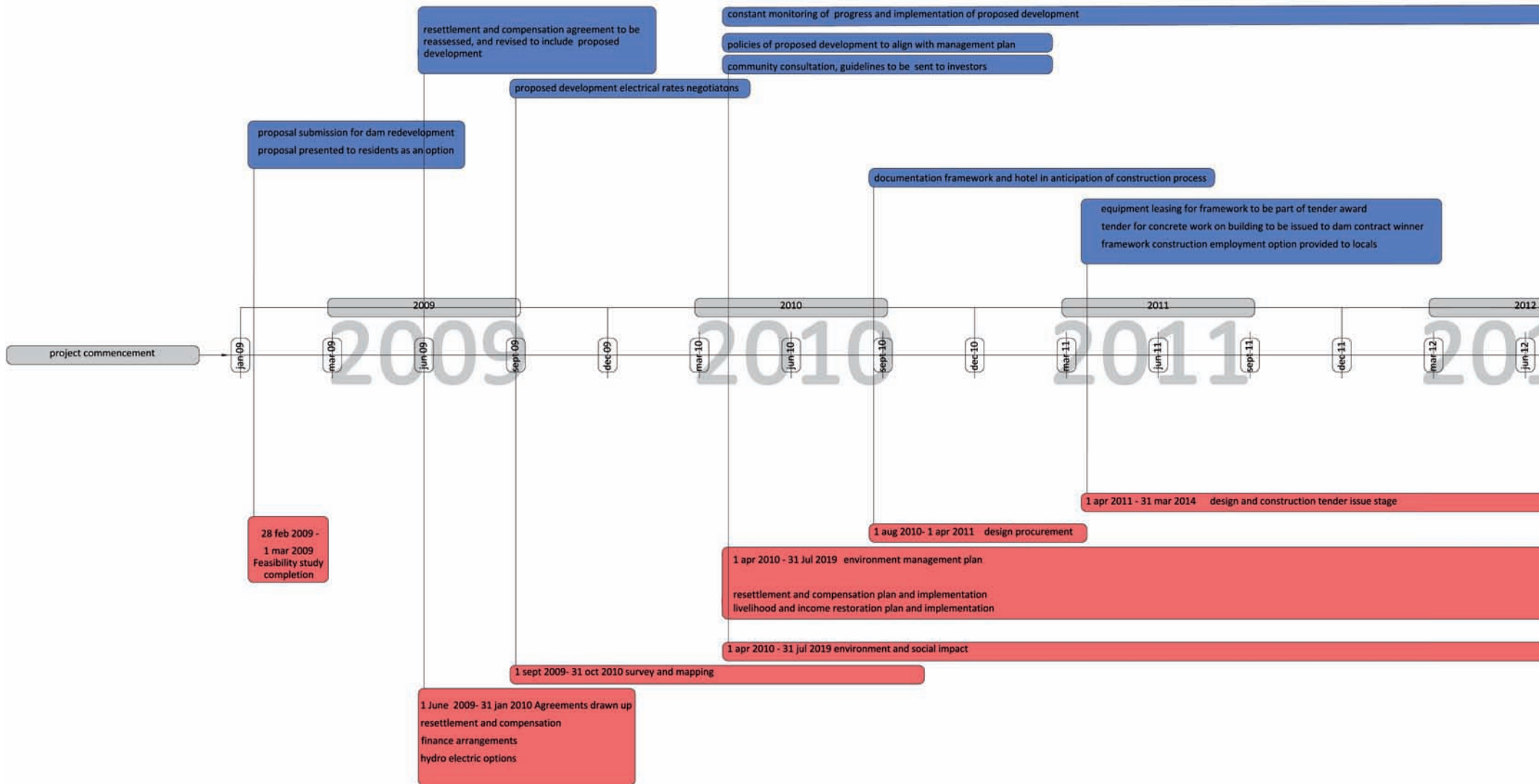
The aims of the proposed intervention are as follows:

- To question the current framework and propose an alternative that takes an approach that is contextually more viable.
- To demonstrate to communities that there are alternatives to the lure of the city to achieve economic sustainability.
- To instil a renewed sense of identity in local rural communities.

- Most importantly, to explore the possibility of an architecture that is current and appealing yet respectful and nurturing of local culture.
- People of rural environments often regard city culture and western models as symbols of prosperity. A hotel constructed from predominantly local materials would act as a tool to represent western appeal while still being contextually relative. The aim would be to encourage locals to renew their appreciation of indigenous architecture. Also, as a skills transfer exercise, locals employed by the construction would be exposed to alternative western building methods that may be more attuned to their own environment.

The ultimate objective of the project would be to counteract the negative aspects of modernization and the misappropriation of technologies in unsuitable environments.

205 Project Synergy



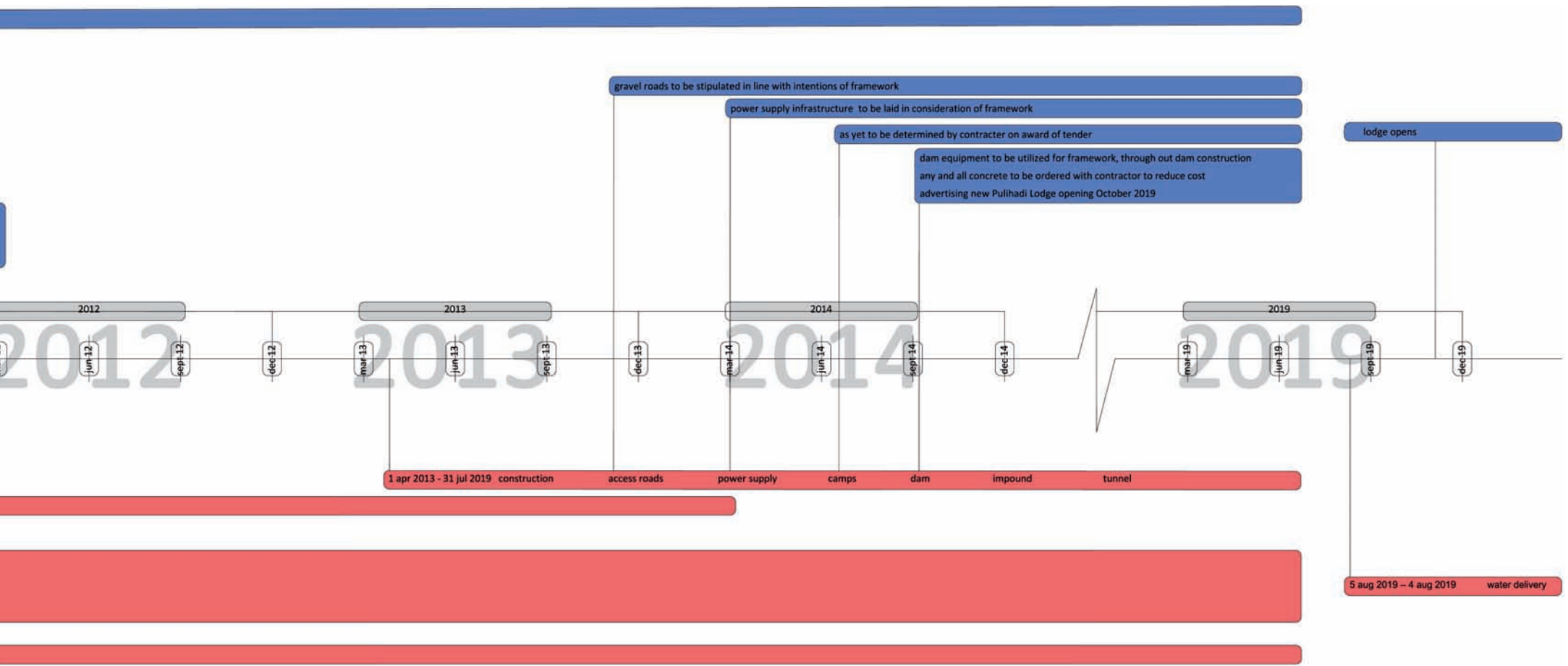


Figure 011. [CENTER]
 “programme synergy” aligning process of construction to optimise usage of machinery and resources

After having outlined the issues in full, a research method by way of a systems approach to problem solving will be utilized to guide the development process. Due to the multifaceted, complex nature of the problem, a critical synthesis of information derived from the following will form the essence of the discourse:

Where the site and its location are concerned, climatic and environmental constraints and advantages should be taken into consideration, in order to make the best use of available resources to benefit locals as well as visitors. This should be done with the intention of maximizing the potential for engaged solutions to enable social dialogue through architecture.

The area of focus consists of the villages of “Ha Konki” and “Tsekong” (meaning “place of Konki” and “place of struggle” respectively), located 30 minutes outside the town of Mokhotlong in the Mokhotlong district. They are two of the five villages directly affected by the advent of the dam.

The analysis of the site will form a strong base for the scheme. The thorough analysis presented later will highlight and take full advantage of the available resources. Extended to include the context and proximity of further resources that could be tapped into, it will be a key element in the success of the legibility of the scheme. A critical site analysis and consultation with the locals, will serve to unlock the potential of the site. The site would then form the cornerstone of the scheme.

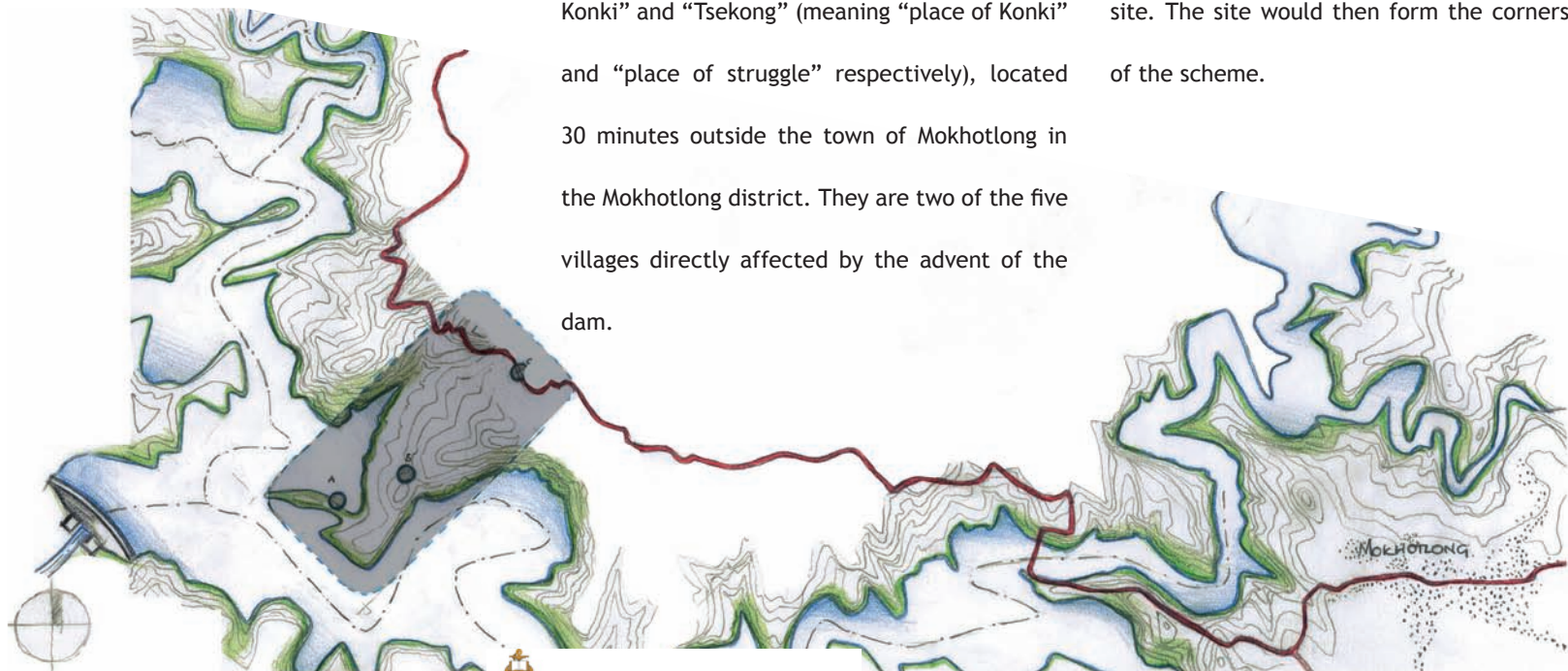


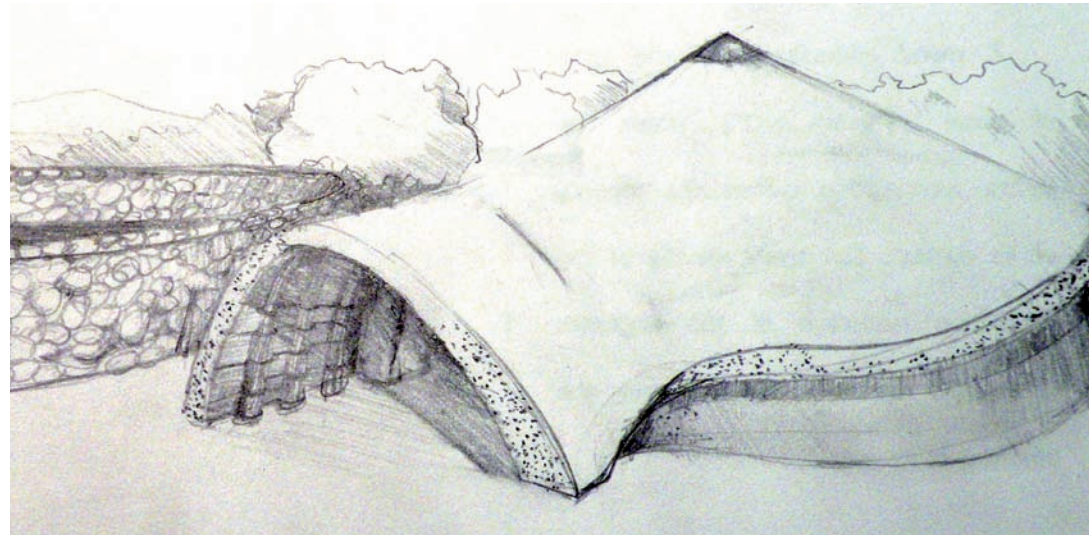
Figure 012. [RIGHT] “Site sketch with proposed dam”

Locals | resettlers | clients

Engaging with the people who are currently settled in the area will form a key element in understanding the site and its usage, taking cognizance of the possibility of them playing a role as clients and the potential wealth of cultural resources that they represent.

Attention should be given to the concerns and expectations of the local people where a design intervention of this nature is concerned. Focused interactions with locals through interviews will gauge their perspective on the proposed intervention. As a result, much needed light will be shed on possible alternative options they may be able to pursue. Furthermore, the locals and their interactions with visitors are undoubtedly crucial to the scheme, so an investigation of the interactions amongst the locals is necessary to determine how communal space would cater for that.

The outcome would be a settlement framework that provides for social interaction and transfer of knowledge between the locals and visitors.



Historical background

The history of the Lesotho / Basotho nation and its people forms an integral part of the scheme in that certain events denote influences and shape architectural responses to specific problems. The history therefore becomes the narrative of the regional architecture and identity. Key events are highlighted, illustrating their significance and influence on the architecture of Lesotho. This will serve to inform an approach to the design that allows for future growth while being mindful of age old traditions.

Figure 013. [UPPER LEFT] "Residents of Tsekong"

Figure 014. [LOWER LEFT] "Image of Traditional home"

Theoretical Premise

The theoretical premise is focused on the hotel/lodge design intervention. The theoretical discourse addresses the hotel retreat as an element that stands as an intermediary, announcing the identity of a culture within a modern paradigm, where rural pragmatic and vernacular design meets contemporary and environmentally responsive architectural innovation. Established theory acts as a re-interpretive measure that mediates between the two, contextually informing the design process.

- A sound embodiment of the spirit of place, its 'genus loci', occurs where the design intervention expresses the identity of its context. The design is sensitively mindful of the undulating landscape of the highlands of Lesotho and its effect on forming the lifestyles of its people.

- A critical-regionalist interpretation of traditional forms is used to establish a new architectural language, drawing from historical and cultural fundamentals that are reassessed and applied to current circumstances. The result would be an architectural language that is measured against itself in a changing environment.
- Reference is made to precedents that have had to accommodate similar circumstances, and had to negotiate vernacular identity in a modern context.

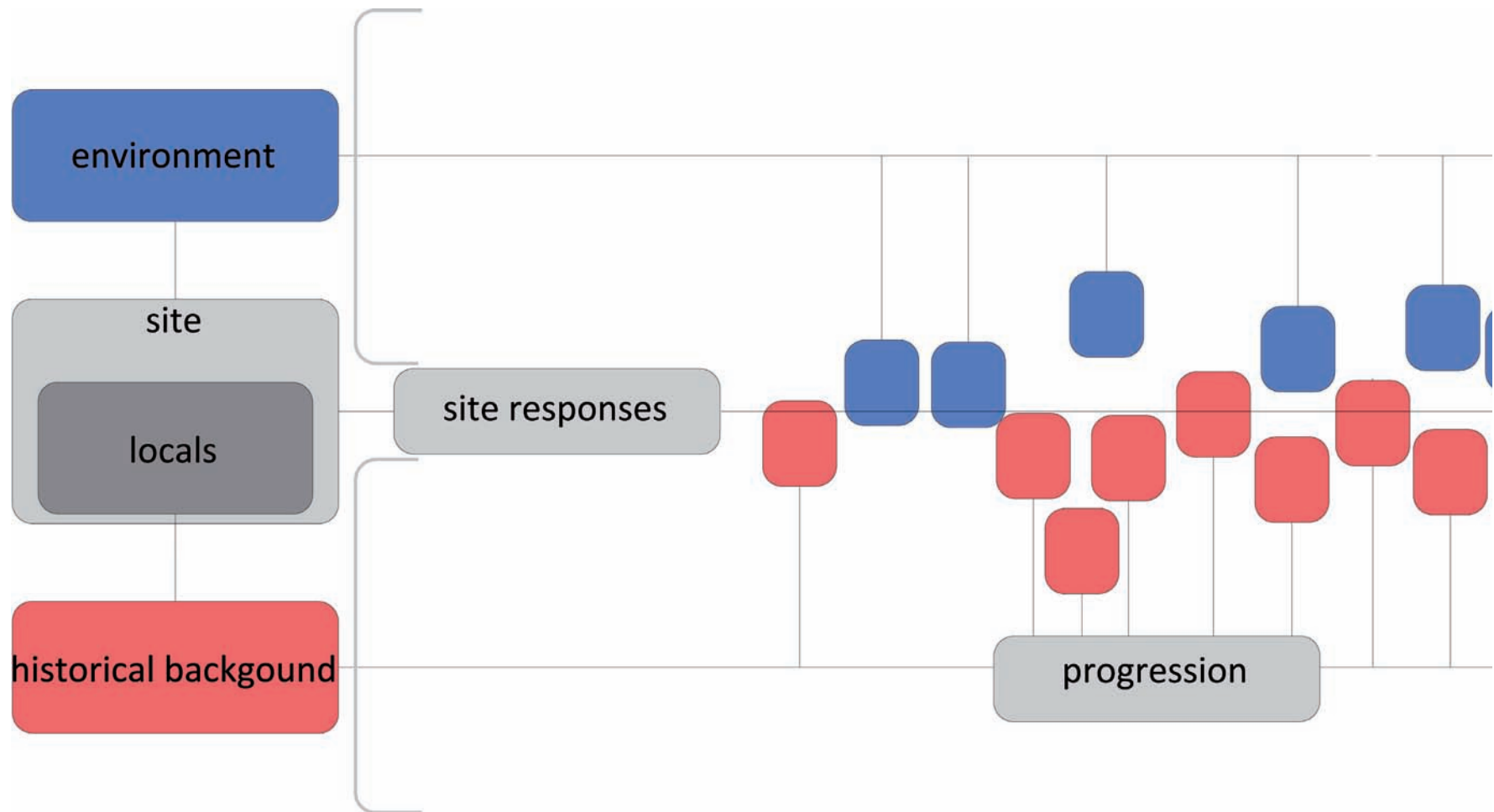
[rich | hancock | low]

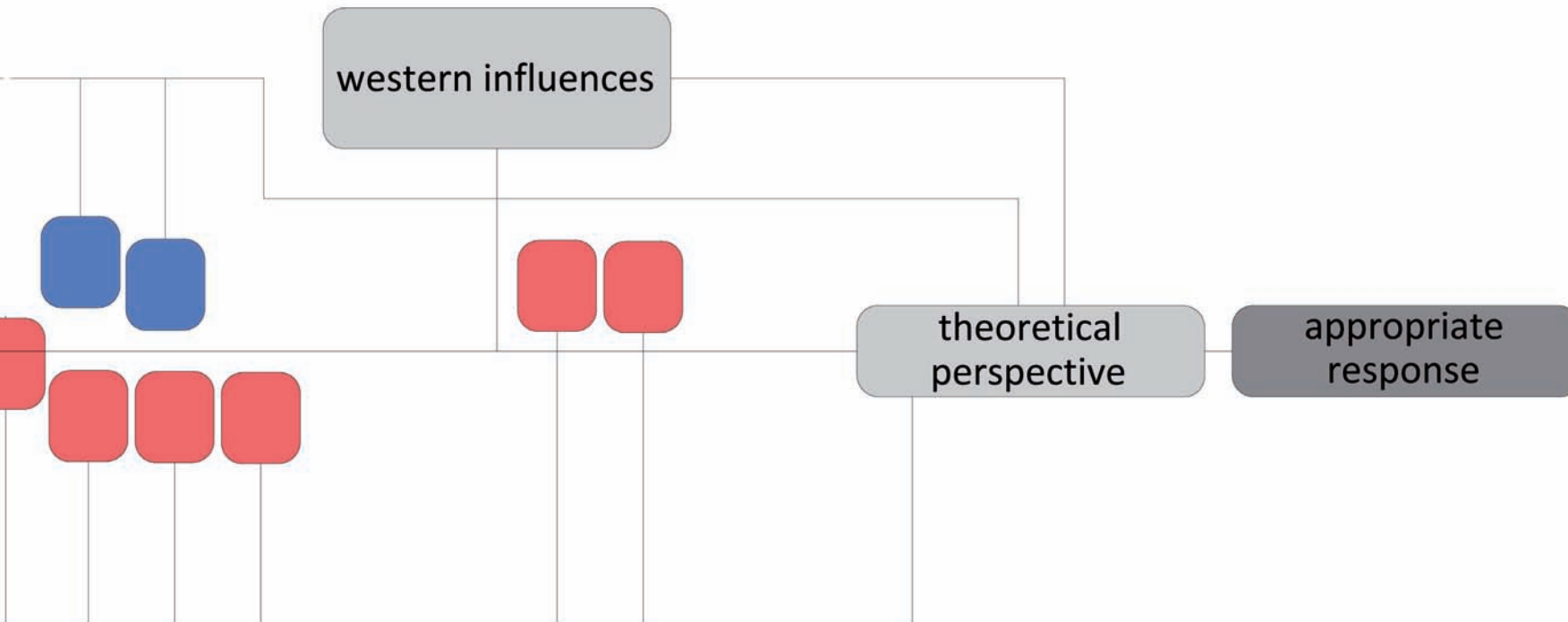
Later on in the site analysis and framework conceptualization, established theory is used to address the implementation of the framework in terms of vernacular principles of place making and those of normative small-scale urban development. They are juxtaposed and their outcomes are evaluated against Lynchian principles of space definition as well as patterns of settlement as per Christopher Alexander.

Environmental and climatic response

The isolation of the site coupled with the self-sufficient lifestyle of the local people lends itself to be complemented by an environmentally responsive architecture. A lack of infrastructure and services should not hinder development in remote areas. A golden opportunity exists to explore the potential of remote self-sustaining developments. The project aims to investigate the potential of channelling resources and climatic conditions towards the most environmentally responsive solution:

- Where the human impact is least harmful.
- Where the application of traditional climatic responses to contemporary interventions can be harnessed





300_historical background

301 Historical timeline
analysis

Time line analysis

The historical timeline plays a role as a pattern-defining tool in the gradual progression of a nation. Past paradigms are response based in that prevalent circumstances of that time inform architectural design responses. This progression forms the identity of a culture and there-in, the development of an architectural Character.

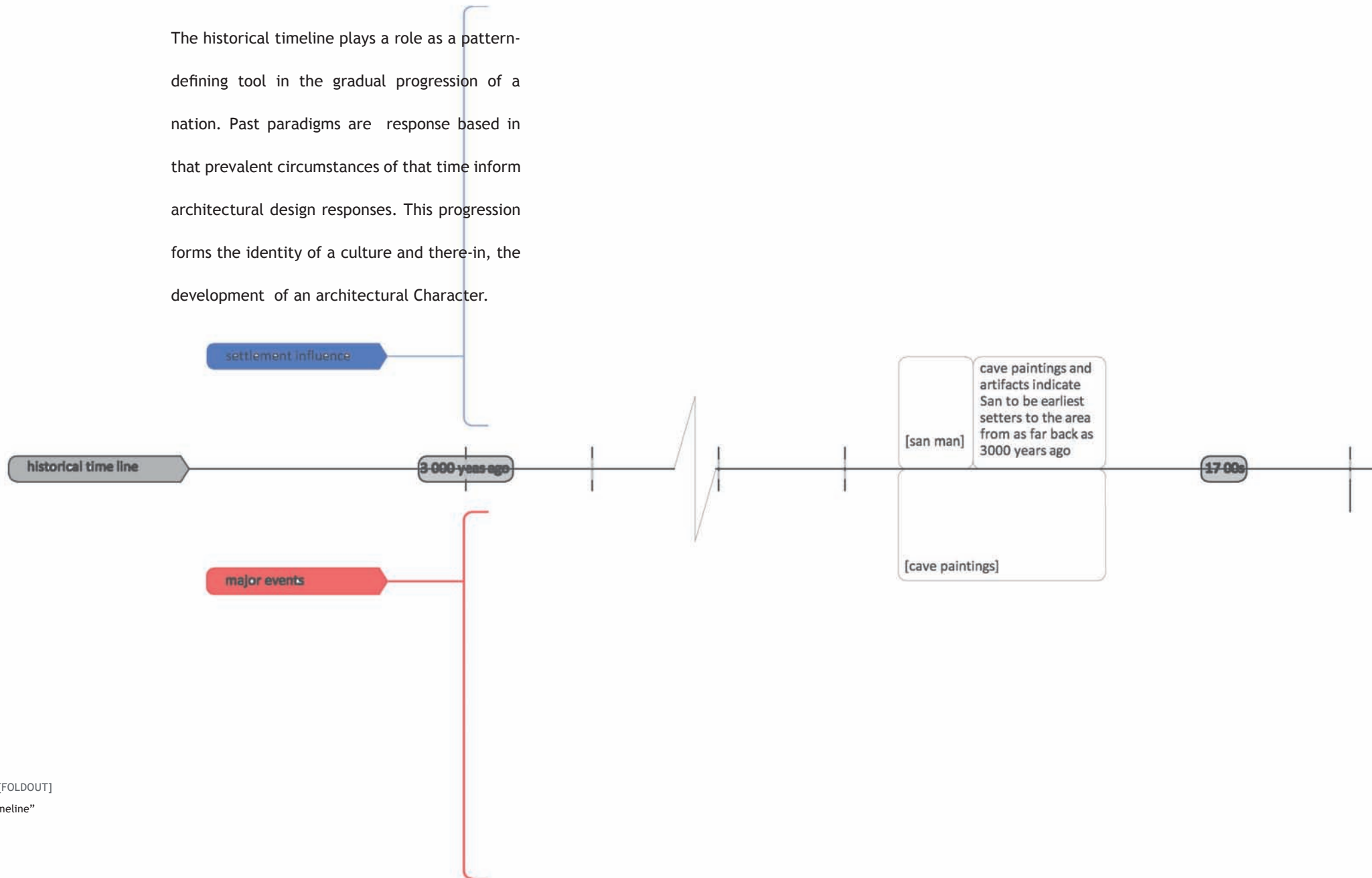
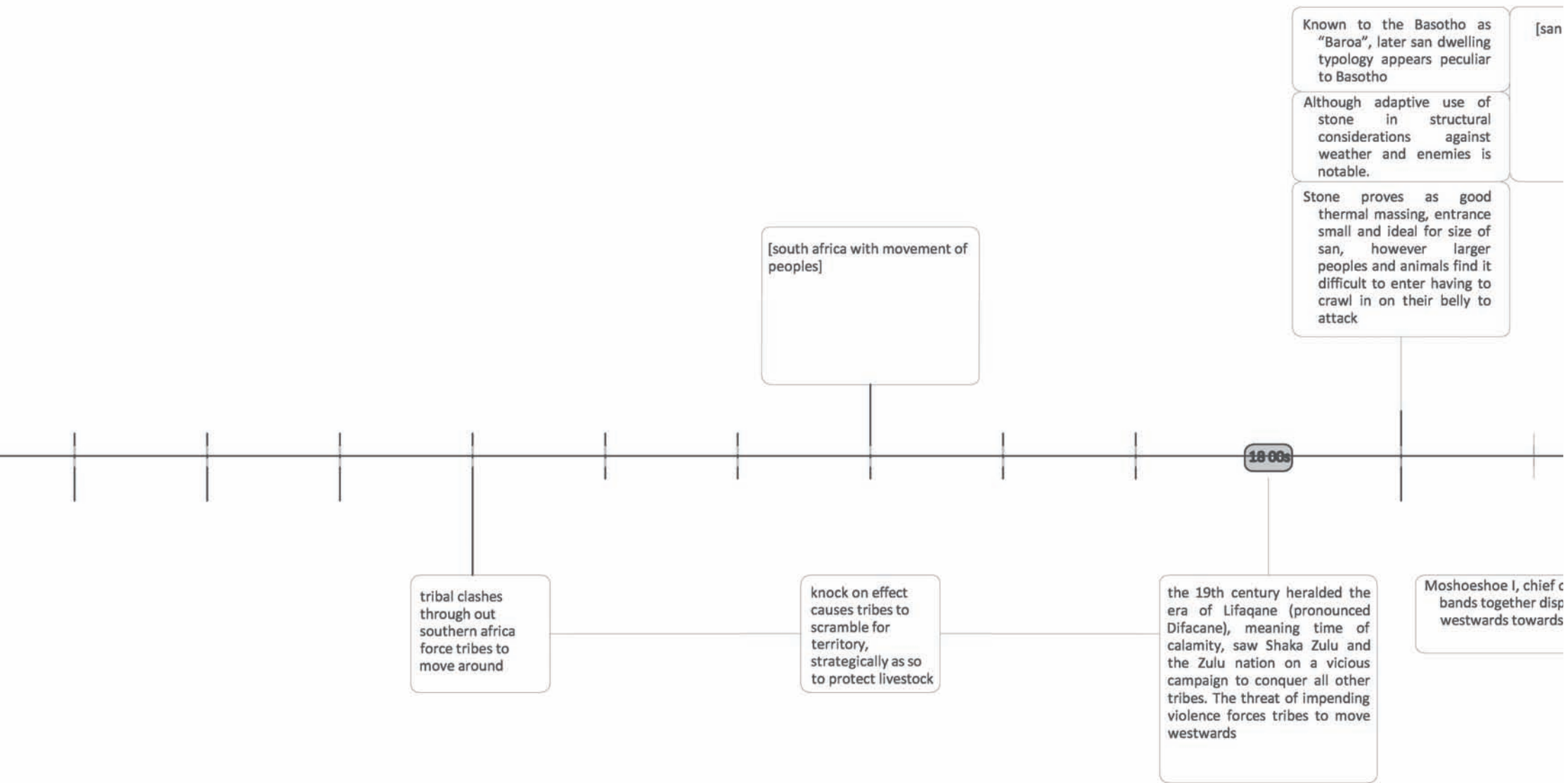


Figure 015. [FOLDOUT]
"Historical timeline"



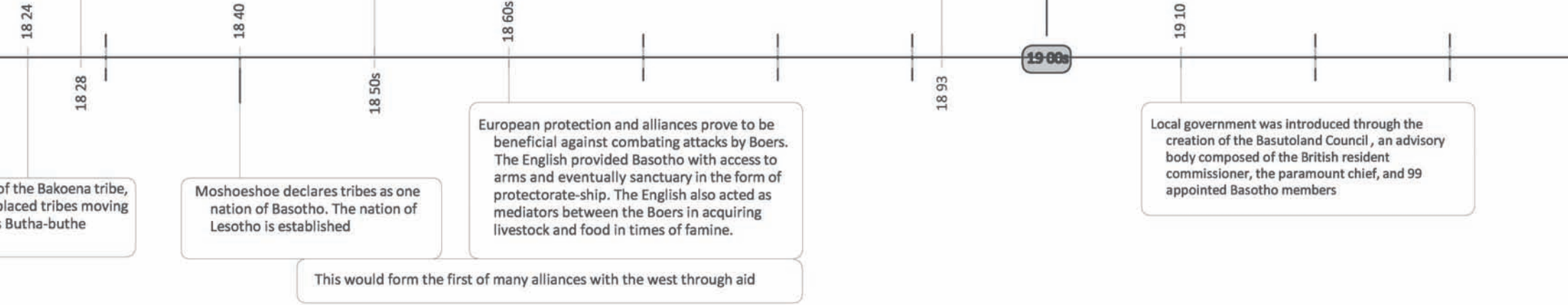
sketches]



Moshoeshe I, and the tribes, roughly 4000 people move further south west to the Qiloane plateau, later known as thaba bosiu- the legendary stronghold of the Basotho during the 'gun war' against Boer farmers

Missionaries and Other Europeans move into Africa, Clashes erupt over land between the Basotho and Boers Settlers to the Free State

As population pressure in the lowlands increased, Basotho began first to graze their animals in the Maloti and later to build villages. The earliest such village founded on a mountain known as Thaba-Tseka- 'the mountain with a blaze'.



of the Bakoena tribe, placed tribes moving : Butha-buthe

Moshoeshe declares tribes as one nation of Basotho. The nation of Lesotho is established

European protection and alliances prove to be beneficial against combating attacks by Boers. The English provided Basotho with access to arms and eventually sanctuary in the form of protectorate-ship. The English also acted as mediators between the Boers in acquiring livestock and food in times of famine.

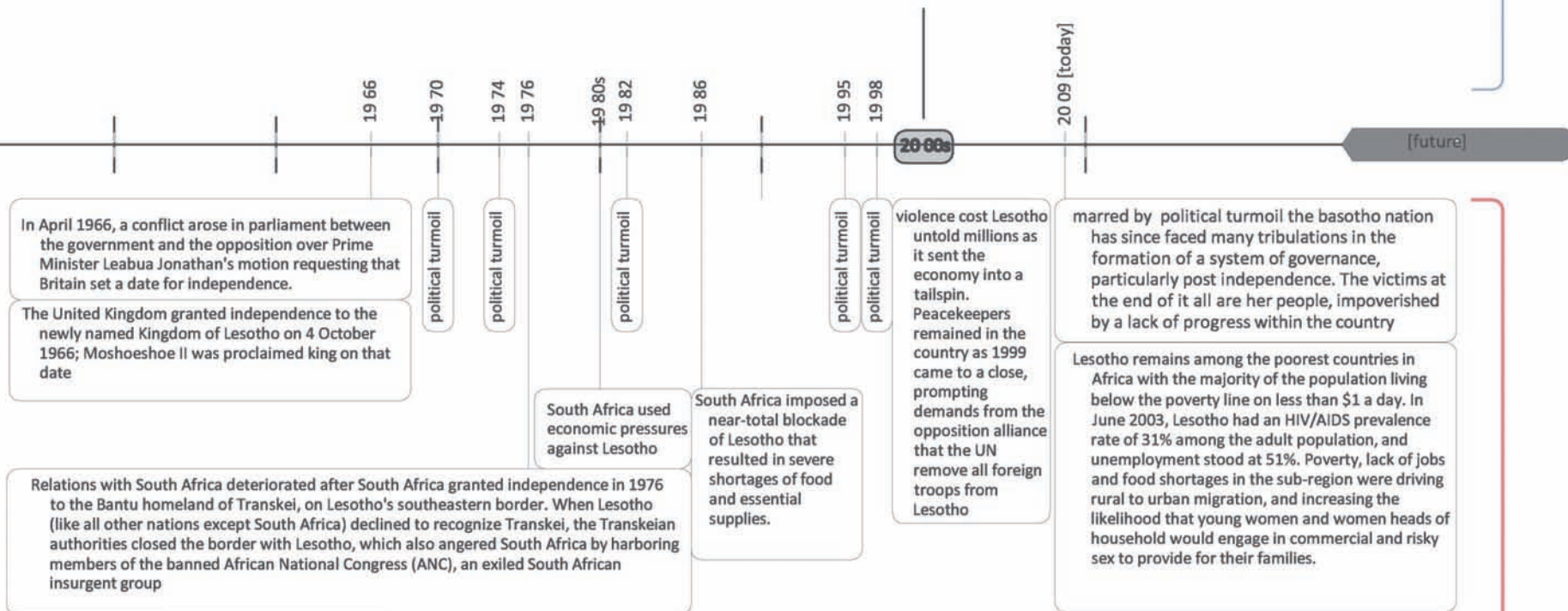
This would form the first of many alliances with the west through aid

Local government was introduced through the creation of the Basutoland Council , an advisory body composed of the British resident commissioner, the paramount chief, and 99 appointed Basotho members

Conclusion

It is evident that the people of Lesotho have been at the mercy of external forces throughout time. Consistently having to respond to this, their identity is based on their relation to those external influences. Thus making it difficult to control, fortify and eventually shape this identity into something

definitive and pride instilling. The future should in effect centre rural peoples as being formative of their own environments. The Author is of the opinion that, where equipped with knowledge their responses would be informed and internally orientated to progressing from within.



400_ theoretical discourse

- 401 Identity for Modernity
 - 402 Place Informing Identity
 - 403 Critical Assertion
 - 404 Theory in Practice
- [alexander | lynch]
- [rich | hancock | lowe]

The historical analysis presents circumstances that are not uncommon in developing environments. Communities in underdeveloped countries struggle to negotiate the pressures of modernization. The increased need for convenience and comfort has been sought after in western ideals and commodities. Rural environments are in turn laden with modern constructs and services. The identity-rich culture and traditions as cradled by orthodox spatial constructs are thus diminished, where indigenous building methods are set aside in lieu of modern comforts.

Modernization however is in many ways inevitable, in that every society can be expected at some point to advance and live within the now. Peoples of developing environments more often than not have to find a meeting ground for culture and modernity, taking what they can of their culture and expressing it through

their adopted western culture. This of course is characteristic of an erosion of culture and its place as the cornerstone of identity.

By re-evaluating this corruption of culture, architecture can play an integral role in the reaffirmation of cultural and traditional principles. Unlike city or townspeople who are exposed to the contaminants of modernization, those from rural environments are perfectly placed to counter this situation, given their rich cultural affiliations. Villages in the highlands of Lesotho can still act as custodians of culture and traditional ways, in that rural communities have woven the ideals and values of culture into their everyday lives. Thereby, the living, working and playing spaces of the community are laden with their identity. The identity of a place is defined by the character of its people.

Place = space + character

[Nesbitt 1996: 418]

Place and the sense thereof is defined by ones ability to orientate oneself within a space and identify with the specific character of that space. [Nesbitt 1996: 412]

The way these spaces are put together is characteristic of its people and therefore makes them meaningful.

Norberg-Schulz in his essay 'The Phenomenon of Place', he makes the following statement: *The man made parts of the environment are first of all settlements of different scale including paths which connect these settlements, as well as various elements which transform nature into a cultural landscape. If these settlements are organically related to their environment it implies that they serve as foci where the environmental character is condensed and explained. The environment experienced is meaningful.*

[Norberg-Schulz in Nesbitt, 1996:417]



The lure of modernization impedes the progression of meaningful space by introducing alien constructs into a contextually unsuitable environment. As an example, the inappropriate introduction of clay bricks into a rural setting comes at a high cost. Where stone was traditionally sourced on site, it is now discarded as it is difficult to use and to adapt to today's modernity. The people of the area forego culturally binding constructs that are *sensitive to specificity of place* [Nesbitt, 1996:486].

The potency of a place's individual identity becomes diluted through time. Place making has to be true to its region; however, rural peoples have lost confidence in the traditional or vernacular presets as not being malleable enough to changing circumstances. Vernacular constructs and regional techniques are thus deemed stagnant. This view is not entirely wrong given the convenience of current alternatives.

Sadly, the transition to the modern forms is misguided, given the fact that it does not foster regional identity.

In his essay 'Universal Civilization and National Cultures' [1961], Paul Ricoeur states that *everything depends on the capacity of regional culture to recreate a rooted tradition while appropriating foreign influences at a level of both culture and civilization* [Ricoeur in Nesbitt, 1996:471].

403

Critical Assertion

The solution lies in the ability of communities to reassess traditional constructs in a new era, and to steer regional architecture in a direction that is of its time yet reflective of a cognitive past. They then cease to become adoptive but rather, adaptive. The transformation, commonly termed critical regionalism, looks critically at

dated methods, refining them to reapply them to renewed circumstances.

Architect and lecturer at the University of Pretoria, Barbra P Jekot echoes the sentiments of this author in her paper 'The coexistence of the 'third' and the 'first' world in South African architecture' [Jekot, 2007]. She discusses how the 'first' and 'third' worlds can work together in sharing information and knowledge, where skills are pooled and the resultant architecture is *rooted and functionally relevant*. She highlights the importance of looking into factors shaping the identity of specific regions and how architecture can be viewed as the material expression of different cultures. More pointedly, she sees architecture as *the most evident, substantial and tangible manifestation of life and culture*. She states furthermore that *it is necessary to build significant buildings to articulate regional architecture so that the expression may be*

sufficiently forceful to catch people's attention and provide a climate for developing design. Her profound views speak directly to the intentions of the proposed scheme, where location has thus defined the nature of architecture.

In her paper 'On Performative Regionalism' [Allen in Canizaro, 2007:420], Barbara Allen sees the way forward as design being informed by 90% cultural practices and 10% style, where the perspective is constituted by how people live their lives as opposed to how they appear. She states *what is needed in architecture and urban design are more robust tools for understanding the intersection of cultural practices and how they inform their regional places* [Allen in Canizaro, 2007:420].

Apart from economically empowering the disenfranchised peoples, the framework aims to critically re-evaluate vernacular design and traditional uses of materials and building methods to develop an architectural language reminiscent of handed-down cultural nuances.

At the same time the proposal is on par with contemporary architecture, and is representative of the regional identity. In this way a model of local architecture that reignites community pride in a renewed architectural identity can be established.

In its re-evaluation of traditional architectural language from a critical-regionalist design approach the hotel/lodge is set against a multitude of influences to propose a renewed archetype that the locals can take inspiration from. It aims to be appropriately responsive to climatic conditions and the building of the dam as an agent of change in the regional environment.

It also aims to be mindful of available materials, and the needs, desires and aspirations as well as current lifestyles of the local people. It will derive inspiration from current models of traditional architectural language and reinterpret them from a critical-regionalist perspective to reinforce and further develop a local identity.

In his book 'A pattern language' [1977], Christopher Alexander states his belief that patterns define towns or communities. However, these patterns are developed over time, "gradually designed in such a way that every individual act is always helping to create or generate a larger global pattern". His view in respect of the intervention can be summarised as follows:

Larger city patterns are built up from the grass roots, where communities govern themselves in the context of identifiable places, i.e. identifiable neighbourhoods with defined boundaries. Neighbourhoods are thus connected to one another by ring roads and a network of pedestrian routes on a human scale, and on a larger scale, a web of transport facilities and minibuses. The character of the local environment is defined by the height of the buildings as well as by its sacred sites. Spaces between communities should form

local centres of activity and trade and, in some instances, working spaces. This would form a necklace of community projects, perhaps a local town hall, a market space and a health centre. These small community-generated initiatives alleviate the red tape associated with larger government implemented initiatives. Also, public green spaces, small public squares and quiet areas should be included, along with play spaces, local sports facilities, public open space and grave sites in between clusters of buildings. Residual spaces in between the cracks thus become meaningful. The arrangement of buildings should be determined by the circulation patterns of the community. Fixing the position of each of these buildings according to the nature of the site, while taking trees, quality of light and public / private interface into consideration, would create a unity of building and environment.

Care should be taken to nurture residual spaces and utilise them for paths, arcades or activity pockets and ensure that they relate well to the building entrance and correspond with the desired intimacy gradient.

Further on Alexander addresses the more intimate elements of household formation that are not addressed by the broad framework but implied in the space planning of the hotel/lodge.

Kevin Lynch made a seminal contribution to the field of city planning through empirical research on how individuals perceive and navigate the urban landscape.

In his book, 'The Image of the City' [1960], he sets out guidelines that addresses the patterns outlined by Christopher Alexander.

paths- the streets, sidewalks, trails, and other channels in which people travel;

edges- perceived boundaries such as walls, buildings, and shorelines;

districts- relatively large sections of the city distinguished by some identity or character;

nodes- focal points, intersections or loci

landmarks- readily identifiable objects which serve as reference points.

Alexander and Lynch's principles provide guiding mechanisms to developing environments.

Through these principles, designers are made aware of elements that define and give meaning to a place. By identifying and nurturing those elements- as guided- development the environment should in effect, still retain its defining qualities.

The work of architect Peter Rich, who, throughout his career has collaborated closely with communities in a southern African / African context, serves as a precedent for the proposed project. He reinterprets African elements in a contemporary way, with specific reference to Ndebele architecture.

From articles on Peter Rich one can discern the depth of his understanding of architecture that promotes the formation of identity. According to Rich, the future of development in rural and undeveloped urban environments lies in extensive community consultation – *the people's voice must be heard* [Davie, 2005]. The architecture should be simple and should echo that of the people, while being mindful to provide public spaces. Furthermore, intermediary spaces such as back and front yards are an integral feature of houses. Relating to the front yard in a more public way, seating against walls create

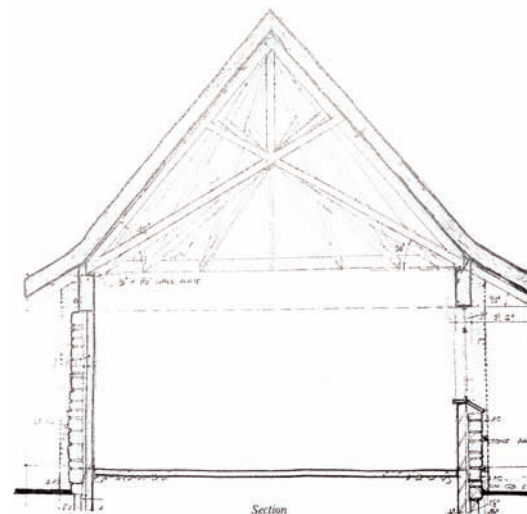
areas for socializing reminiscent of structures in a rural setting. Rich's perspective recalls urban design lectures held by Gary White at the University of Pretoria, in which he provided keen insight into how the built structure of informal settlements was congruent with the immediate needs and social structure of the people in the area. These settlements predominantly feature footpaths familiar to the residents, as they have no need for cars or roads, complemented with nodes that respond to a public transport system. Also, front yards with shade netting correspond with Rich's ideas. The initial opinion of the author had not recognized that this was indeed a response to socio-economic circumstances as experienced by the people. Choice of materials was limited by their economic feasibility as well as availability. Consultation with residents of Phomolong, an informal settlement in Mamelodi, revealed that their structures were made to be

temporary or easily dismantled in anticipation of relocation under state subsidized housing policy. Residents want to be able to disassemble their current home and re-erect it in the location of their new home, or possibly in their back yards, to be leased out for an additional income.

Architecture would then have a part to play in refining this approach by proposing inexpensive ways to enrich and re-invent the current responses of the people. The proposed response would in turn have to be cognizant of the people's way of life and thus formative of identity under the prevalent circumstances. The relation between identifiable space and how meaning is threaded into it is of critical importance.

During the 1960's, and through an empirical approach of direct observation, architect Peter Hancock was able to adapt to Lesotho's milieu, without being theoretically bound by the

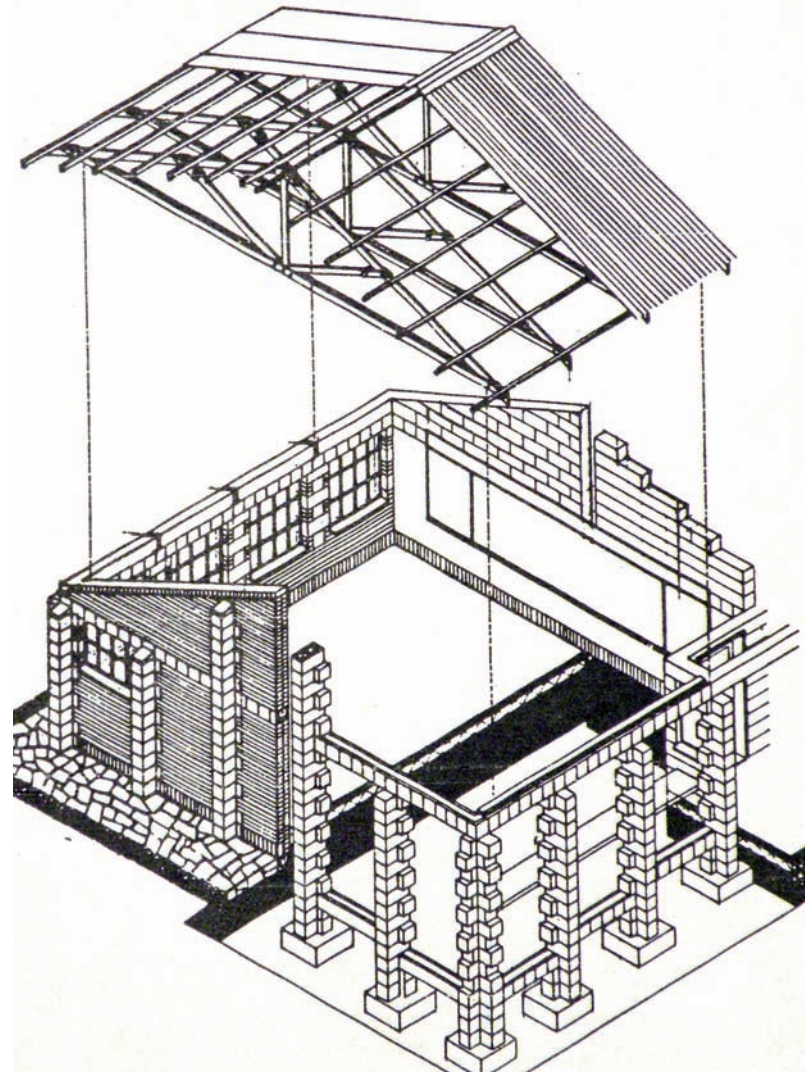
Modern Movement or any other dictum. He used traditional motifs of round huts and high-peaked thatched roofs to define a national identity, creating an architecture with which the people of Lesotho can readily identify [Beck, 1985:16].



In later years, architect Iain Lowe's vocabulary was largely influenced by the works of Mario Botta. Botta's formal concerns were underpinned by the development of vernacular masonry techniques. This appeared to be an appropriate model for an architect working in Lesotho, with its own vernacular stone masonry tradition. Lowe used concrete blocks or bricks, and rubble stone infill according to availability [as indicated overleaf]. *His work powerfully expresses the rationalisation of construction techniques, giving a dignity and presence to buildings in a context outside of civic traditions. And he does this with the most meagre financial resources. The significance he imbues his school buildings with is an important factor to a people whose existence is minimal, and who therefore depend increasingly on education to improve their lives. Lowe's rationalism is not just a matter of developing a vocabulary of forms; it goes*

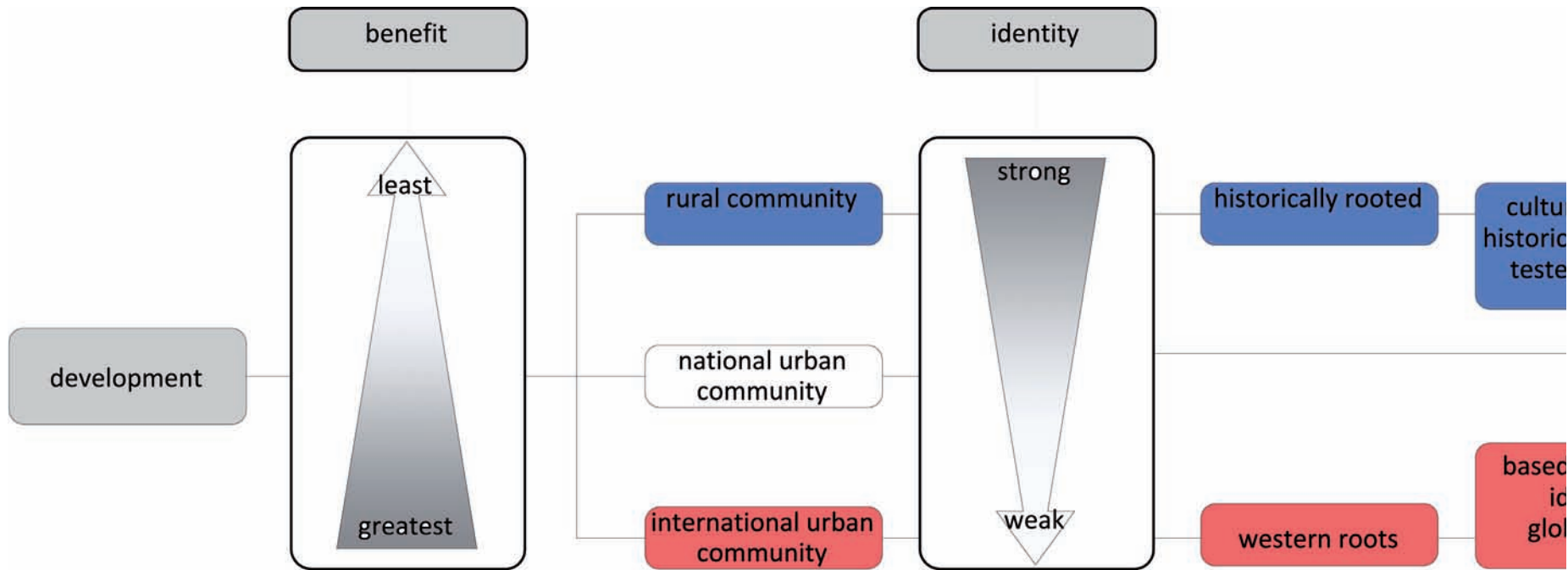
Figure 016. [LEFT]
"Leribe Market"

to the core of how to make cheap buildings, how to use unskilled labour and in the process transform them into skilled artisans, how to provide maximum space with a minimal budget, how to build up an architectural style based on constructive logic which can be copied and introduced into the local vernacular. It also allows him scope to play and experiment. His work demonstrates what can be accomplished from very limited resources with a clear theoretical / ideological position, clear formal concepts, a willingness to experiment and a cogent understanding of environmental factors [Beck, 1985:14]. This forms a sound basis for the practice of critical regionalism.



Overleaf, the theoretical approach is outlined in diagrammatic format so to best understand the application of theory to the project.

Figure 017. [RIGHT]
“Lesotho Schools Programme”



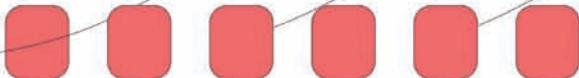
culturally based,
historically tried and
tested methods

national pride



based in western
ideals on
globalization

innovation
efficiency

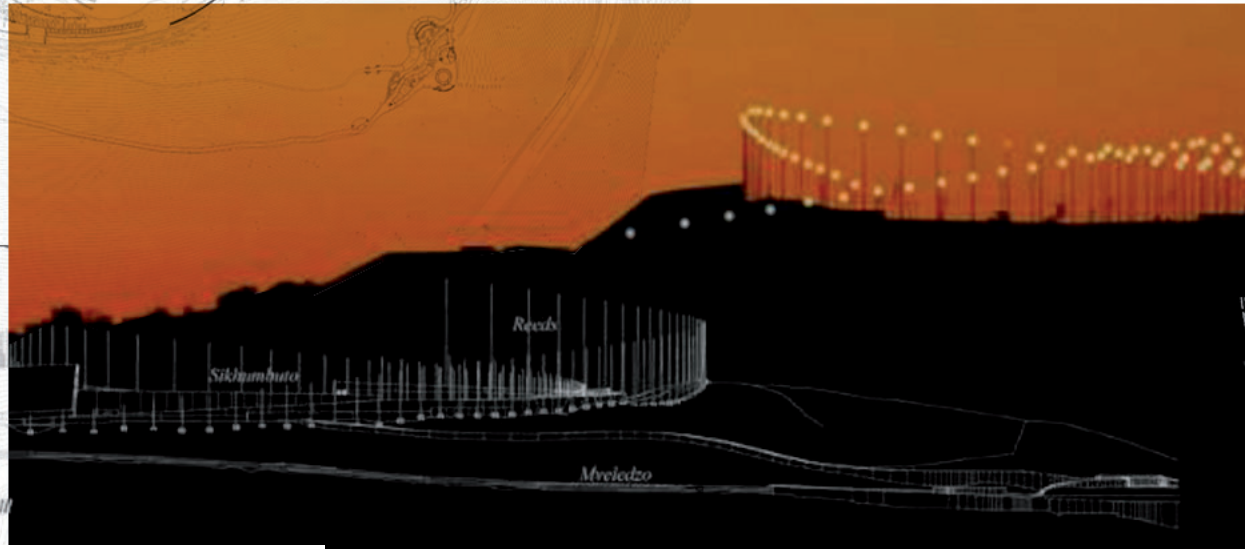
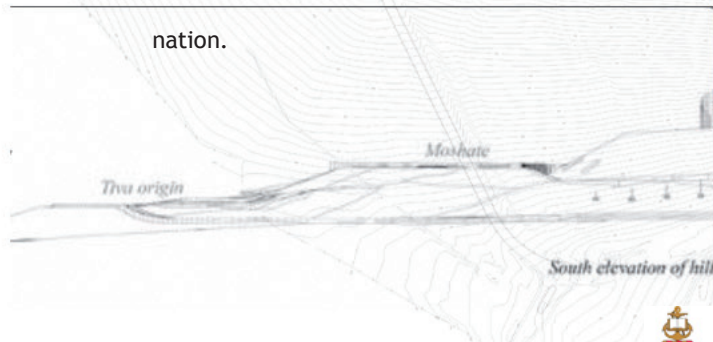
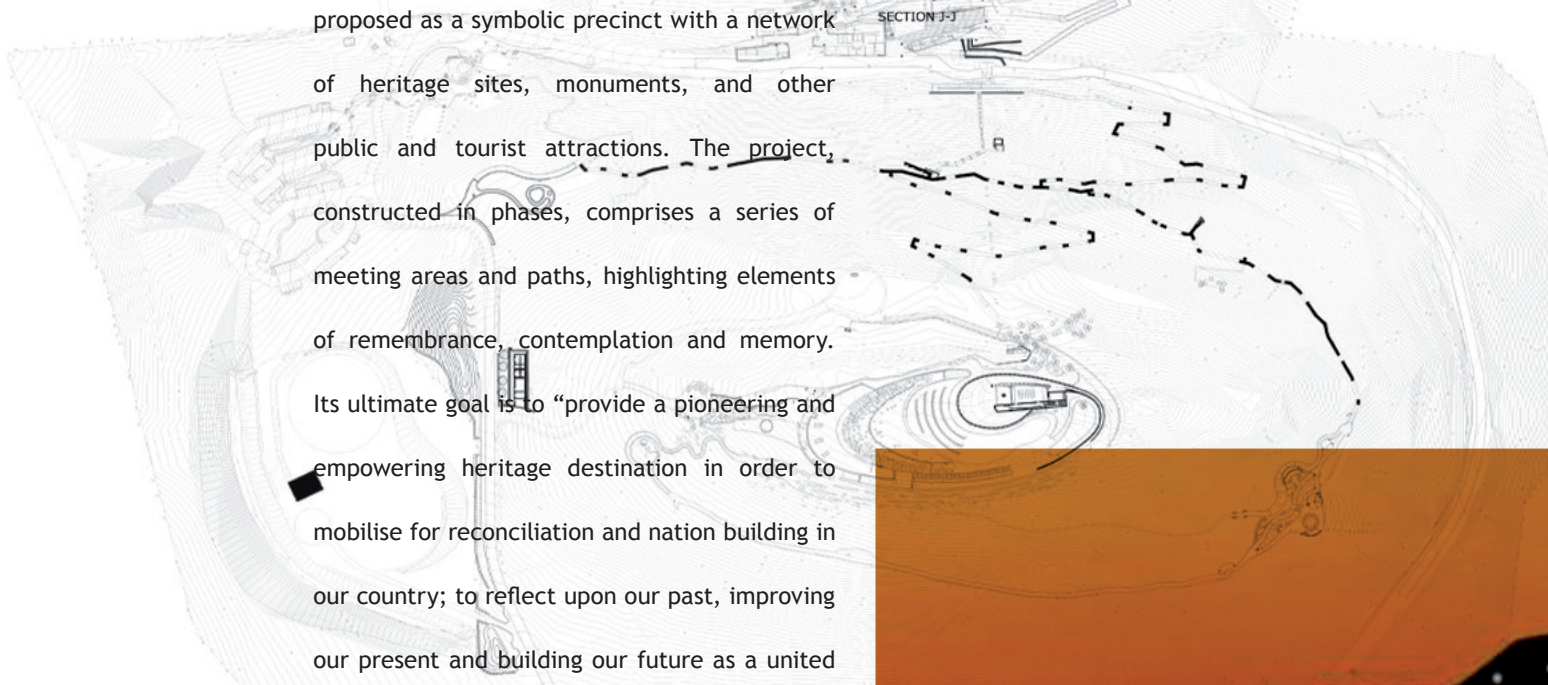
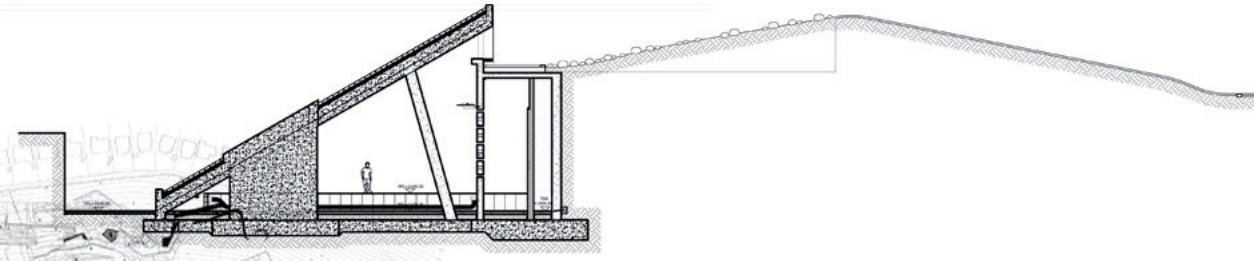


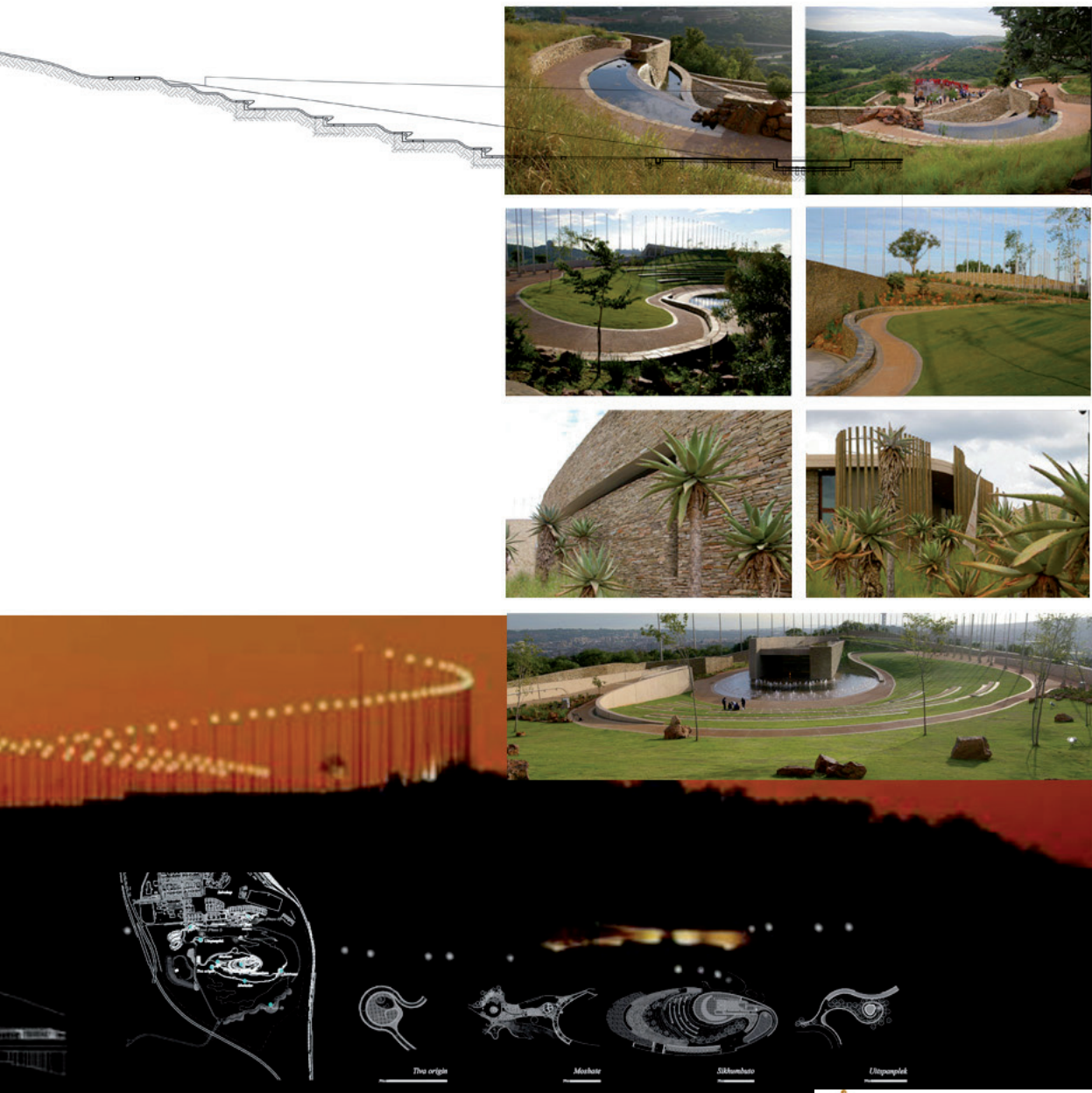
appropriate regional
architecture

500_design precedents

- 501 Freedom Park
- 502 Singita Lebombo
- 503 Coromandel Farm

The park is part of a larger project to develop symbolic reminders of South Africa's formerly neglected heritage. The brief as interpreted by GAPP and its associates, MMA and MRA was proposed as a symbolic precinct with a network of heritage sites, monuments, and other public and tourist attractions. The project, constructed in phases, comprises a series of meeting areas and paths, highlighting elements of remembrance, contemplation and memory. Its ultimate goal is to "provide a pioneering and empowering heritage destination in order to mobilise for reconciliation and nation building in our country; to reflect upon our past, improving our present and building our future as a united nation.





The spaces appear to be Zulu inspired, taking a re-interpretive approach to each space to imbue the spirit of remembrance and tranquillity and tolerance while being refreshingly jubilant. Each space flows into the other seamlessly hugging the landscape in an architectural language of stone embankment, wall and path.

The freedom park has particular relevance to the thesis for its richness of identity. An identity defined by architecture with gestures drawn from a cultures' past and re-interpreted in a contemporary architecture that lends itself to its setting, rooted in the landscape.



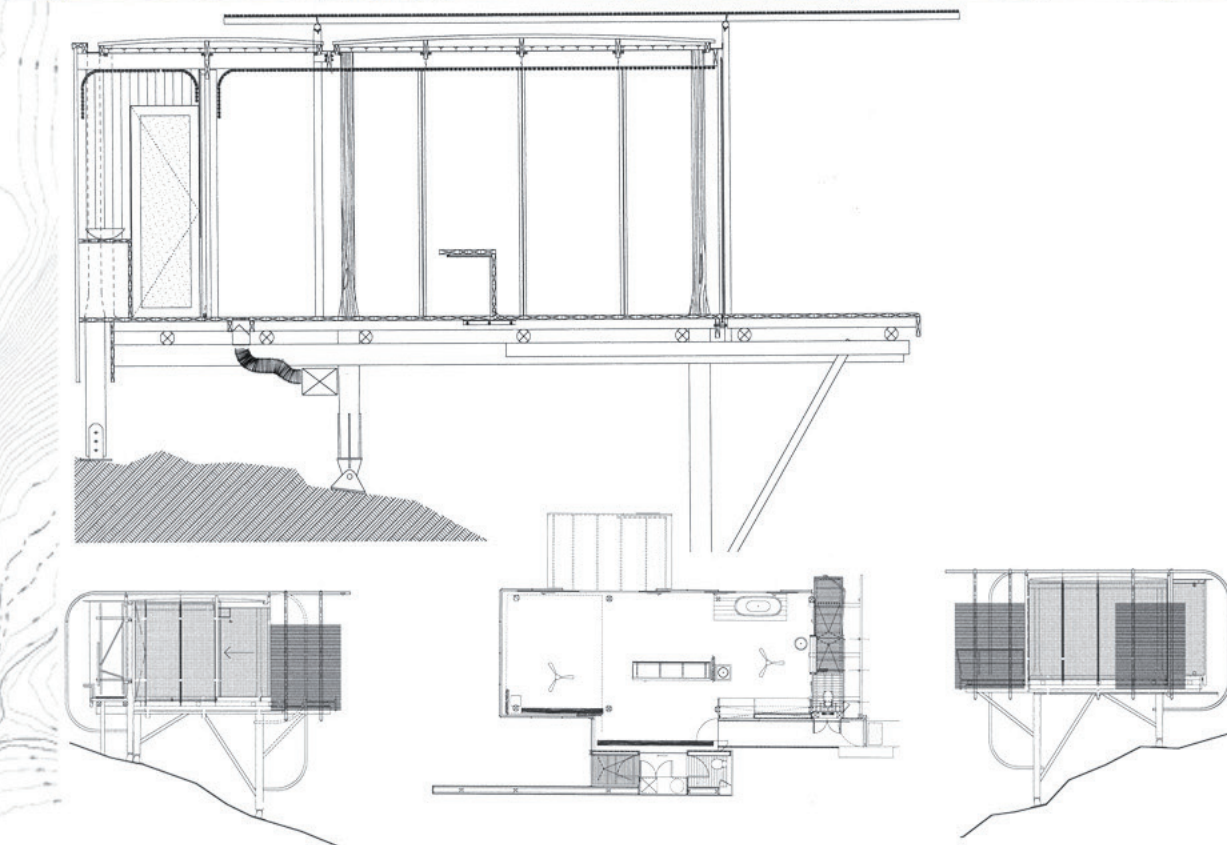
Figure 018. [CENTER] "Freedom Park Precedent" analysis sketches done by author

The Singita complex, is private concession situated on the eastern boundary of the Kruger National Park. It is set against a rhyolite ridge of low hills that are part of the Lebombo mountains and is bounded by the N’wanetsi and Sweni Rivers. The Singita Lebombo lodge was the first of three interventions, the other being a second lodge and a commercial complex.

The brief required that the project be sustainable in designing for a site with these environmental qualities. The brief called for minimal impact on the environment and easy removability at the end of the 20year concession period.

The choice of structure type and the positioning of structures on site ensure that there was minimal disturbance of the natural environment. Buildings in the most sensitive areas of the site were constructed on stilts, and the components of most buildings are demountable.





The design incorporates for passive design principles to temper the extreme heat and humidity that is prevalent in the area, as can be seen in the use of lightweight materials, shade screens wrapping around the skins of inhabited spaces, the use of large overhangs over large glass surfaces.

The design has an active dialogue with both physical and intangible aspects of the site and the surrounding environment in a critically regionalist approach. Neo-Modern architectural devices are used but details and elements are inspired by the local condition and through rich historical referencing. With reference to the thesis, the lodges' layout in the land, as orientated to views while being specifically responsive to the environment in that orientation is notable. Precedence is drawn from the use of indigenous materials in a contemporary manner climatically as well as stylistically.

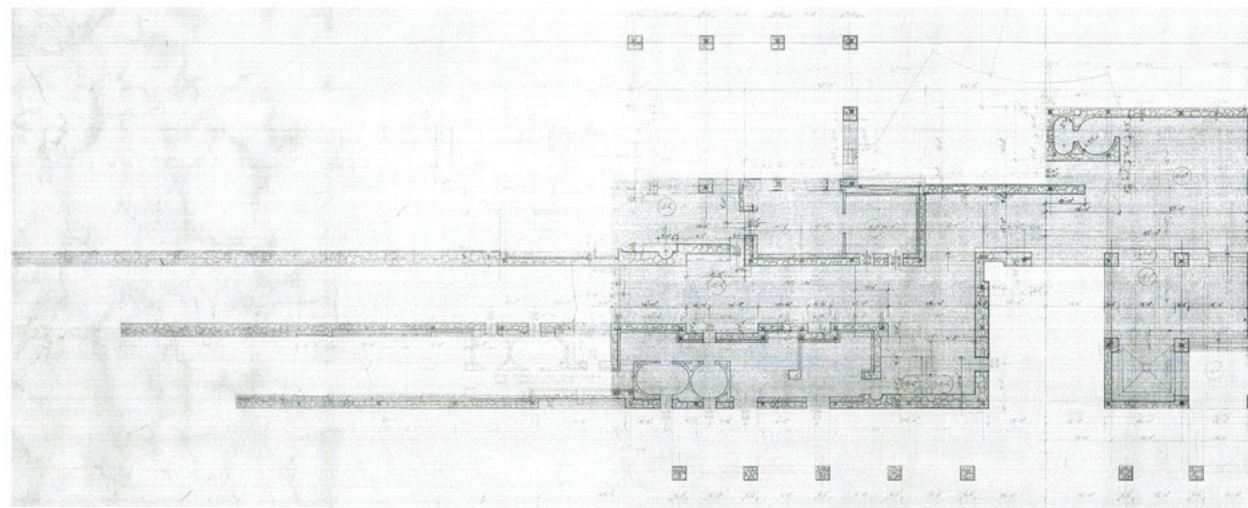
Figure 019. [CENTER]
 "Singita Lebombo Precedent" *analysis*
 sketches done by author

503 Sydney press house- Coromandel

Situated on the enormous Coromandel farm in Lydenburg, a small town 3 hours outside of Johannesburg in the Mpumalanga province, the house was built for Sydney Press, founder of Edgars retail stores. The 240m long design, by Italian architect Marco Zanuso, appears nestled within its context of vast undulating hills of veld grass.

Zanuso, who immediately felt the resonance of the landscape, felt that the building should be one with its environment, hence the walls extending far beyond the expanse of the living space reaching out to become one with its setting. The design draws from a multitude of influences suggesting memory and cultural references, allowing it to be modern yet somewhat ancient at the same time. As a defined bold line in the landscape its presence is felt, it is reminiscent of military fortifications having a precise discipline. Its materiality however,

lends it to an architectural equilibrium held in its affinity to the land. The stone architecture that rests the building in the landscape is in effect reinforced concrete with stone cladding from a quarry dug specifically for the stone. Interior walls of a single brick skin plastered, or in some cases clad with stone. The house is disguised on top by a veld grass rooftop and mimicked inside by wood clad ceilings and floors.





In recent years, the house, under the ownership of the Coromandel farm, has not been well maintained. Weathering and vermin damage is evident throughout the entire house, possibly due to economic constraints of its custodians and an inability to adapt the house to current community needs. Currently its function as a tourist destination is sorely understated due to poor marketing of tourism at the Coromandel farm.

It bears great significance to the thesis in that the stonework is awe-inspiring. The painstaking precision of the stone corners and details reflects true craftsmanship. The stone, quarried on site indicates a usage of available materials. This is coupled with current day construction in the concrete and brickwork, which is elegantly concealed.

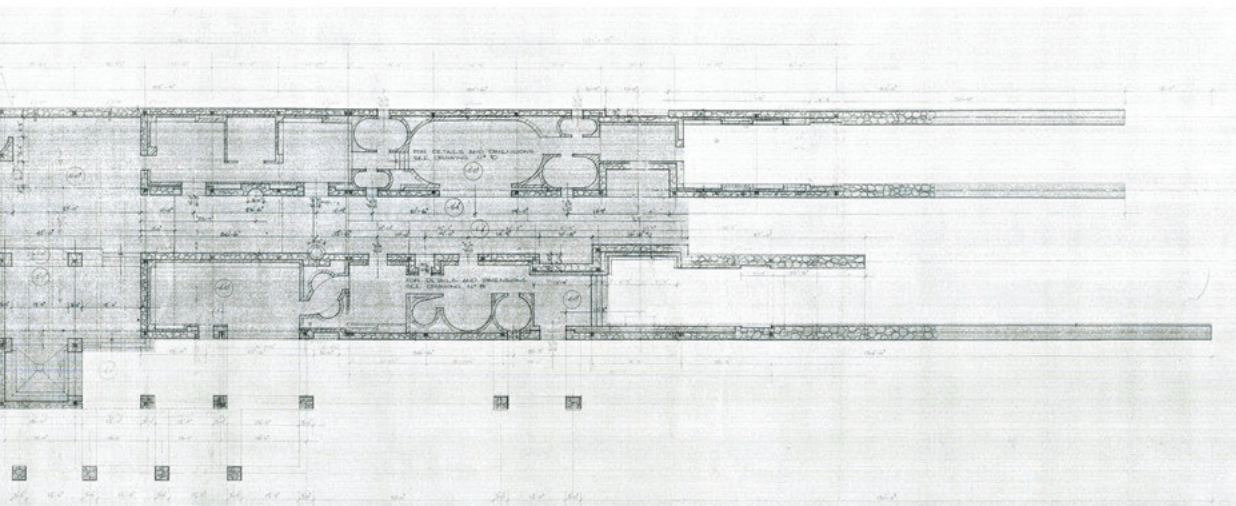
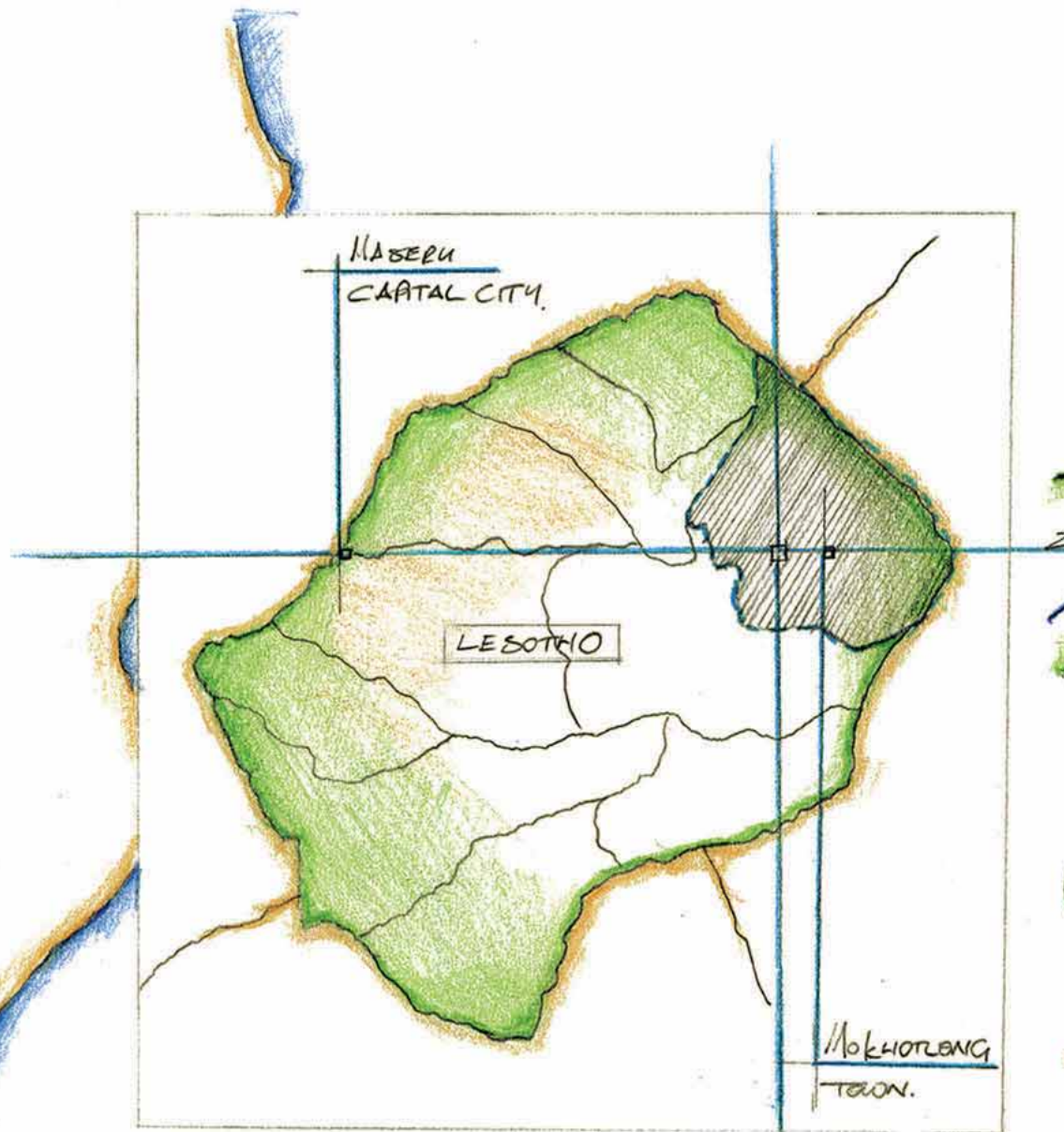
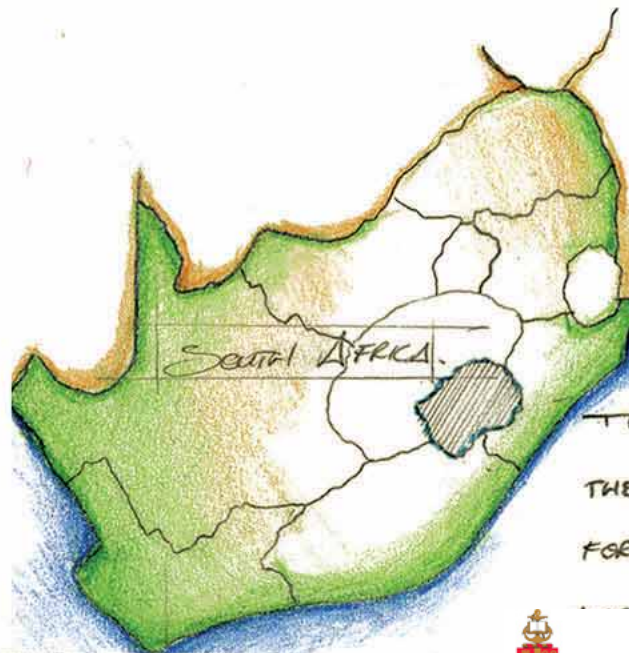


Figure 020. [CENTRE]
 "House Press, Coromandel Farm" *analysis*
 sketches done by author

600_context and site

- 601 Regional | National | District
- 602 Locality
- 603 Locality analysis
- 604 Site locale
- 605 Site locale- Lynch
- 606 Site
- 607 Site analysis
- 608 Interviews
- Community interface

THE SMALL NATION OF LESOTHO IS LOCATED IN THE HEART OF SOUTH AFRICA. ENTIRELY SURROUNDED BY SOUTH AFRICA. THE LAND LOCKED NATION IS ECONOMICALLY DEPENDENT ON SOUTH AFRICA. ... % OF ITS POPULATION WORK IN SOUTH AFRICA.



THE DISTRICT OF MOKHOTLONG ON THE EASTERN BOUNDARY OF LESOTHO FORMS THE SETTING FOR THE FIRST DISTRICT OF MOKHOTLONG

THE HIGHLIGHTED AREA ABOVE IS THE DISTRICT OF MOKHOTLONG

29° 17' 00"

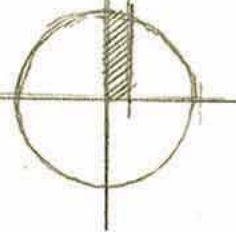
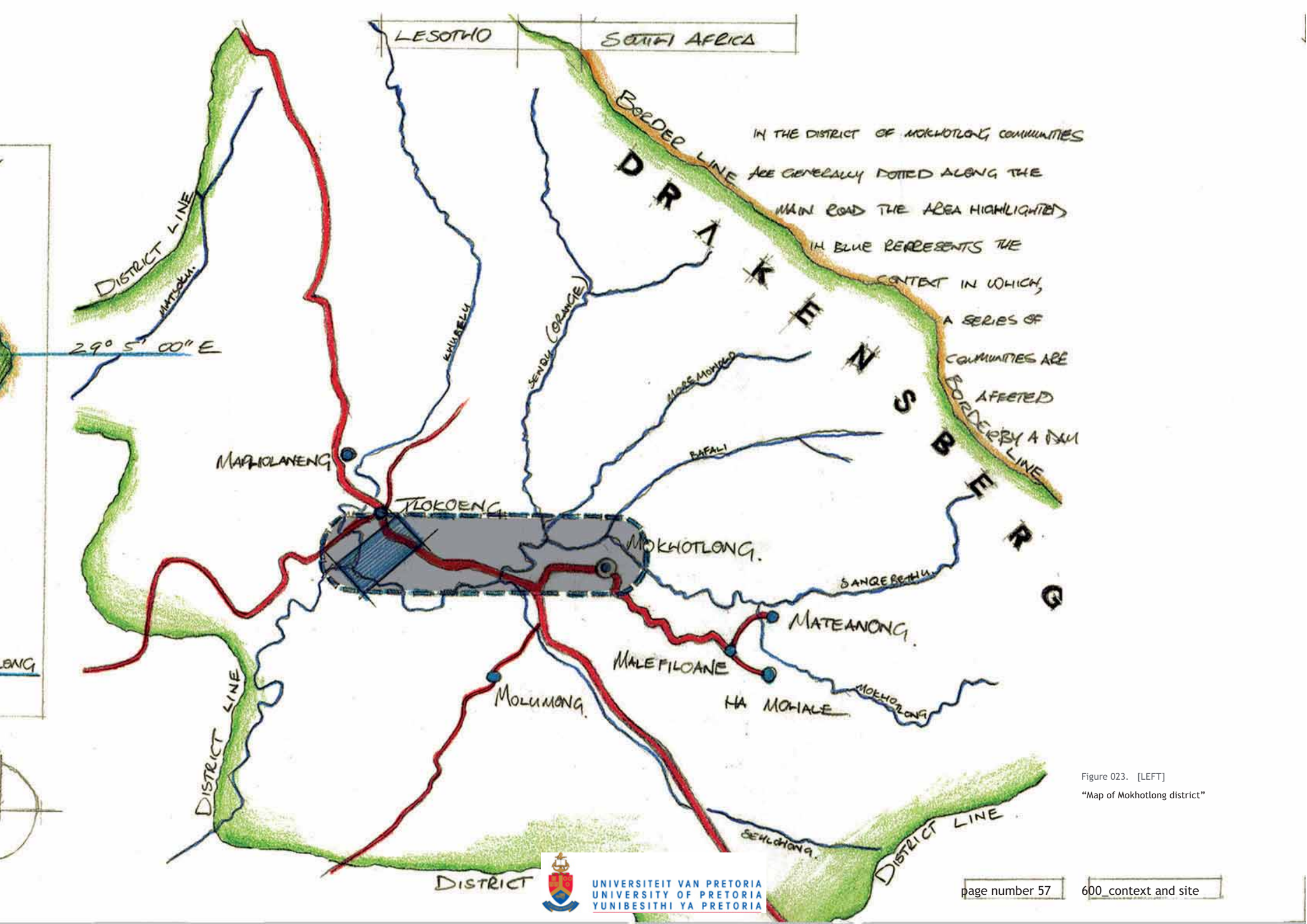


Figure 021. [RIGHT] "Map of South Africa"

Figure 022. [CENTRE] "Map of Lesotho"





LESOTHO

SOUTH AFRICA

IN THE DISTRICT OF MOKHOTLONG, COMMUNITIES
 ARE GENERALLY DOTTED ALONG THE
 MAIN ROAD THE AREA HIGHLIGHTED
 IN BLUE REPRESENTS THE
 CONTEXT IN WHICH,
 A SERIES OF
 COMMUNITIES ARE
 BORDERED BY A DASH
 BORDER LINE

D
R
A
K
E
N
S
B
E
R
G

DISTRICT LINE
 MATSOU

29° 51' 00" E

MAPHOLANENG

TLOKOENG

MOKHOTLONG

MATEANONG

MALEFILOANE

HA MOHALE

MOLUMONG













DISTRICT LINE

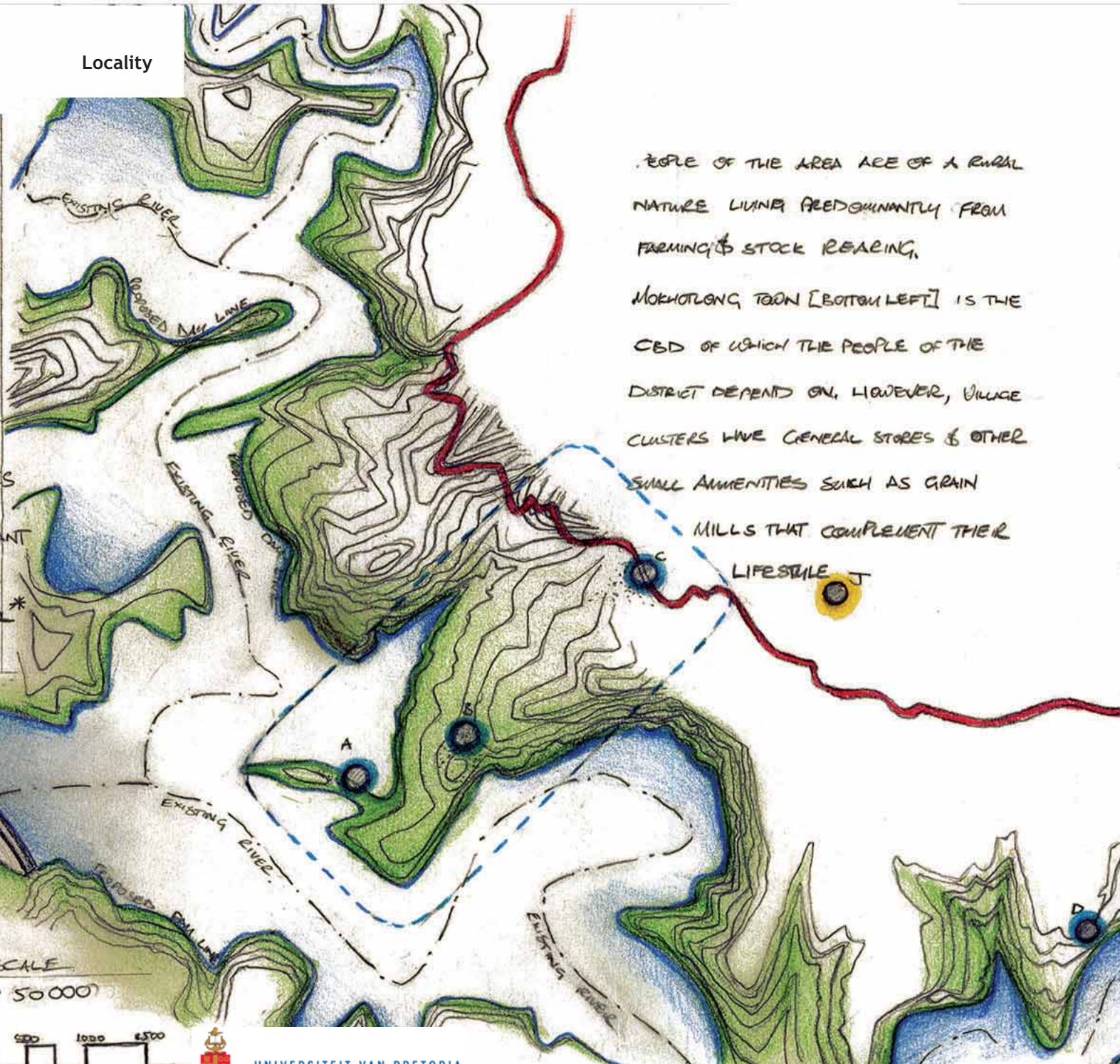
DISTRICT



UNIVERSITEIT VAN PRETORIA
 UNIVERSITY OF PRETORIA
 YUNIBESITHI YA PRETORIA

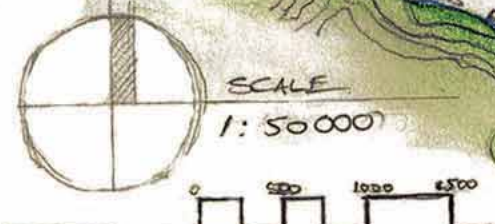
Figure 023. [LEFT]
 "Map of Mokhotlong district"

-  AIRSTRIP.
-  MAIN ROADS.
-  REMAINING LAND PARCEL.
-  PROPOSED WATERS EDGE.
-  EXISTING RIVER
-  FOCUS AREA.
-  MOKHOTLONG TOWN
-  IMPACTED VILLAGES
-  PROPOSED DAM WALL + POWER PLANT
-  DAM CONTROL
-  NEAREST SCHOOL *
-  CBD.



PEOPLE OF THE AREA ARE OF A RURAL NATURE LIVING PREDOMINANTLY FROM FARMING & STOCK REARING. MOKHOTLONG TOWN [BOTTOM LEFT] IS THE CBD OF WHICH THE PEOPLE OF THE DISTRICT DEPEND ON. HOWEVER, VILLAGES CLUSTERS HAVE GENERAL STORES & OTHER SMALL AMENITIES SUCH AS GRAIN MILLS THAT COMPLEMENT THEIR

LIFESTYLE



ZOOMING IN TO THE REGION FOR THE PROPOSED DAM TO DISCOVER SERVICE AMENITIES RELATIVE TO THE FOCUS AREA. THE INTENTION BEING TO INFORM AND DIRECT THE DESIGN THE AREA AS HIGHLIGHTED IS THE FOCUS AREA FOR THE INTERVENTION. THE CONTEXT ANALYSIS SURVEYS THE PROXIMITY OF SERVICES AS A DESIGN INFORMING TOOL.

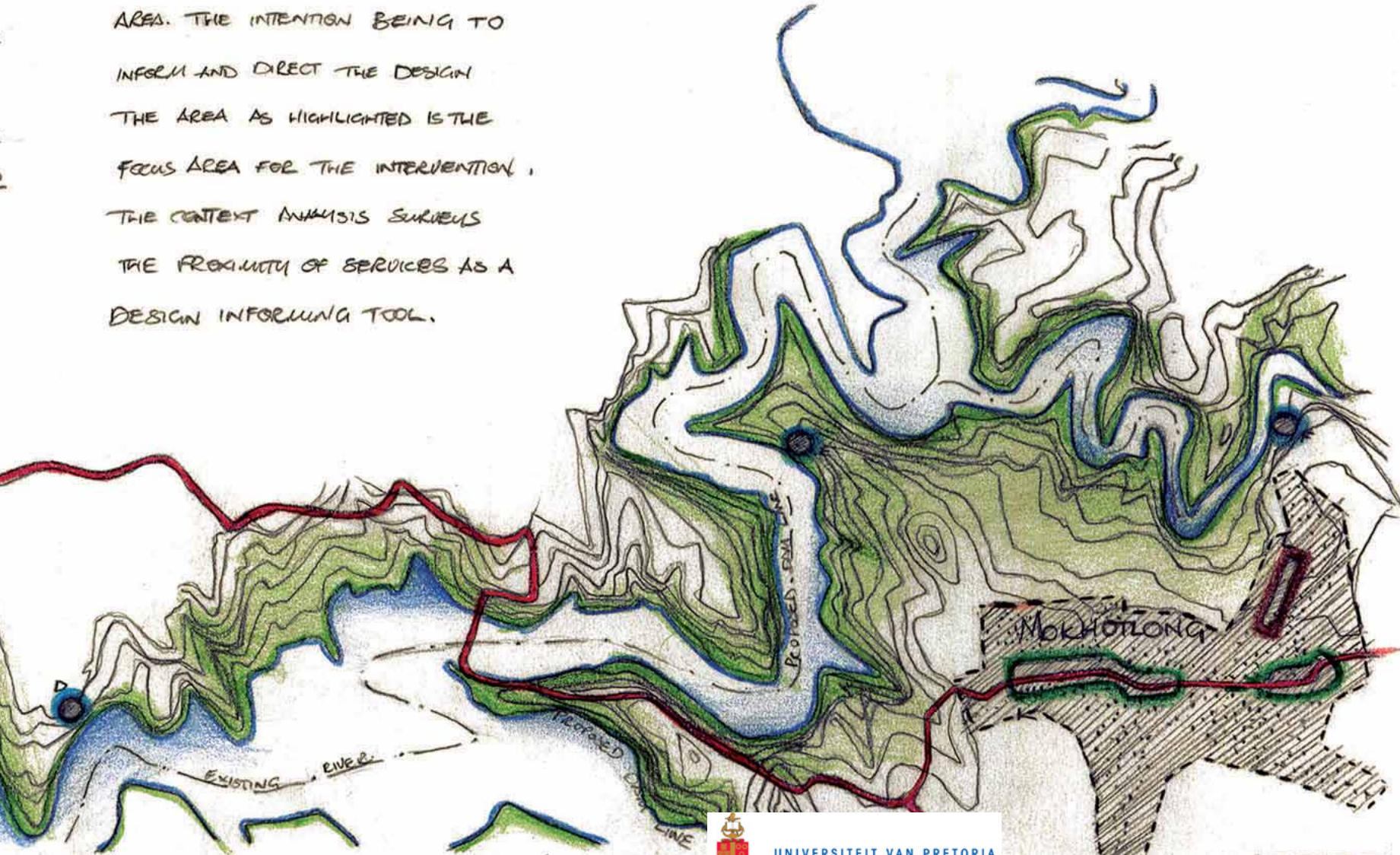
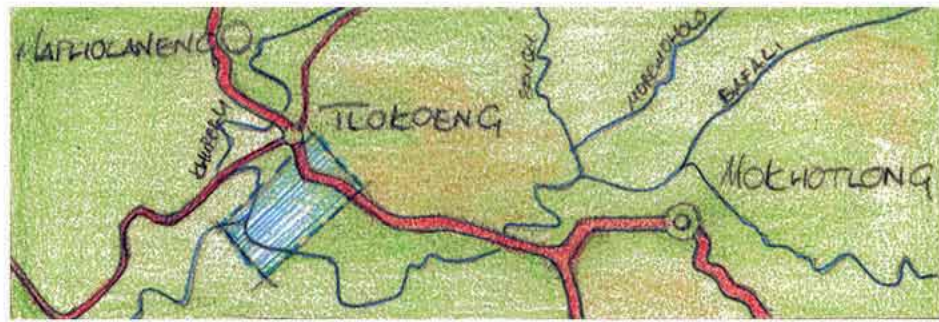


Figure 024. [LEFT] "Site map sketch with proposed dam"



NEARBY TOURIST ATTRACTIONS

□ AFRISKI SKI RESORT .
50 MIN AWAY - USUALLY
RECEIVES MORE GUESTS
THAN IT CAN ACCOMMODATE.
VISITORS GO AS FAR AS
MOKHOTLONG TOWN FOR
ACCOMMODATION.

□ SANI-PASS VIEW POINT
\$ LODGING - 1HR 20 MIN
AWAY IS ALSO A COMMON
TOURIST ATTRACTION
FOR VISITORS STAYING
IN MOKHOTLONG
TOWN.

MAIN ROAD LEADING IN TO
MOKHOTLONG IN BAD CONDITION
MAJOR DETERRENT FOR TOURISTS
TO BE RECURRING. AS PER
DAM DEVELOPMENT

..... PRIMARY
\$ SECONDARY SCHOOL
NEAREST SCHOOL
TO FOCUS AREA.

GENERAL TRANSP
MAIN ROAD VIA K
GIVEN THE LIFESTYLE
AT TIMES EVEN LIVE
SUCH AS SHEEP ALSO
TO BE TRANSPORTED
TAXI

15 MIN WALKING
45 MIN WALKING
25 MIN WALKING
SCHOOL ACCOMMODATES
250 STUDENTS OF
800 APPLICANTS FROM
SURROUNDING VILLAGES
INDICATIVE OF A SHORTAGE IN
EDUCATIONAL FACILITIES.

SITE CHOSEN WITH SPECIFIC
REFERENCE TO PROXIMITY OF
DAM WALL & LARGE EXPANSE OF
WATER AS A MARKETABLE TOURISM
QUALITY.

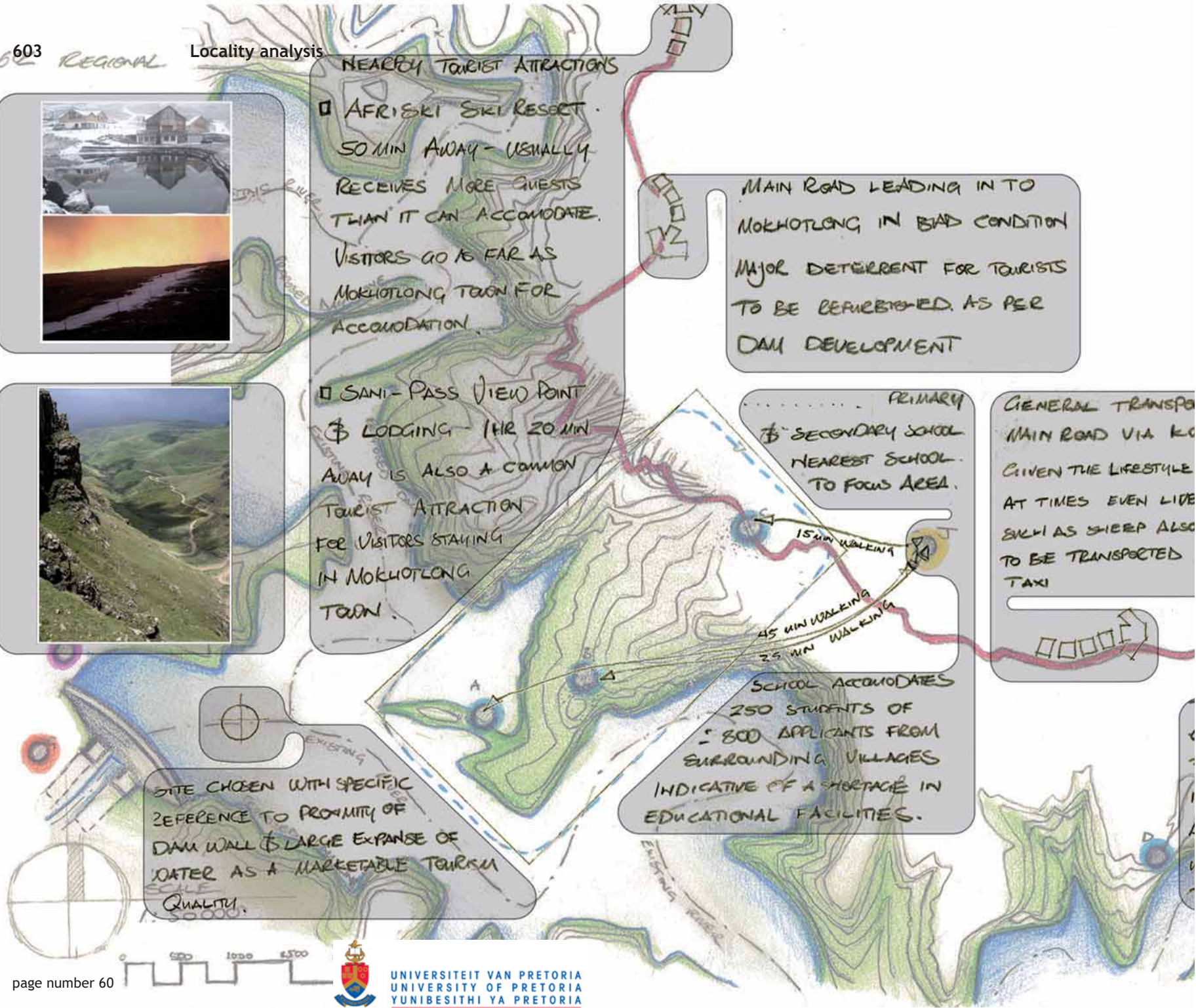


Figure 025. [TOP RIGHT]

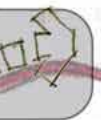
"Afriski Resort"

Figure 026. [MID RIGHT]

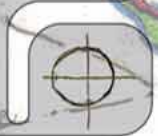
"Sani Pass View"



TRANSPORT ALONG
D VIA KOMBIS TAXI
LIFESTYLE OF PEOPLE
EVEN LIVESTOCK
SHEEP ALSO HAVE
INSPECTED VIA KOMBIS



THE ADVENT OF A DAM PRESENTS
OPPORTUNITIES FOR LOCALS IN
TERMS OF FISHING AND CROP
IRRIGATION
ALSO A POSSIBILITY FOR
WATERSPORTS FOR
TOURISTS.



MOKHOTLONG TOWN, OF WHICH
PEOPLE GENERALLY DEPEND
ON FOR MOST OF THEIR DAY
TO DAY AMENITIES -

□ ADMINISTRATIVE REPRESENTATIVES
WHO OVERSEE ENTIRE DISTRICT &
REPRESENT CHIEFTAINCIES IN
PARLIAMENT

□ POLICE STATION (MAIN)
OFFICERS DEPLOYED TO REMOTE
AREAS STATIONED WITH TENTS

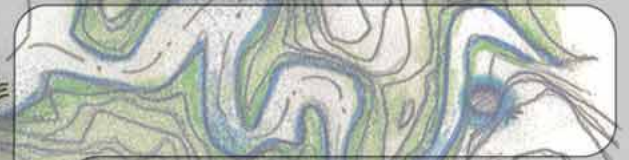
□ CLINIC [BEST EQUIPPED]
OTHERS RUN OUT OF HOMES OF
NURSES

□ BANK - STANDARD BANK
LESOTHO

□ GENERAL STORES INCLUDING
BOTTLE STORES | BARS | SMALL
SCALE SUPERMARKET &
WHOLE SALE

□ HARDWARE & SMALL BUILDING
SUPPLIES
□ LOW MARKET RETAIL
'PEP' STORE

□ LODGES
- HOTEL SENGU
- MOKHOTLONG INN



- 604
- MAIN ROAD
 - REMAINING LANDS PARCEL.
 - PROPOSED WATER'S EDGE
 - EXISTING RIVER
 - VILLAGE BOUNDARY
 - - - VILLAGE ROUTES

Site locale

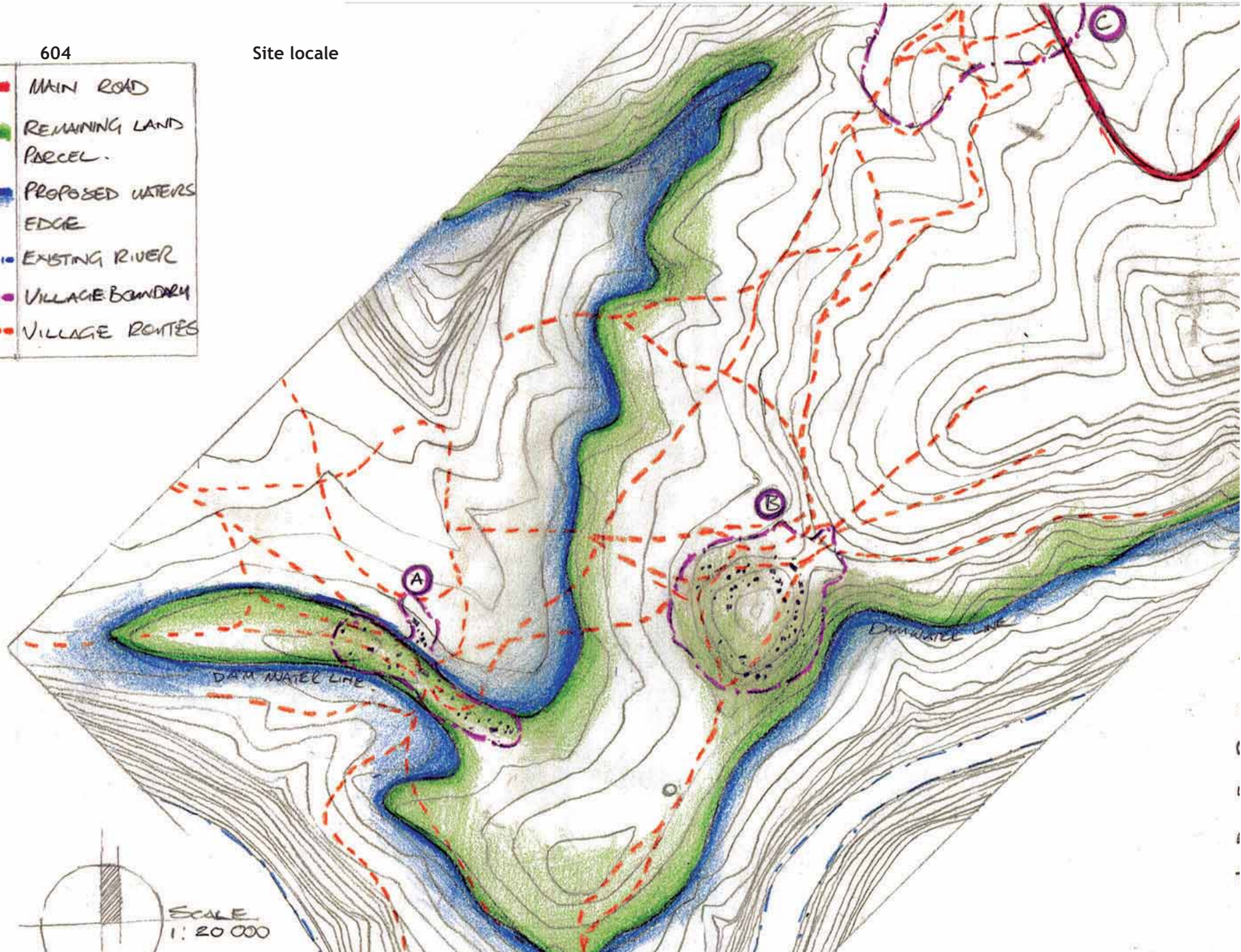
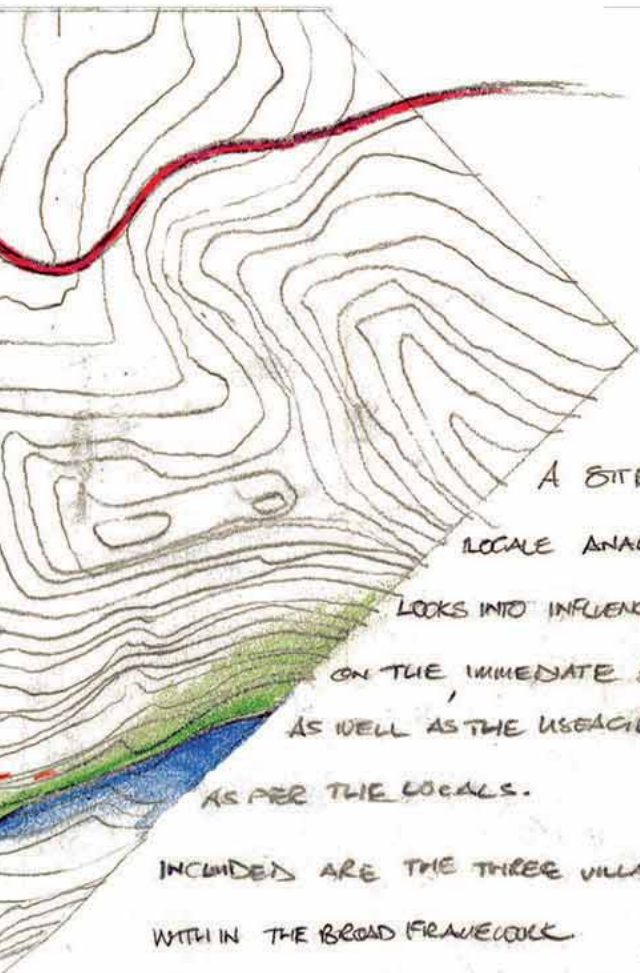


Figure 027. [RIGHT]
"Site Locale"





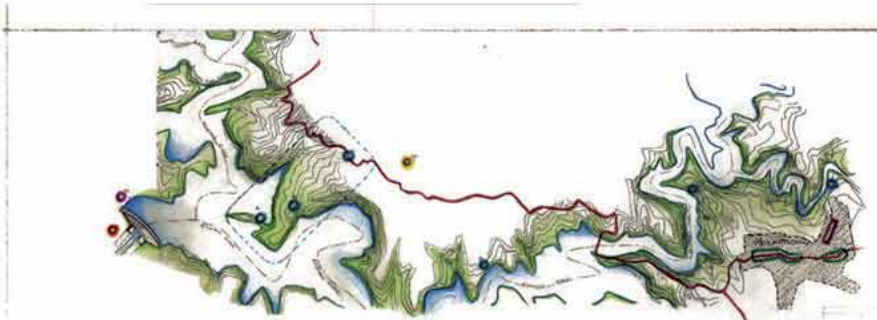
A SITE

LOCALE ANALYSIS

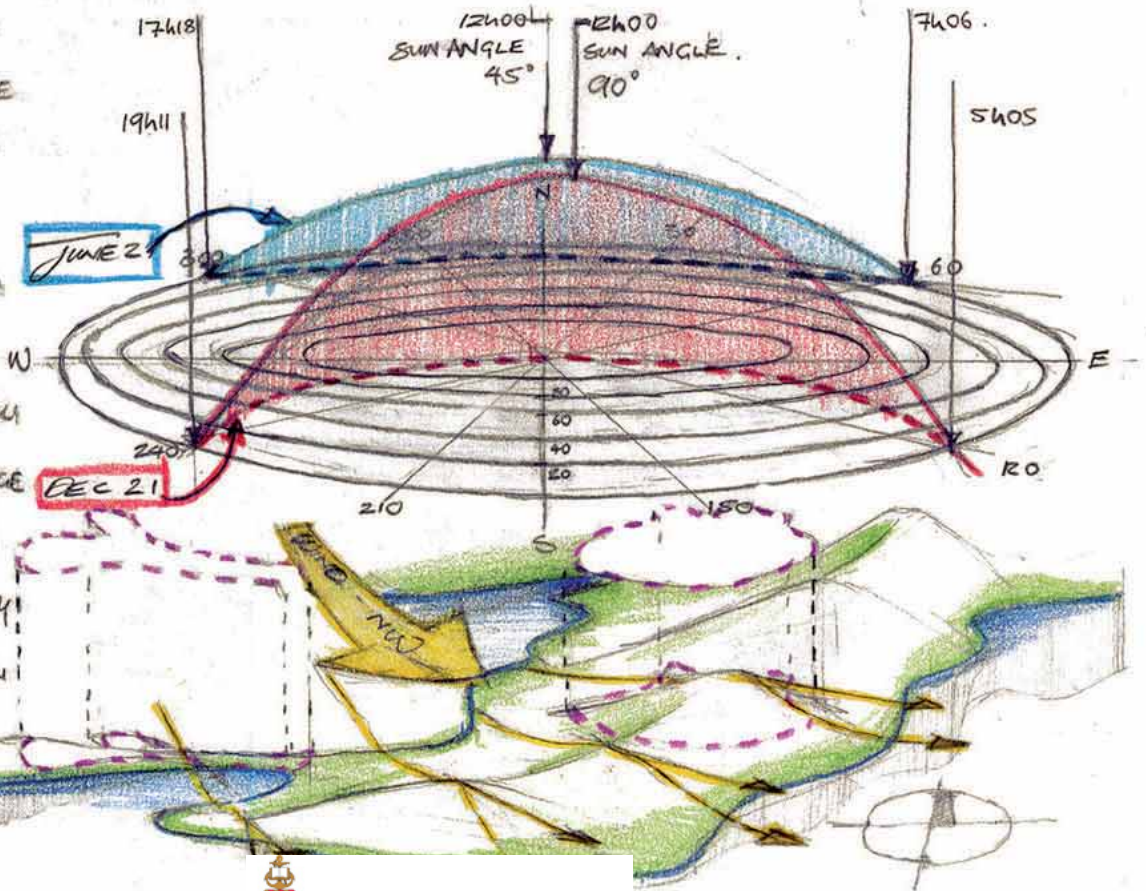
LOOKS INTO INFLUENCES
ON THE IMMEDIATE SITE
AS WELL AS THE USAGE.

AS PER THE LOCALS.

INCLUDED ARE THE THREE VILLAGES
WITHIN THE BROAD FRAMEWORK
THE IMPACT OF THE DAM IS PRIMARILY
ON VILLAGES A & B, ALTHOUGH VILLAGE
C - GIVEN ITS PROXIMITY - BASED ON
WALKING DISTANCE AND INTER-COMMUNITY
RELATIONS - IS CATERED FOR WITHIN
THE FRAMEWORK

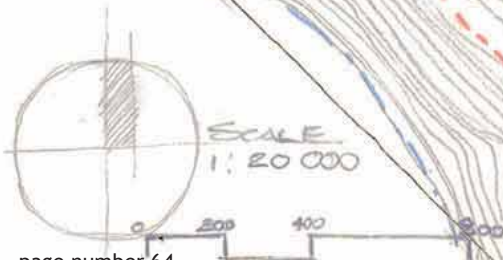
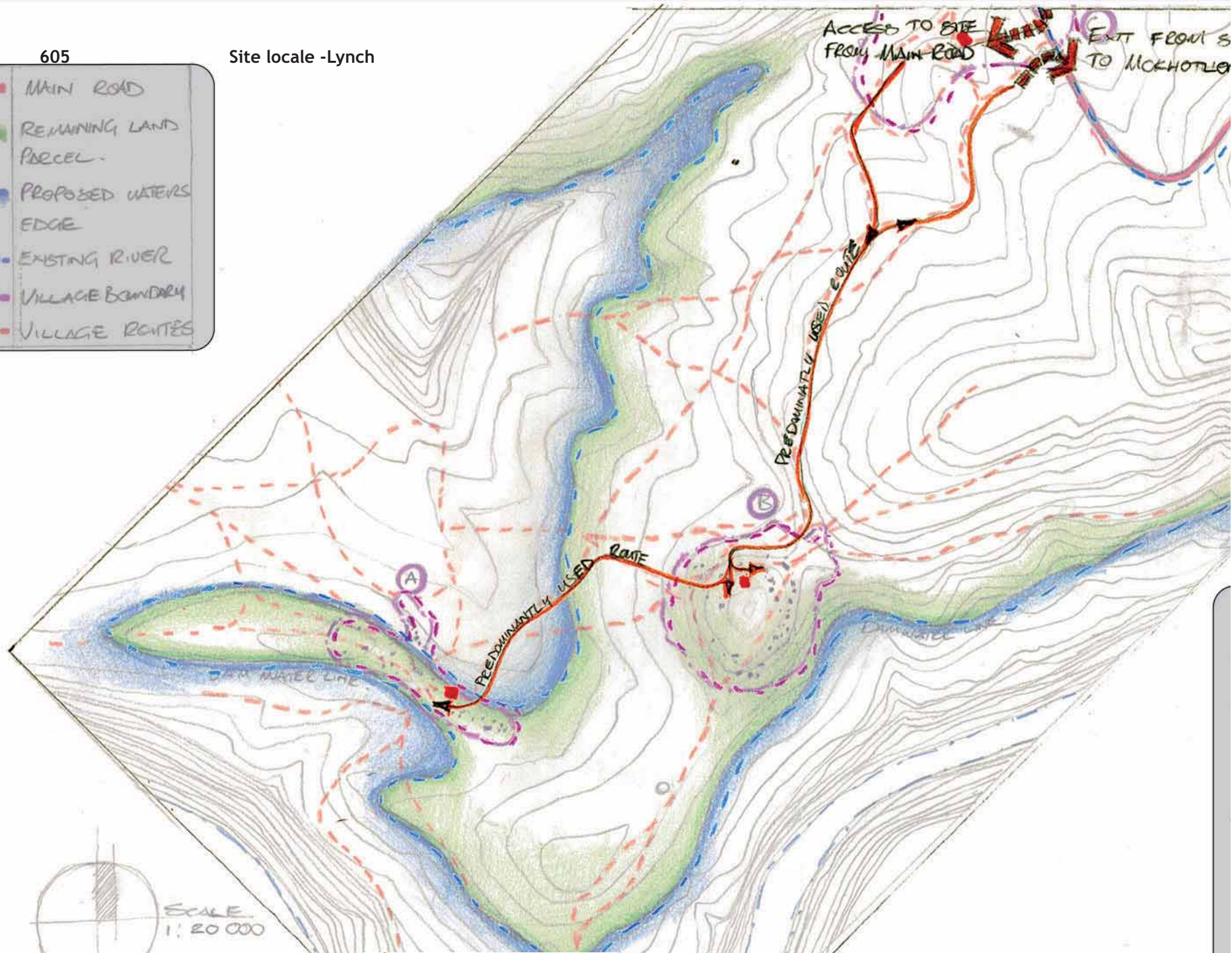


	WIND DIRECTION	WIND SPEED	Avg TEMP	PRECIPITATION (MONTHLY)	WET DAYS
SUMMER / SPRING	N	15 m/s.	18.5°C	85mm.	11.5 / MONTH
WINTER / AUTUMN	NW	10 m/s	5°C	20mm.	3 / MONTH
MAX		20 m/s.	19.9°C	110mm.	13 / MONTH



605

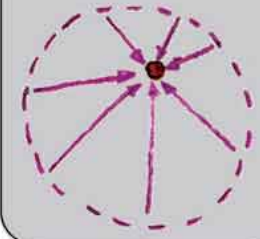
Site locale - Lynch





--- EDGES

UNCONSCIOUS BOUNDARY LINES THAT BLANKET EACH INDIVIDUAL COMMUNITY RELATIVE TO A RECOGNISABLE NODE



■ NODES

CHIEFTANCIES ARE IMMEDIATELY IDENTIFIABLE FROM THE PATHS THEY FORM THE CENTRE OF COMMUNITIES

... LANDMARKS

CURRENTLY THERE ARE NO DEFINED LANDMARKS. NOT EVEN DEFINED GRAVEYARDS

THE FRAMEWORK IMPLEMENTATION HOWEVER, SEEKS TO ENRICH THE LANDSCAPE WITH CONSTRUCTS THAT GIVE REFERENCE TO THE AREA.

--- DISTRICTS

THE MAIN ROAD FORMS AN EDGE TO THE NORTH, WHERE THE DAM ON THE SOUTH, EAST AND WEST FORMS THE OTHER EDGE MAKING THE AREA A DISTRICT UNTO ITSELF

FURTHER CHARACTERIZED BY THE COMMON LIFESTYLE OF THE PEOPLE AND THE INTERRELATIONS OF THE COMMUNITIES.

— PATHS

FAMILIAR PATHS THAT BIND PEOPLE & COMMUNITIES TOGETHER.

THESE SPACE DEFINING PATHS HAVE DEVELOPED OVER TIME. WHERE SOME BECOME MORE ENGRAINED THAN OTHERS

THE DAM AND ITS DIRECT IMPACT ON THE TWO COMMUNITIES REQUIRES

FOCUS ON THEM IN A CAPACITY TO USE AVAILABLE RESOURCES IN COMPLEMENTING THEIR RE-EVALUATED COMPENSATION INITIATIVE.

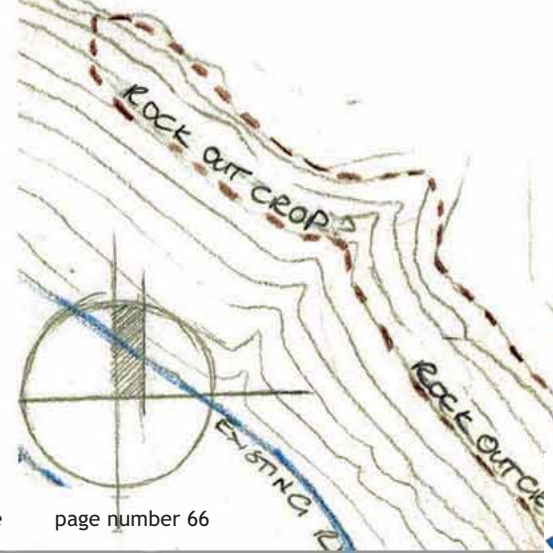
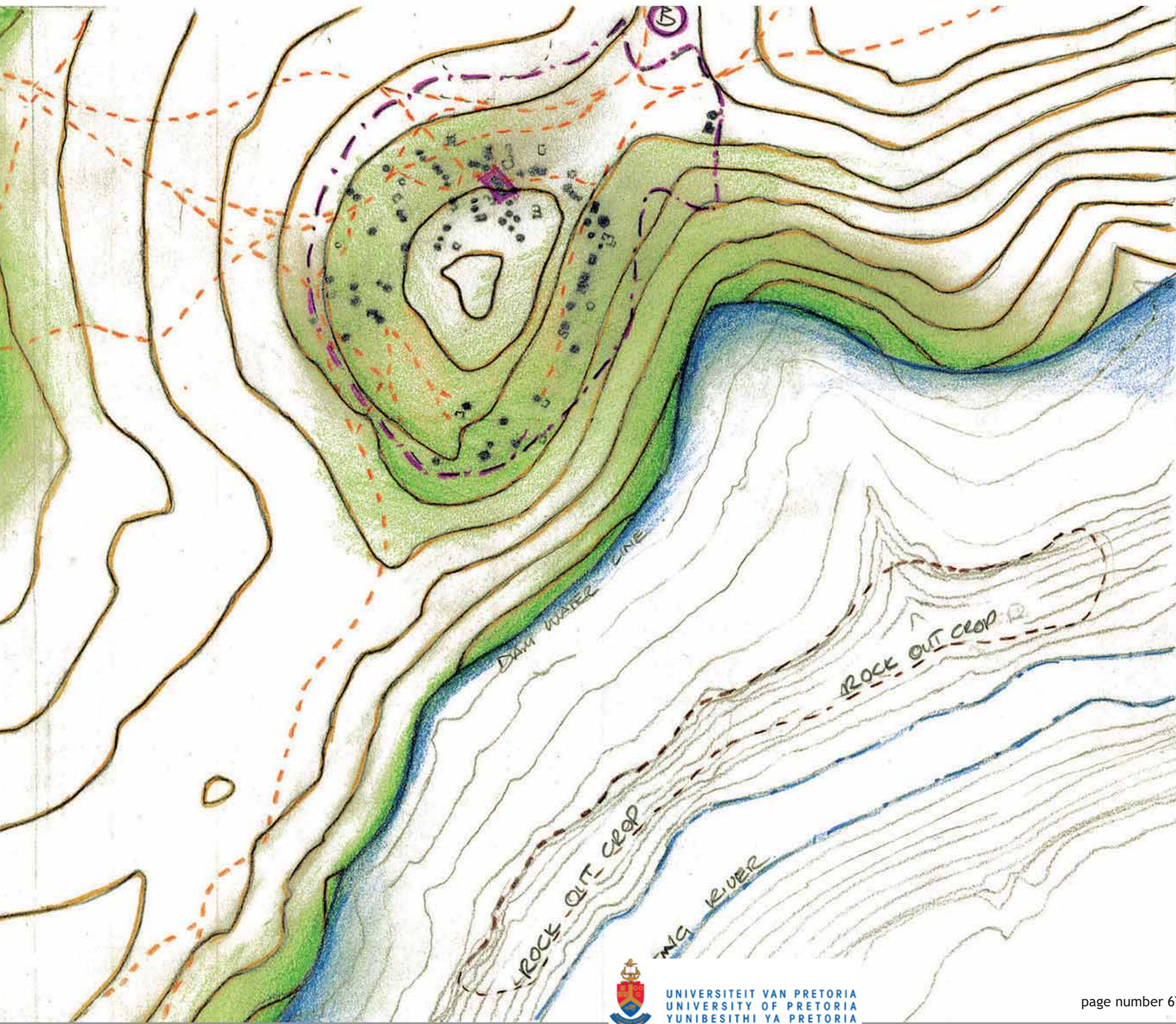
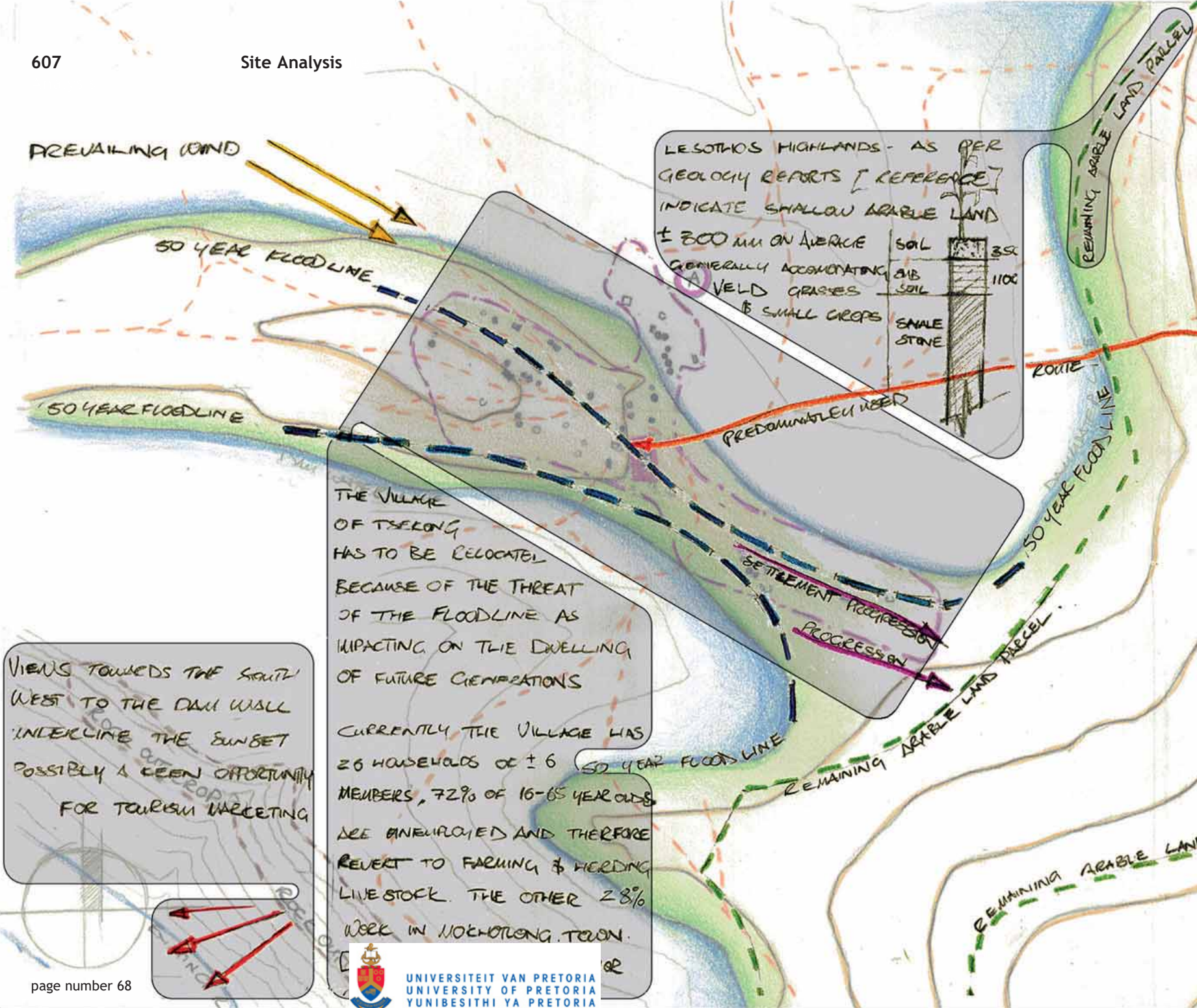
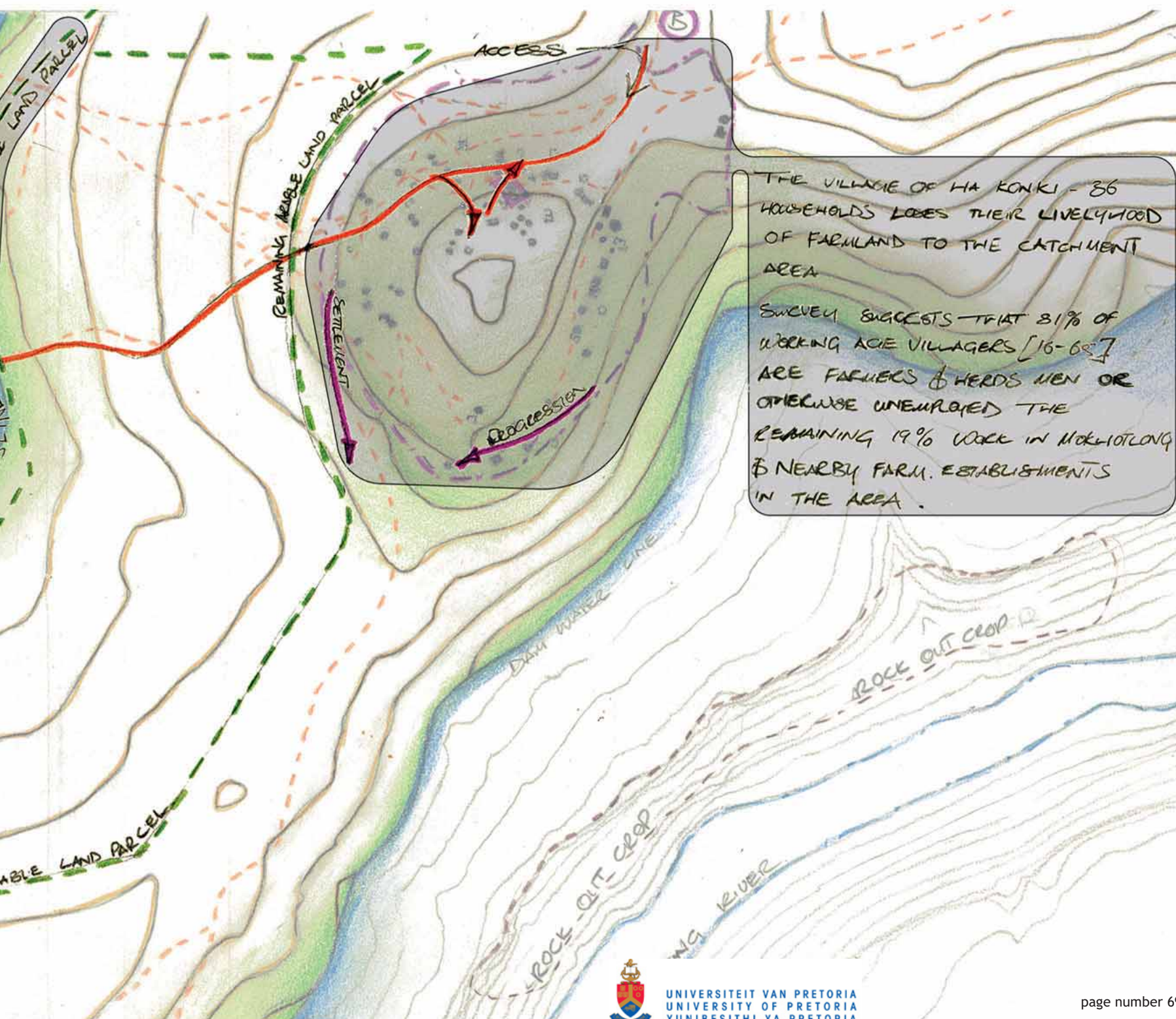


Figure 028. [RIGHT] "Site"







THE VILLAGE OF HA KONKI - 36 HOUSEHOLDS LOSES THEIR LIVELIHOOD OF FARMLAND TO THE CATCHMENT AREA

SURVEY SUGGESTS THAT 81% OF WORKING AGE VILLAGERS [16-65] ARE FARMERS & HERDS MEN OR OTHERWISE UNEMPLOYED THE REMAINING 19% WORK IN MOKHOTLONG & NEARBY FARM ESTABLISHMENTS IN THE AREA.



interview 002- Ntate Tseiso- Mokhotlong town



- “ Ntate Tseiso, how are you sir?
- I’m fine thank you
- I’m doing a project for school where I propose a new relocation scheme for people who are being displaced by the dam and I just wanted to ask you a few questions during our tour today...what do you do?
- I am the **chief of a village** next to the airstrip [name] in town and I am also an **aids awareness leader** and counselor in the Mokhotlong area.
- How do you feel about the dam?
- I am happy about it, it is going to **provide jobs** for the people during its construction, but I am a little **worried about the environmental impact** it is going to have...errr the impact on the environment of the people...especially with respect to the **spread of aids.**
- Oh I thought you meant in terms of climate
- ...yes that too...I am not sure the people understand how much of a **change in climate** a body of water has on a place. But coming back to the point of jobs, where man will find employment as workers, **women may feel that this s an opportunity to make a living selling sex to traveling contractors...** so poverty and lack of **opportunity contributes to the spread of aids**
- Is the dam going to affect any of your village?
- No not at all, maybe just from the cool air from the water. The dam will run north of our village, so I am not sure of how it will affect us... but the people **once they feel the effects of this will turn to me with arms in the air asking what am I going to do about it!**
- So the people rely on you quite heavily?
- You could say that...mostly **when they need a representative** or a mediator
- So you as a chief play an **integral role in the community**
- Yes

Figure 029. [RIGHT]
“Ntate Tseeiso Phakisi”

- Would you say communities affected are at a loss by the dam? With their dependence on the money they expect to earn
- Yes...I think that **people feel as though this money will save them from something**. That suddenly they will no longer be poor because they are getting money. Also, the highland water people have **not** really given **enough information** to the people in as far as **what they can expect**...some may be dissatisfied in the remuneration for their land...they have not really considered **whether the money will compensate the sentimental value of having worked that land**. people see money and forget everything else
- I see, and the moving of some people, are you and your community prepared to take in people who want to move to your village
- Well we as chiefs have been told that the highlands people will buy plots for houses for people who want to be located there. But I am worried that even though I as a chief am open to accept them, some people may resent that they got a free ride because of their positioning. This may impact their acceptance into my community. Also, **earned ownership is very different from bought ownership**
- I am a little puzzled as to how some communities developed along road and some in areas that seem to be in the middle of nowhere.
- Most of the communities along the road developed there because of the services the roads provide. Particularly taxi routes into and out of Mokhotlong town. When they were building the roads, you find that transporting building materials for homes into the furthest areas was difficult so the shortest distance from the roads seemed to be the most optimal place to build. You'll see, that's why the places furthest from the road are built with stone rather than transported brick. But once informal roads have been established, the ones who have made a bit of money- say, from the mines- choose to have the brick transported to where they want to build. Look at schools for example. You won't find many schools more than 10min walk from the main road."



Figure 030. [LEFT]
"Remote village in Mokhotlong"



Figure 032. [ABOVE LEFT]

“Residents of Mokhotlong”

Figure 033. [BELOW LEFT]

“Thaba Putsoa Mountain Ridge”

interview 002-Ntate Thafi - Mokhotlong, ha konki

- “ Lumela [hello] Ntate thafi
- Hallo Papa!
- How long have you been living here
- Eeee [yes]. Its now six tens and nine [69 years] that I have lived here. i came here when I was this old [holding up two fingers]
- So you have known this place all your life
- Mm [yes]
- How do you feel about the dam?
- Its good because it'll be beneficial to the people who live here...it'll bring us money...we want money
- So if I understand correctly, the dam is going to require that you move?
- Ya I hear them saying that
- So you don't want to have to leave
- Of course not...where would I go, this is my home and there... there lives my chief, tell me my boy where would go?...without my chief...where? You see my boy; my chief is my representative I cannot be represented by some one else. I was being represented by his father before him and I watched that boy grow to stand in the place of is father. He respects me as I respect him...and even if we were to have ill relations and he says nxa! to me, he will still be my chief ...you understand [you hear]?
- Yes ntate , so if you had things your way you would have things the way they are...or would you rather move with your chief
- Isn't it that we want money...so things can't remain the way they are. But Mmm [yes] we leave with him because he is my owner

“...morena'ka o lula mane...ke ne ke tla'ea kea ha ke sa tsamae le ena?”

“...le ha'a kare nxa honna o tla lula entse e le morena oa ka”

- And your land...and house?

- Man, soil is our heritage | birthright...it is our legacy...but...money in its stead is good but doesn't entirely fill the gap. Its nice/ satisfying to work the land...the house... man we'll just build again. Even when the heavy rains come we fix and build again.

- You know they are going to build you a house?

- What kind of a man has a house built for him like he is a woman...[laughing]. But we will embrace/accept it because it is ours to accept

- And if you had a choice would you move to the city or mokhotlong town of choose to stay here?

- No! What will I be looking for there at this age? You must know I am preparing to go [die] very soon

- And your children?

- They are old already, they can take care of themselves and each other

- How do you think the dam affects them?

- The dams gives them a tomorrow in this area, through jobs and opportunities

- I think that is about all the questions I have for you

- Okay

- Thank you

- E but wait, aren't you going to arrange something bitter to relieve the throat

- Haw how could I forget! I'll make it happen ...thank you again "

“mobu ke lefa...ke lefa la rona”

“...e fana ka bokamoso”



Figure 034. [FAR LEFT]

“Ntate Thafi Grain mill”

Figure 035. [LEFT]

“Ntate Thafi Interview Images”

700_design development

701 An Essay in process

702 Technical discourse

To recap the initial intention of the proposal: The scheme questions current policies that negatively affect locals with regards to a dam development in a remote area of Lesotho. It proposes a framework in which the various communities affected by the dam can utilise new and existing resources to realign their livelihoods to one that ties in with the development. Within this framework, a hotel/lodge is proposed as an income generating initiative that capitalises on the new dam and the Maluti Mountains as tourist attractions.

Development of the proposal has been directed towards the site conditions and the usage of available resources by the locals. Based on this, initial approaches to the investigation as indicated in the diagram, highlights the site locale and parameters to the study, with focus on the immediate environments of the three communities catered for in the framework.



Settlement on site reflects an honest response to prevalent circumstances. These circumstances are defined by social, economic, geographic, climatic conditions. The settlement primarily depends on proximity to livelihood [i.e. farming] as highlighted in the interviews. Also, within

communities, placement is hierarchic- radiating from the centre, where the centre of the village is the chief. With respect to site geography, settlements are located on mild slopes where farming is most difficult. In addition, routes towards villages are visible from these mild

Figure 036. [RIGHT]
"Process 001 - Site"



slopes, announcing visitors before they arrive. Customarily, visitors would then arrive at the chiefs' home and announce themselves before heading to their respective host.

Peaks of hills are generally not settled on, primarily because of wind, but also because

peaks are considered to be communal spaces. Climatically, settlement is predominantly on the north facing slope for heat gain, however expansion has lead villagers to settle to the east and west slopes.

It is evident that prevalent winds from the northwest, although strong, are not a deterring factor to settlement on the western slopes.

Figure 037. [LEFT]
 "Process 002 - Site circumstances"

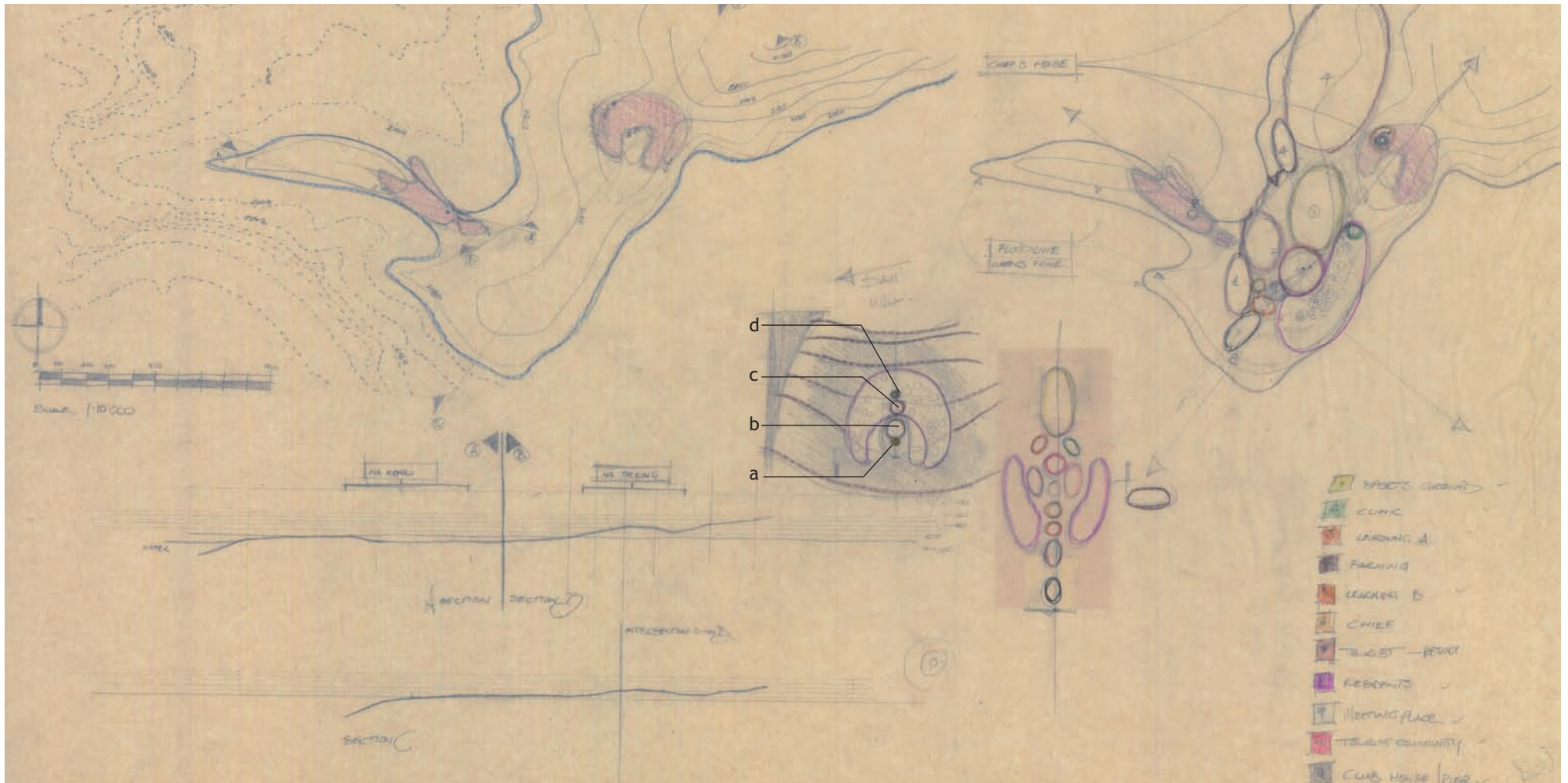


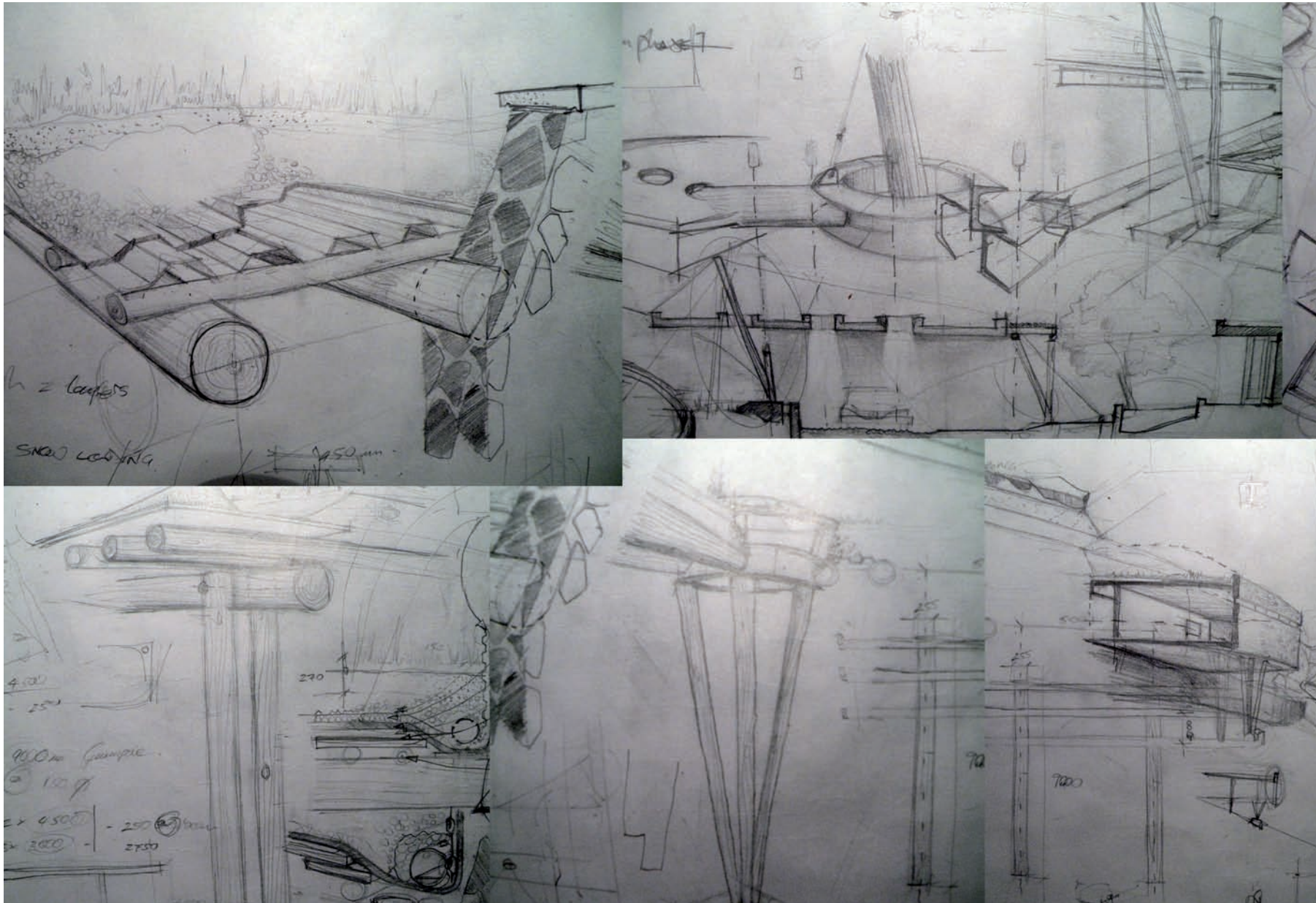
Figure 038. [RIGHT]
 "Process 003 - Framework Adaptation"

The role played by cultural customs being an important factor, lead the inquiry to look in to traditional villages setups, as the model is evident in rural settlements currently. Where as past models of settling on a hillside were a primarily a defence mechanism, during the

unrest of the Difaane era, today they are a reception mechanism [interview: Miola 2009]. The investigation assesses the typical settlement model and explores the linear hierarchy of reception levels. Where indicated above, A is the "patlelong" a place for men of the village

to sit during the day, usually defined by a tree. B is the "Lesaka" [kraal] where the cows of a village are kept and watched. In larger villages, the individual households or small groups of them would have their own "Lesaka" [kraal]. Importantly, livestock since the end of

702 Detail Exploration sketches



THE PALETTE OF MATERIALS FOR THE HOTEL SPEAKS TO THE CONCEPT OF CONTEMPORANEITY MEETING THE RURAL VERNAKULAR TO CREATE A SINGULAR LANGUAGE

STONE

STONE IS THE PRIMARY BUILDING MATERIAL. GIVEN ITS ABUNDANCE AND EXTENSIVE USE BY THE LOCALS IT WAS DEFINED THE LOCAL ENVIRONMENT.

THE TOPOGRAPHY OF THE HIGHLANDS AND THE SITE IN PARTICULAR IS ONE OF DRY VELD GRASS ON RELATIVELY SHALLOW FERTILE SOIL BENEATH THAT IS A SUBSTRATE OF NON FERTILE SOIL RESTING ON A SHALE ROCK BEDS.

THE LAYERING CAN BE SEEN ON STEEP CLIFF EDGES WHERE THE SHALE IS EXPOSED

SHALE IS A SEDIMENTARY ROCK, WHICH IS VERY BRITTLE (WHEN HAMMERED) OR CHIPPED CHIPS INTO LAYERS.



THE LOCALS HAVE IN THE PAST USED ROUNDEN SHALE FOUND ALONG RIVER BANKS AS IT REQUIRED LITTLE TREATMENT BEFORE BUILDING WITH.

THE HOTEL WOULD REQUIRE AREAS CUT INTO THE LANDSCAPE BY HEAVY MACHINERY. (LOCAL QUARRY THE ROCK TO BE USED TO BUILD THE HOTEL LOCAL SKILLED ROCK MASONS WOULD THEN CHIP THE LARGER STONES TO BUILD THE WALLS

RELATIVELY THICK STONE WALLS ($\pm 400\text{mm}$) CAN BE LOAD BEARING.

THE STONE CAN ACT AS A THERMAL CONDUCTOR. PARTICULARLY AS FLOORING.

BONDING THE STONE WOULD REQUIRE MORTAR WITH A HIGH LIME CONTENT.

SHALE STONE HAS BAD WATER RETENTION AND THEREFORE WOULD REQUIRE CAREFUL TREATMENT WHEN EMBANKING LAND

Figure 054. [CENTRE] "Process 017 - Materiality study"

WOOD

THE STONE ROOTS THE DESIGN
IN A NATURAL MATERIAL

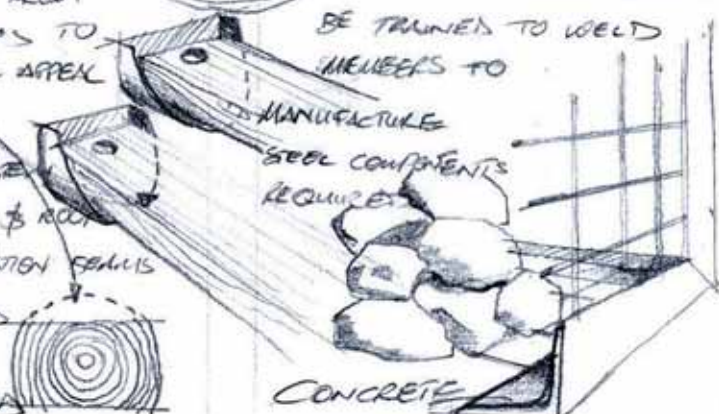
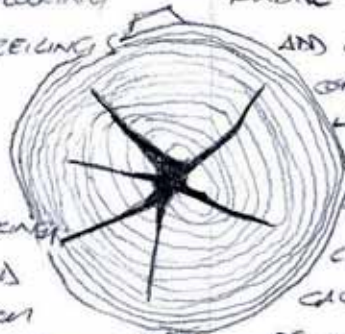
WOOD WOULD ACT TO COMPLEMENT
THE STONE & SOFTEN THE
BOLDNESS OF THE STONE A
AESTHETICALLY.

SUSPENDED TIMBER FLOORING
& WOOD FINISHES TO CEILING
WOULD CREATE A
WARM AMBIENT
ENVIRONMENT.

WHERE EXTERNAL DECKING
& STAIR WELLS WOULD
BE CONSTRUCTED FROM
PLANED COMPOUNDS TO
CREATE A RUSTIC APPEAL
TO THE EXTERIOR.

THE STRUCTURAL SYSTEM
OF THE BUILDING & REQUIRES
COMBINATION OF

WOOD
& COLUMNS OF WOOD
COMPOUND & STEEL
THE STEEL REINFORCED
COLUMNS & BEAMS WOULD
CREATE A LANGUAGE THAT PLAYS
ON THE RUSTIC & CONTEMPORARY



THIS LANGUAGE WOULD BE
THREADED THROUGHOUT THE
ENTIRE BUILDING.

STEEL

IN CONTRASTING WITH THE
NATURAL MATERIALS STEEL
LOCALS OF THE STONE AND THE
RUSTIC OF THE WOODS TO
AND AN ELEMENT OF
CONTEMPORARY TO THE
HOTEL.

THROUGH VARIOUS SUPPORTS
IN ADDITION TO
CUSTOM STEEL ROOF
CAGES, LOCALS WOULD
BE TRAINED TO WELD
MEMBERS TO

MANUFACTURE
STEEL COMPONENTS
REQUIRES

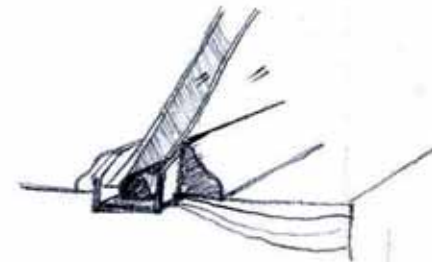
CONCRETE

GIVEN THE FLUID NATURE OF
THE BUILDING, CONCRETE
WOULD BE REQUIRED FOR THE
LOADABILITY OF CERTAIN SPACES

GLASS

THE SCENIC NATURE OF THE
HOTEL ENVIRONMENT REQUIRES
LARGE EXTENSES OF GLAZING
TO TAKE FULL ADVANTAGE
OF THE SCENIC DRAW CARD

THE SOUTH FACING ORIENTATION
OF THE BUILDING COUPLED
WITH THE GENERALLY COLD
CLIMATE OF LESOTHO
REQUIRES THAT THE GLAZING
ACTS TO SHIELD THE INTERNAL
SPACES FROM THE WEATHER
THEREFORE DOUBLE GLAZING
WOULD BE REQUIRED THROUGH
OUT GLAZED AREAS OF THE
BUILDING, IDEALLY WHERE
POSSIBLE A MODULAR SIZE OF
GLAZING AS DOUBLE GLAZING
SHOULD NOT BE EASILY CUT.



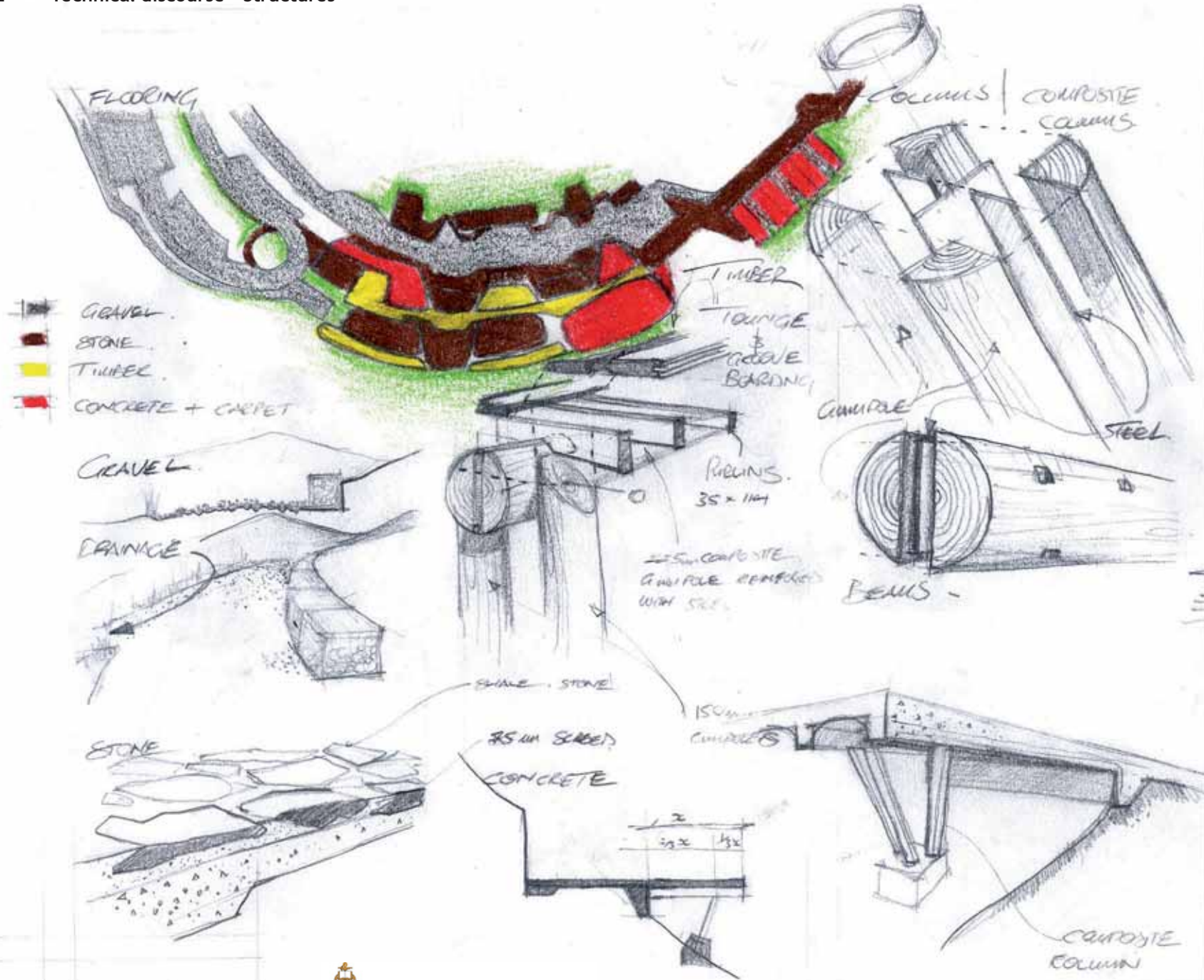
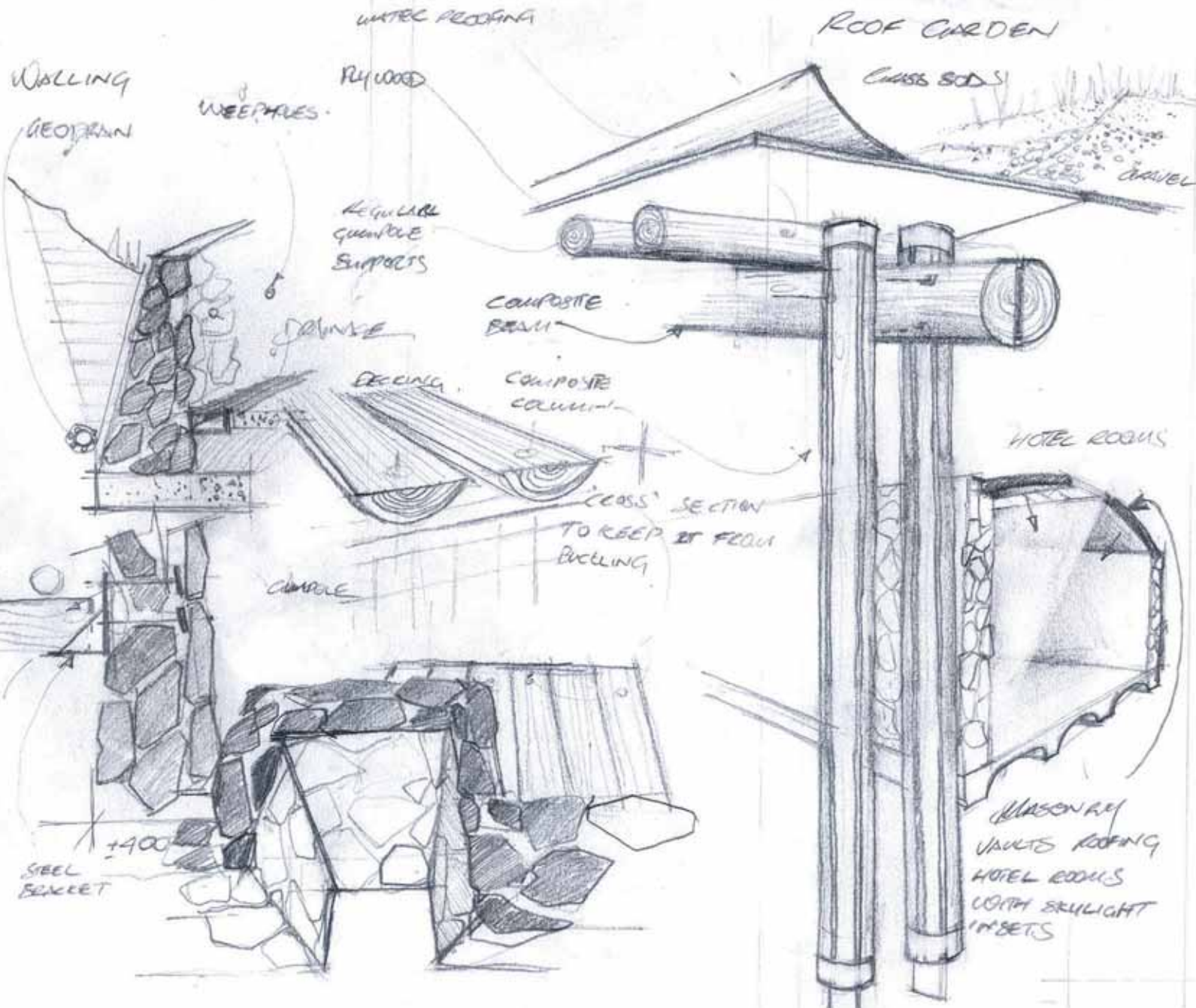


Figure 055. [CENTRE]
 "Process 019- Structure Study"



The design is further realised through the investigation and resolution of technical aspects. Addressing issues of circulation, materiality, structural systems, climate control mechanisms and water reticulation, the investigation continues.

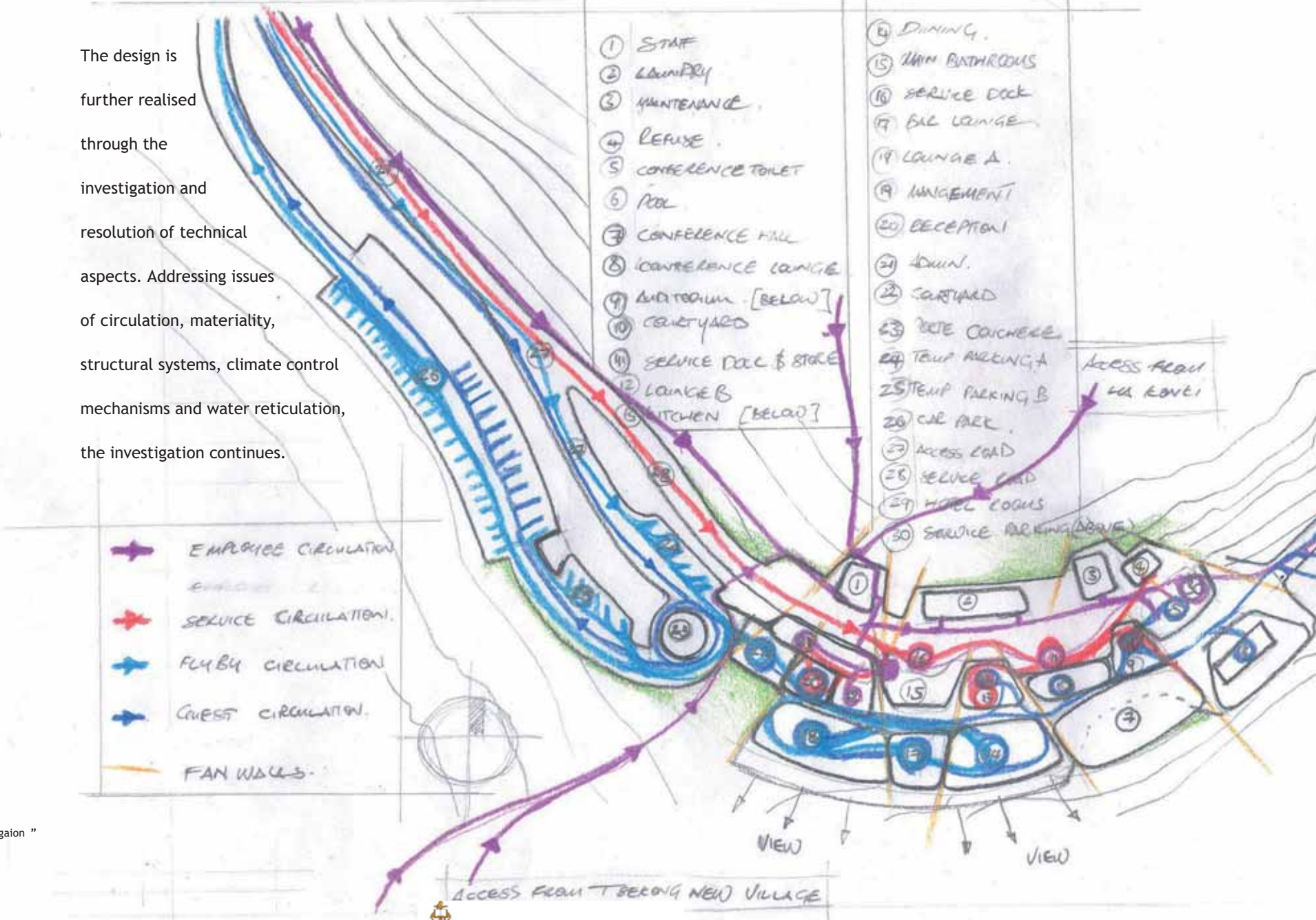
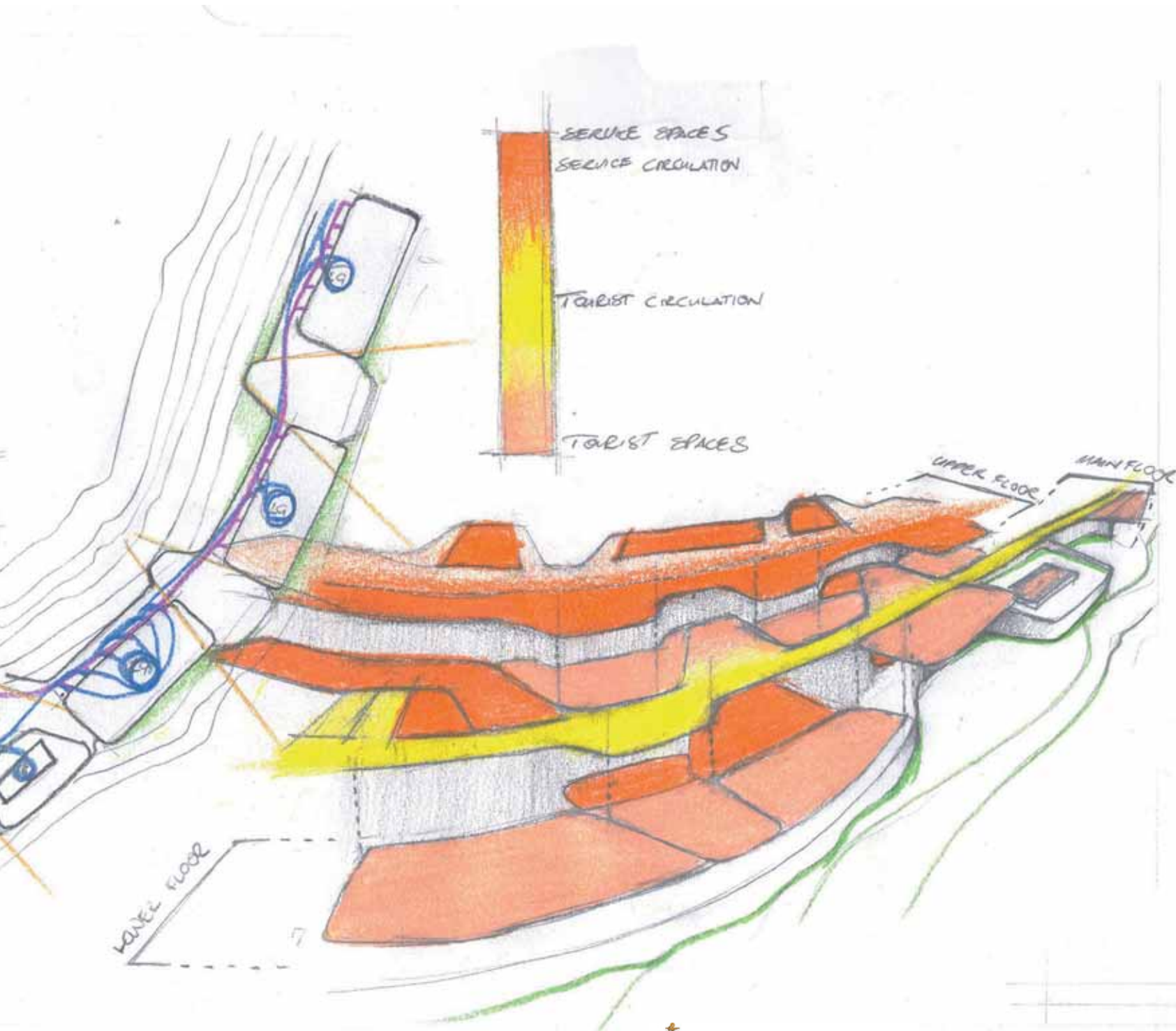


Figure 051. [CENTRE]
 "Process 016 - Circulation Investigation"



During the summer months the buildings open plan and series of openings intended to accommodate cross breeze air flow to cool the interior spaces.

The predominantly south facing glazing detacts heat gain from north light

The mass of the walls allows for a gradual radiation of heat gained during the day in the evening.

Prevailing winds drawn by the ridge will be allowed to enter through a multitude of openings on the north and exit through the south

The roof acts as insulation against prevalent weather conditions irrespective of season

Winter however, requires the greatest climate control conditions due to the extreme cold conditions of the highlands.

The hotel/longe is seeded with fire place noods in social spaces to create an ambient temperature.

In addition underfloor heating will provide a temperature

different from the outside, heating social spaces from beneath the floor finish

- HILL RIDGE
- UPPER FLOOR
- MAIN FLOOR
- LOWER FLOOR
- OPENINGS
- PREVAILING WINDS
- BREEZE
- UNDERFLOOR HEATING

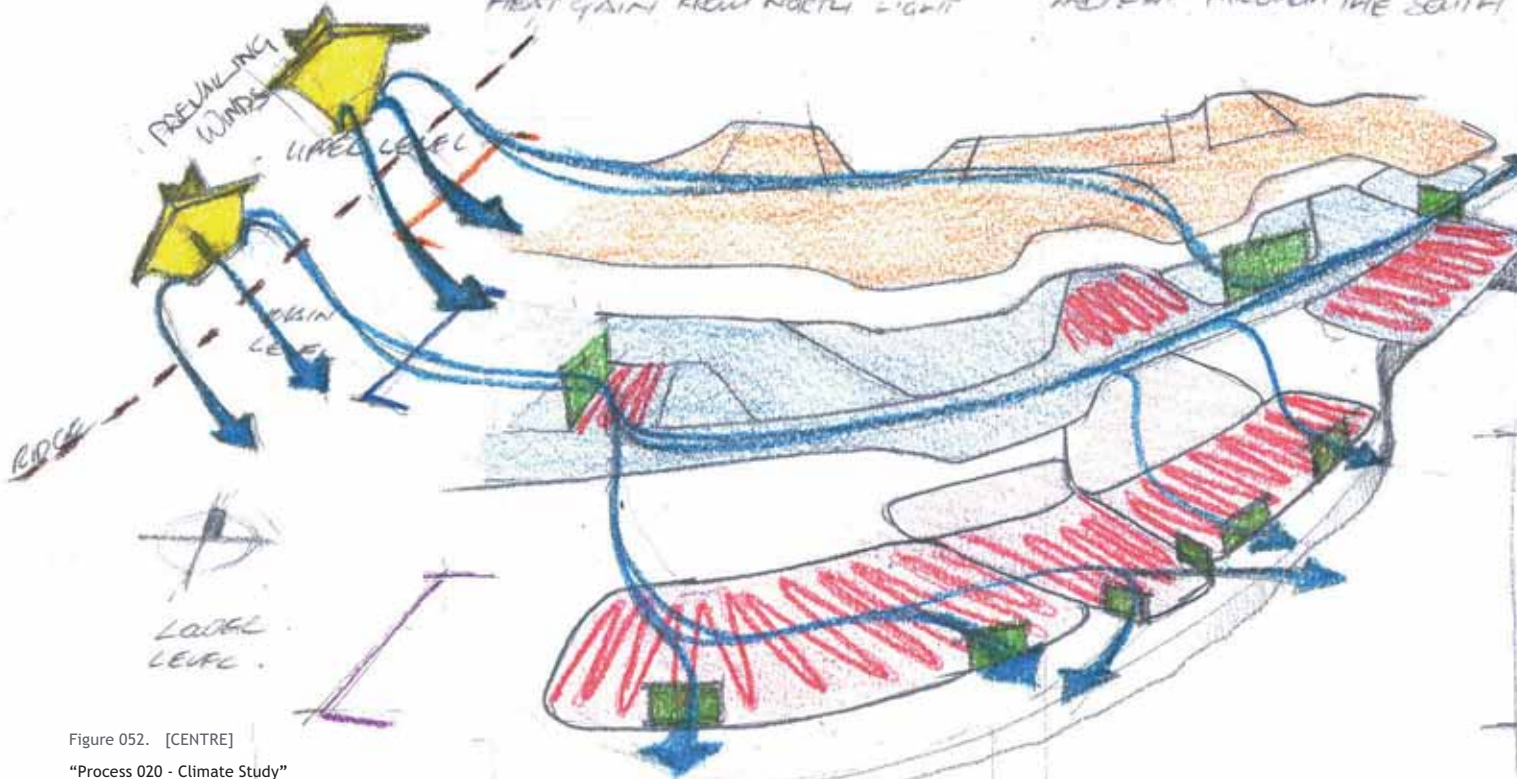


Figure 052. [CENTRE]
"Process 020 - Climate Study"

WATER IS RAPIDLY SUPPLIED FROM UNDERGROUND SOURCES. A BOREHOLE WOULD BE DRIVEN AND WATER PUMPED INTO A STORAGE TANK LOCATED IN THE POSITION INDICATED ACCOMMODATING A WATER CAPACITY OF FULL DRAIN CONSIDERATION AS RECOMMENDED [ADLER 1967]

- BOREHOLE WATER SUPPLY
- AREAS REQUIRING WATER
- WATER SUPPLY
- WATER DISPOSAL
- TREATED WATER OUTLET

THE PUMP WOULD BE HOUSED BELOW THE TANK. WATER WOULD THEN BE SUPPLIED TO THE VARIOUS SECTORS AS INDICATED IN THE DIAGRAM. USED WATER, BOTH GREY & BLACK ARE THEN FILTERED THROUGH BIODIGESTERS AND RECIRCULATED OUT INTO THE GARDENS. UNUSUAL WATER HOWEVER WOULD BE TREATED

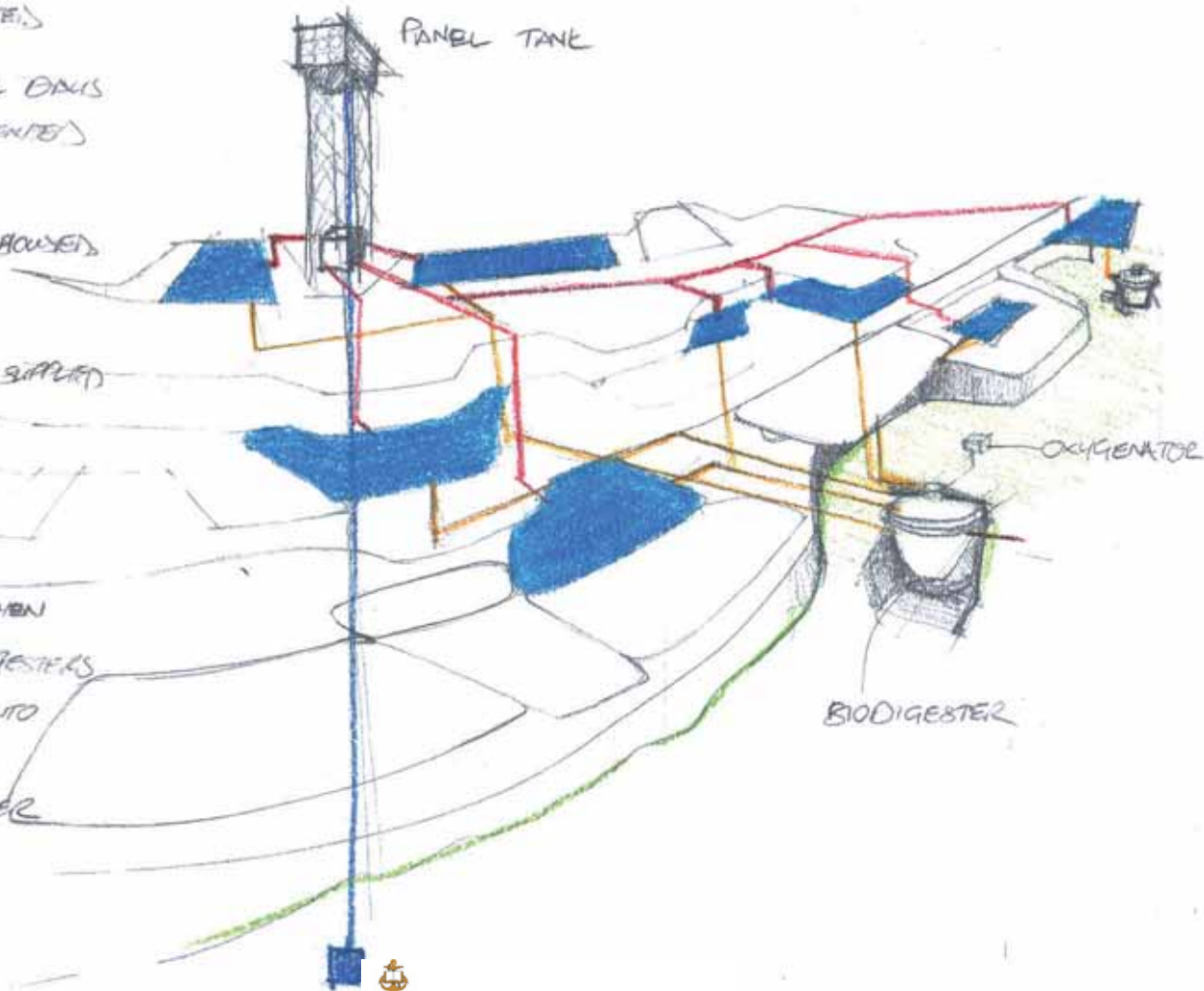
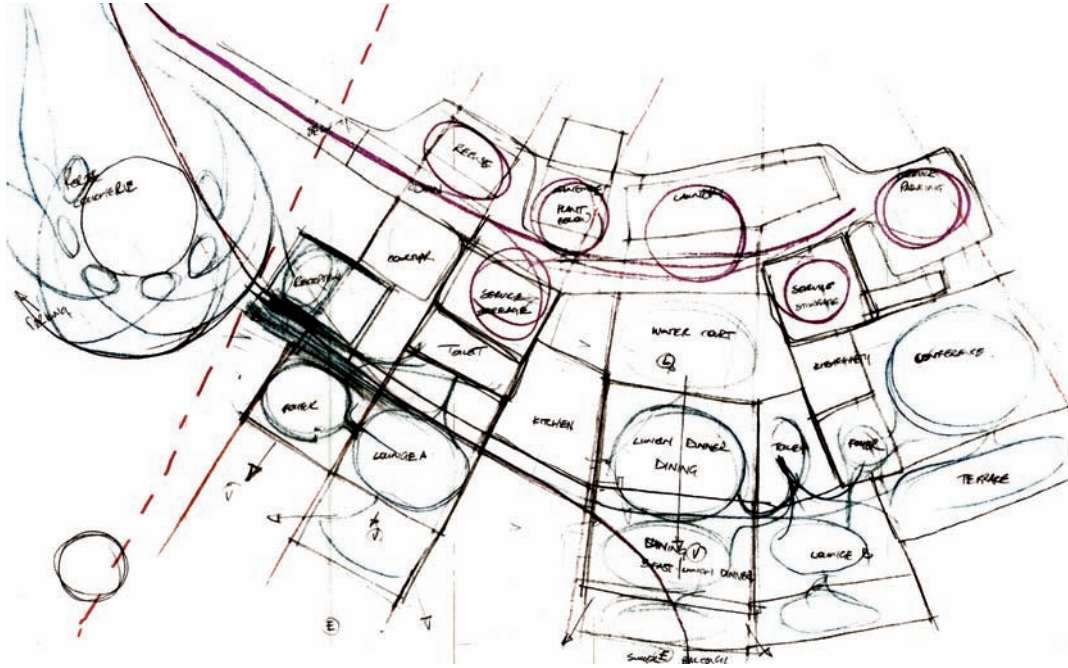


Figure 053. [LEFT] "Process 021 - Water reticulation Study"

By repositioning the building over the ridge to shield it from the wind, the change in contours required that the building form ultimately had to be adjusted to fan out across the new topography. This positioning embraced the dam more with panoramic views from east to west. Now hidden from the access to the site, the hotel/lodge inherited a sense of recluse, a quality synonymous with that of a retreat as defined in the title. By concealing it from immediate view of the visitor, a play on the sense of anticipation is created and eventually, embedding feelings of arrival at the end of a long journey.



Figure 047. [RIGHT]
“Process 012 - Hotel space plan”



The design as extrapolated from the revised concept follows the contours to the southeast. Where initially the hotel rooms were south of the main building facing out eastwards, it appeared more appropriate to continue the journey of the tourist through the hotel along the same grain of contours, further east. Although the south facing orientation is not accommodative of much needed northern sunlight. Warm north lit social spaces had to be accommodated in the design.

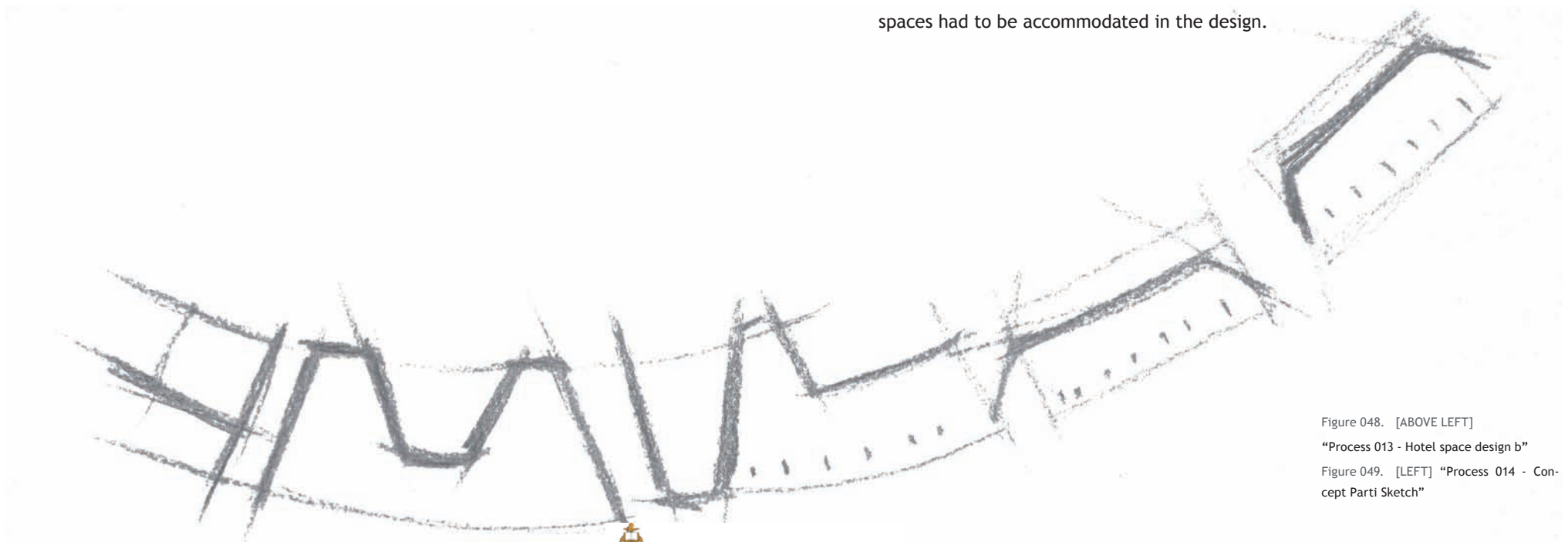
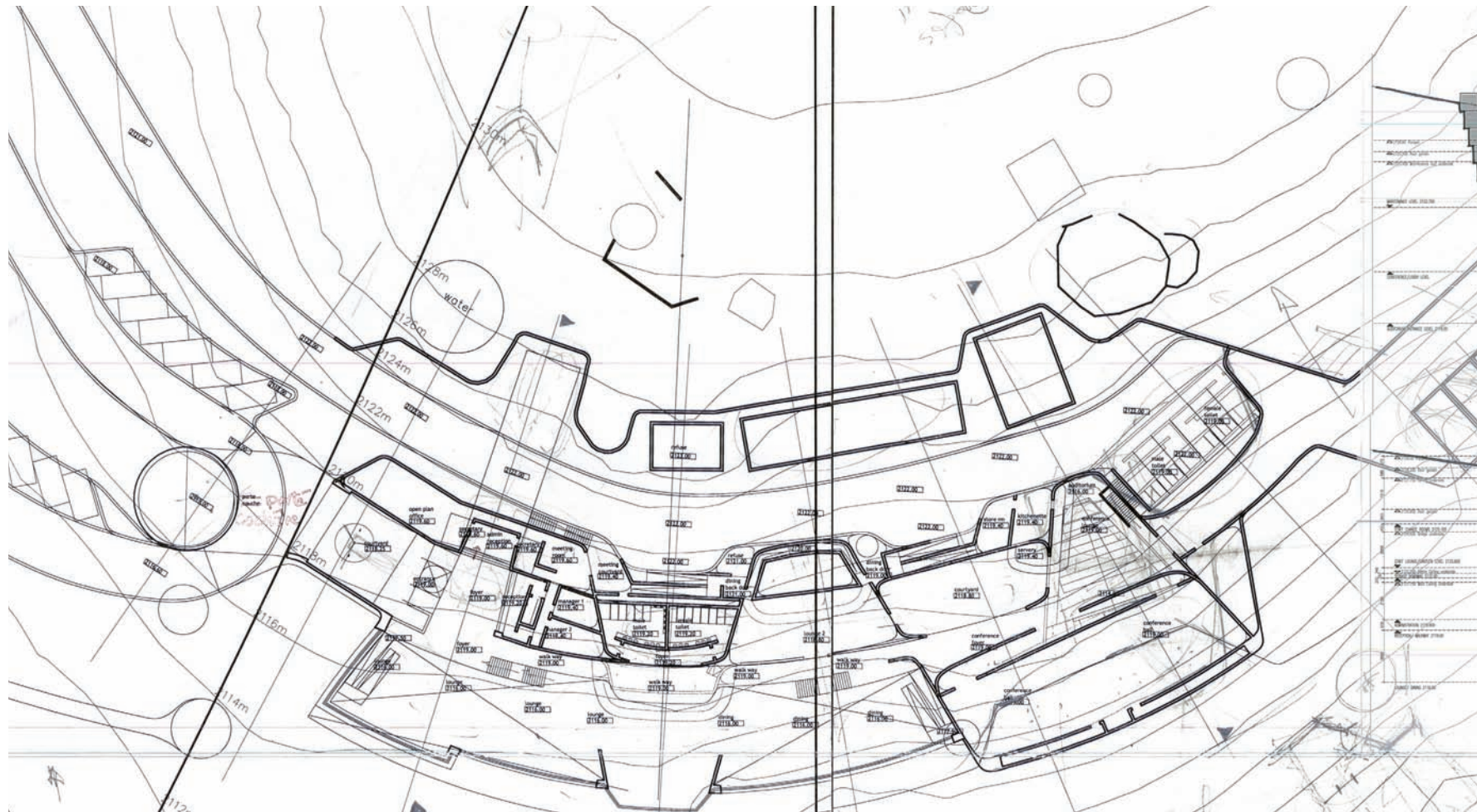


Figure 048. [ABOVE LEFT] "Process 013 - Hotel space design b"
 Figure 049. [LEFT] "Process 014 - Concept Parti Sketch"

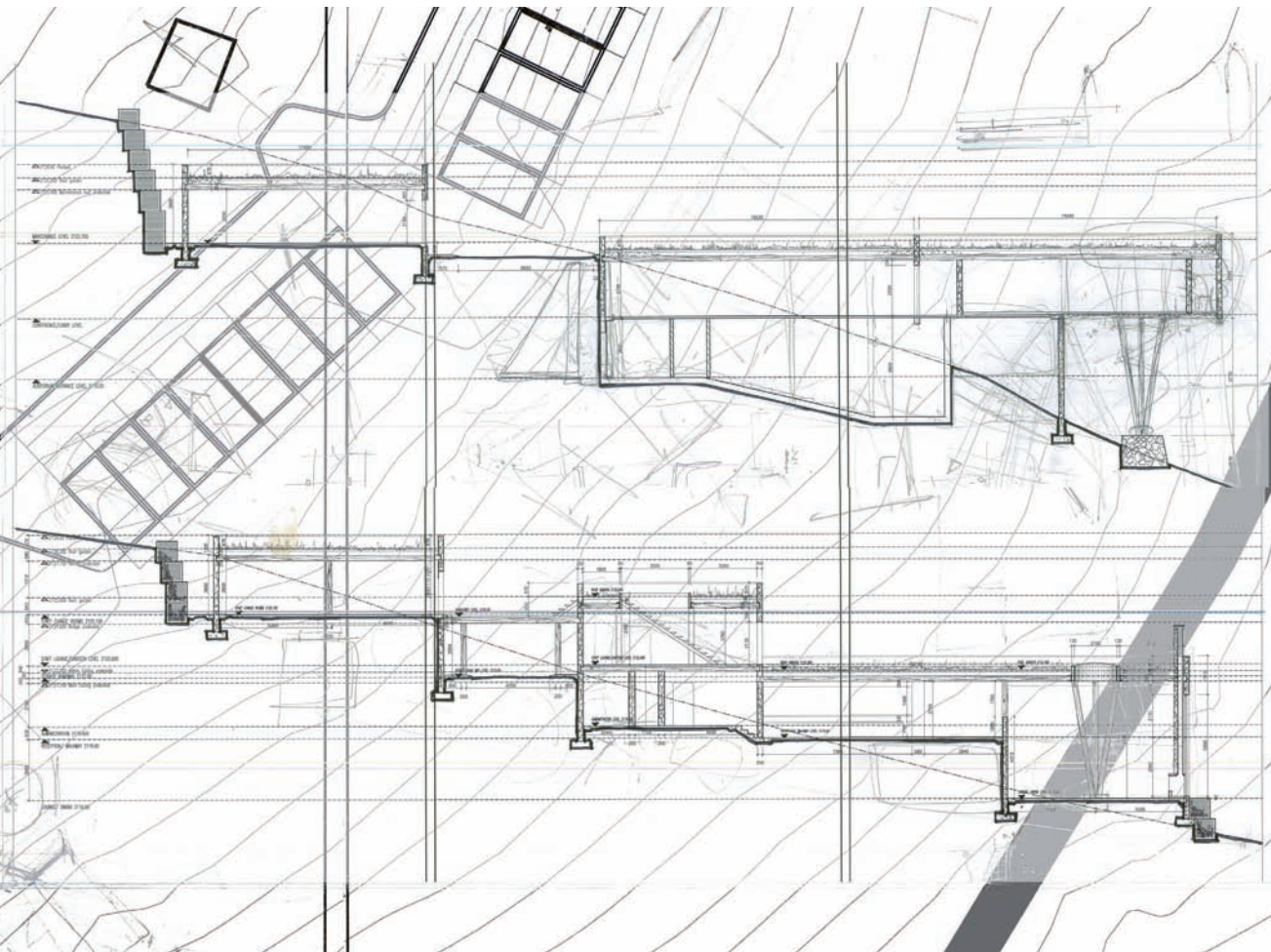


In providing the series of internal and external tourist spaces, supplemented by back of house, the design concept was fleshed out to the current proposal above. The splayed walls allow for the design to fan out across the contours and subsequently create a language that runs

through the entire hotel/lodge defining spaces. A concept underlying the transition of spaces in the main building refers to the typological traditional village layout. Where reintepreted here in the hotel proposal, the spaces represent the linear transiton from the “patlellong”

[reception] to the “lesaka”[lounge] on one side , “moreneng” [mangement] to the other. A series of public spaces “kopanong” [lounges] and further down to the “khotla” [conference hall]. Looking at the plan, cascading down from the perimeter of the village are a series of levels,

Figure 050. [RIGHT]
 “Process 015 - design proposal rev 0”



a series of exclusively tourist-orientated spaces to the south.

This circulation route leads right through the building past the conference facilities on to the hotel rooms to the far east of the hotel. Outside, between the conference facilities and the hotel rooms, a hot and cold pool caters to residents.

The cut and fill nature of the design, rests the buildings firmly in the landscape, where the rock bed is used to make up the walls of the hotel/lodge. This approach gives a quality that makes the hotel/lodge somewhat reminiscent of the cliff edge that defines the relation of the villages to the river. A landscaped roof to recreate the existing grassland, tucking the building into the topography.

which define usage and the integration of back of house [servicing] and front of house [tourist area].

The circulation is legible, with secondary service units such as staff quarters, laundry and maintenance to the top, furthest away from tourist interaction.

A service delivery road that diverges from the main

road to the hotel. Then a primary service unit that ties the service road to stores at one end and tourist

interface at the other. The road leading up the hotel is then carried on internally as the circulation spine and is flanked by a combination of primary services

spaces and public tourist spaces to the north and

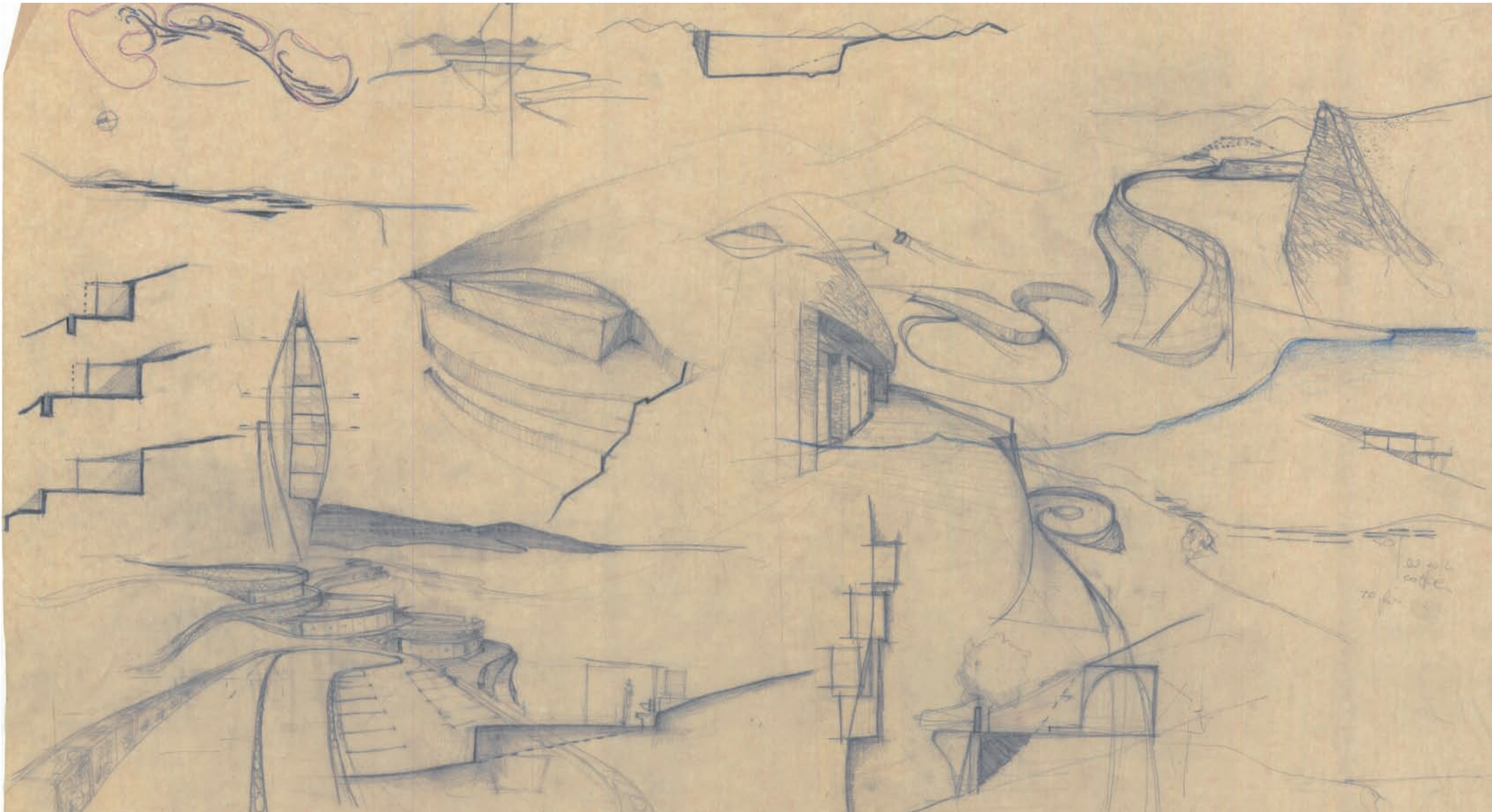
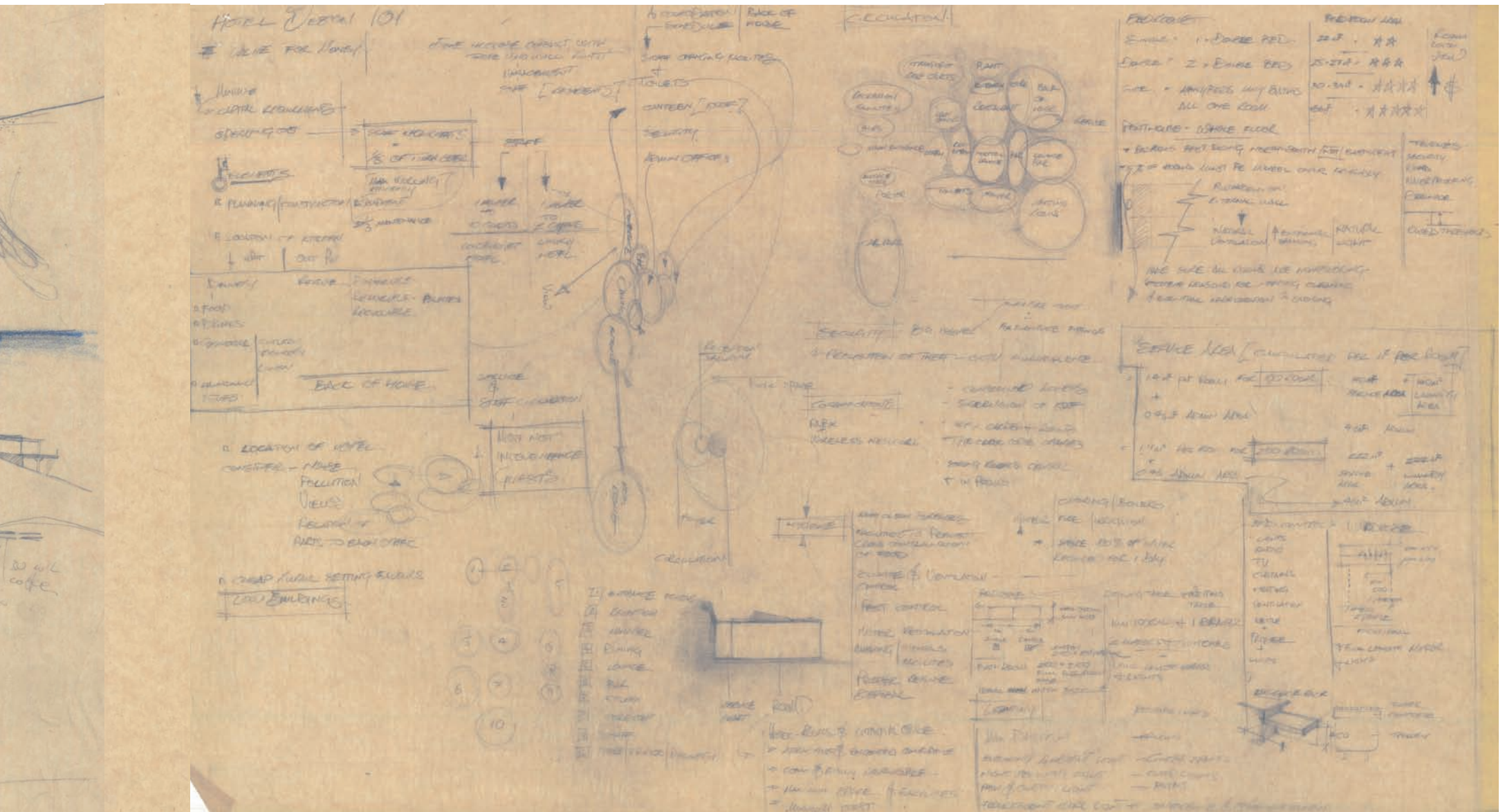


Figure 044. [RIGHT]
"Process 009 - Design Language"

The framework reached a defined legibility and attention was directed towards the hotel/lodge, where the craftsmanship of the locals coupled with contemporary interventions would present

the community in a renewed light. Inspiration was drawn from the ability of the building to become one with the landscape tapping off old and forming new routes and paths. The

experience of the hotel/lodge attempts to fuse the proposed language derived from the local vernacular, of an architecture terraced on the landscape, with an architecture that hugs and



essentially embraces the landscape, meandering with the contours. At points sinking into-and at others protruding from the landscape.

Phase 1 would only have 18- 20 rooms catering to

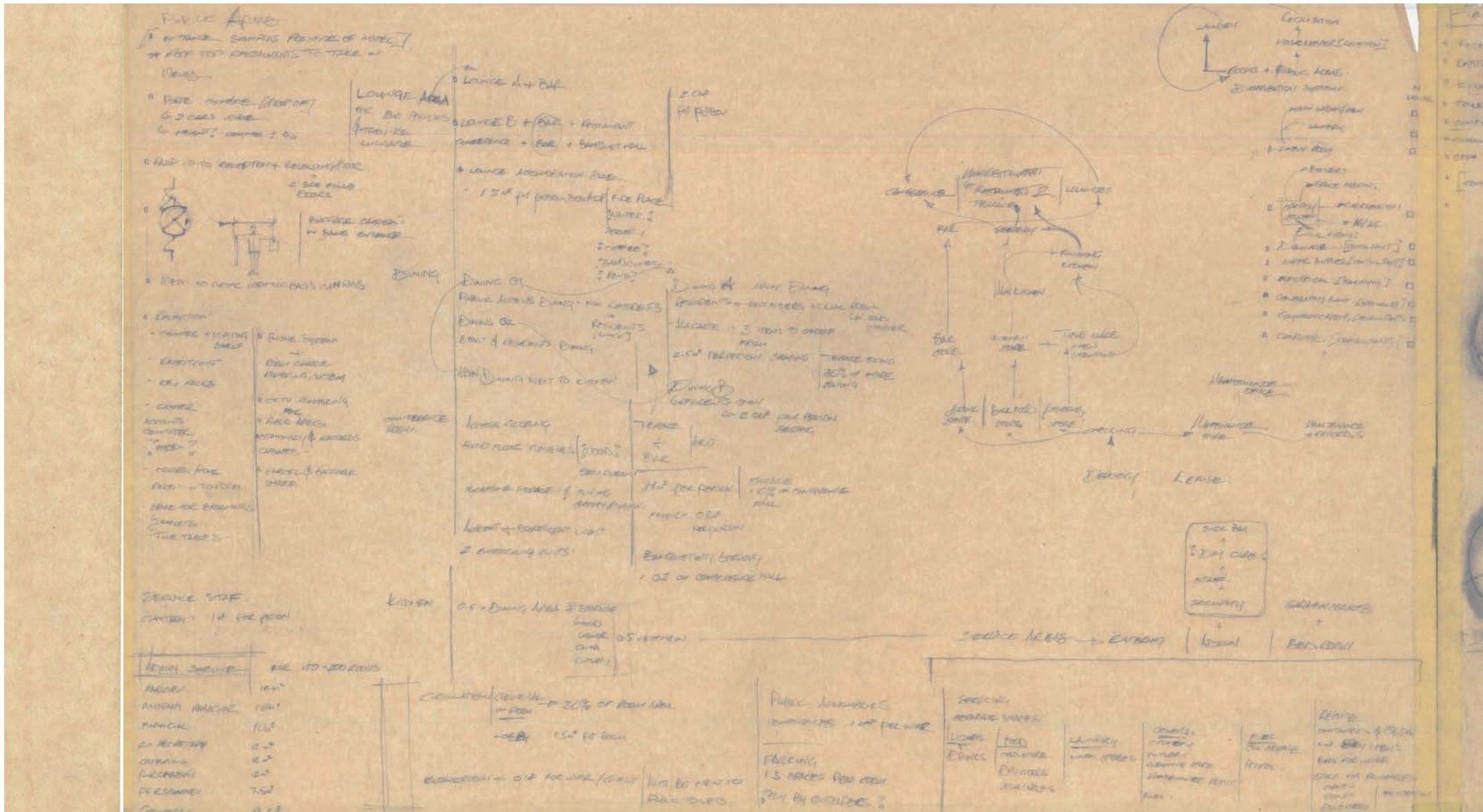
an average of 1.5 people per room, specifically under catering to gauge the demand for more lodging in coming holiday seasons.

The above image shows the calculations and

resolution of the spaces and how they work together. Intentions lead to applying the programme and space planning exercise to the

framework. The process attempted to apply this

Figure 045. [LEFT] "Process 010 - Hotel space planning"



programme to the initial intuitive sketches of the author. The framework sketch appeared too small to accommodate the programme requirements and was therefore increased. In addition, the authors premise that simply because the people in the region have become accustomed to the prevailing wind the tourists will also be able to withstand it was incorrect. The prevailing winds represent a discomfort to someone who may not be from the area. Attempts to buffer the wind appeared futile given the high wind speeds; the building thus had to move.

Figure 046. [CENTRE]
 "Process 011 - Hotel Space norms and space planning exercise "

The proposal [left] indicates design intentions towards space planning. Once component accommodation had been addressed far enough to begin space planning, the proposal was set into place. On entering the proposed framework at village B, a laundry facility using a nearby stream was proposed as well as a farm in the heart of the remaining arable land portion. The laundry proved not to be feasible to serve the hotel in the current location and was then relocated. Furthest south of the peninsula, initial space planning accommodated the relocated village in relative proximity to their old village. The relocated village looks in part to the north, in line with the communities' climatic considerations, while in part to the west towards their old village in memory. North of the new village, a central area was proposed for community and tourist

interaction, where activities could be planned and administered by community members. North of the circle, a school and soccer field was proposed, however their proximity to the proposed hotel required that this design be reassessed and was subsequently moved. Initially the intention was to integrate the community as much as possible with the tourists, tapping off existing routes and encouraging the tourists to explore the peninsula and walk through the village. The cross pollination of programs would ultimately clash and the holiday lifestyle of tourists would inevitably disrupt and be disrupted by the everyday life of the villagers. The hotel as indicated in red, would comprise a central building that is strung to a series of embankments of hotel rooms, which would create mini clusters of hotel rooms linked by a road around the area.

In a revised proposal the process took a direction that centralized the services into a town square where the school defines a central courtyard on one side and a string of retail on the other. Central to this, a multipurpose hall is proposed, that can be used by the school as well as the community. Above the retail portion, just beneath the hotel, a church that can be used by the community and also by the hotel guests is proposed. North of the square the proposed farm remains, the new framework proposes that the hotel rooms face east, where the ridge stands as a soft boundary between the community and the tourist resort shielding the tourists from the wind. This is comprised of a central building and a series of hotel room embankments. The rooms closest to the main building would be built as phase one. Subsequent phases would be constructed as demand for lodging increases.



A critically important consideration was to define in full, the parameters of the hotel/lodge.

It is assumed that investors would partner with a hotel group that would eventually manage and market the hotel/lodge under their banner and would fund the hotel/lodge. The consortium would then be required to train and employ the local community members in the construction and day-to-day running of the hotel. In exchange, the lease agreement would give exclusive rights of tourist development on the peninsula and surrounding waters to the consortium, requiring that the locals ensure their area is always well maintained.

In terms of services to the hotel/lodge, the hydroelectric power station proposed by the dam would cater to the lodge and communities electrical requirements. A borehole would allow access to underground water that could

eventually be reused in the watering of gardens and the landscape. The farm produce would be sold to the hotel/lodge and seasonality would determine the menu. Small delivery vehicles would go to and from the airstrip where goods would be delivered by chartered aeroplane.

The hotel/lodge would be the fifth lodging development in the region east of the Caledon border. In this growing environment of tourism, the Drakensberg ridge and the surrounding highlands are becoming an increasingly popular tourist destination. One of the two most popular, Afriski, west of the proposed hotel/ lodge, offers skiing in the winter season and is often overbooked as it is only able to accommodate 60 guests. Tourists have to travel over an hour southeast to either Senqu hotel or Mokhotlong inn in the town of Mokholong for lodging. The second most popular tourist attraction is the Sani pass lodge, which is currently earmarked

for upgrading in late 2009/early 2010. In future it will accommodate 40- 60 people. The Sani Pass is an hour and a half south of Mokhotlong town and offers breathtaking views, hiking and pony trekking. The proximity of the four lodging facilities to each other allows relatively short travel distances between tourist attractions. There in is an opportunity to tap in to the Afriski market during the winter, and the Sani pass market in the summer.

Tourism developments in Lesotho tend to under cater so to ensure that beds are always filled which consequently provides exposure to other lodging facilities nearby. The hotel/lodge would be midway between Afriski and Sani Pass and would offer hiking and pony trekking in the summer as well as water sports on the western banks of the peninsula. To the east of the peninsula, boat trips upstream to other villages on the banks



could provide other tourist activities such as fishing nooks and camping trips. In the winter however more internally orientated activities would be accommodated. Restful areas with fireplaces would make for a cosy picturesque getaway retreat. Ample sized communal areas would allow for restful social spaces for elders while accommodating children in others. Conferencing facilities of a hall and auditorium would also be provided. Guests could either drive in for a weeklong workshop or fly in and be picked up at the airstrip, have their meeting and fly back out later the same day.

Once a concept for the hotel/lodge was conceived and accommodation schedule proposed, design intuition guided by research into hotel spatial norms took the fore [space norms and guidelines extracted from Adler 1969: 36_1- 36_2]. It proved to be an analogical design method that negotiated sizing of spaces

and the interrelation thereof. Finding a medium that draws from the vernacular while still applying to the seamless operational efficiency of a hotel in this setting. The ultimate goal relative to hotel design being a clearly defined integration of back of house; the servicing area, and front of house; the tourist interface.

Space norms were calculated for 100 guests. This was ideal in that space sizes could then be adjusted based on percent. Where in the case that the hotel only accommodates 60 guests then the hotel/lodge would be 0.6 the initial calculations. The figure was also based on receiving a maximum capacity of two tour buses seating 45 each during day visits [total 90 guests during a day visit]. Tour operators in Durban, South Africa usually charter trips sightseeing in Lesotho, from Sani pass up to Afriski [interview: Phakisi. 2009]. Apart from residing guests, “Fly bys” [tourists sightseeing during the day] would

make up a large portion of the market.

Thus a careful compromise between sizing of public spaces accommodating day visitors, and number of hotel rooms provided would have to be reached, from an investment point of view, considering that the profitability of a hotel rests on people staying in beds over night, more than one night in particular. This is based on the principle that the amount of money gained over two nights marginally outweighs the amount of money spent on accommodating a tourist over that time. So the longer a tourist stays, the more profitable [Interview Crafford : 2009]. But given that water would be a readily available abundant resource, and electricity supply would be subsidized by the LHWA for the community and their initiatives as part of their remuneration, the reduction in running costs would thus act in the favour of investors who would be able to marginally capitalize on day visitors too.

the Difacane were sent to “Mophatong” where young herd boys would tend to them away from the villages open grazing pastures, only bringing them home to be milked, have calves or be slaughtered for celebratory purposes. C is the “Khotla” where the villagers meet for discussions and feasts. And finally D is “Moreneng” the chiefs’ home. Following on is the settlement of the villagers.

A sports ground is proposed; for community interaction, a communal farm, whose produce will be sold at low prices to the community members. In addition, a clinic, a learning centre for farming methods, a school, the tourist resort, and a series of communal spaces where tourists can interact with locals are provided. Finally the proposal accommodates the potential for a water sports facility with a club house.

It is anticipated that through a partnership of the Lesotho Highlands Water Authority LHWA and the government [through rural upliftment programmes] the broad framework will be funded.

- Where community A has to be relocated, houses provided by the LHWA will be built as per their policy.
- The LHWA policy also proposes its own community upliftment programmes in the form of crop seeding and fish farming programmes.
- The remuneration packages for land will be offered to the locals as share ownership of specific implementations, i.e. shops, community farms, etc., so to keep the income generative.
- Government rural upliftment programmes will provide funds to build projects such as schools.

- Members of the community will be trained as educators and medical care givers in the time leading up to the building of the schools and clinic. They will be contractually bound to work for a period of time post training.
- Land for the hotel will be placed under a trust and leased out to investors to build. The dividends will then be paid out to the community members.
- The communities will be employed in the construction and day to day running of the framework proponents. Where possible, materials sourced on site will be used to reduce cost. All the while instilling a sense of pride in their indigenous building method and providing a sense of identity to the area.
- The scheme would be aligned with the construction of the dam so as to utilize heavy-duty construction equipment/ machinery where necessary.

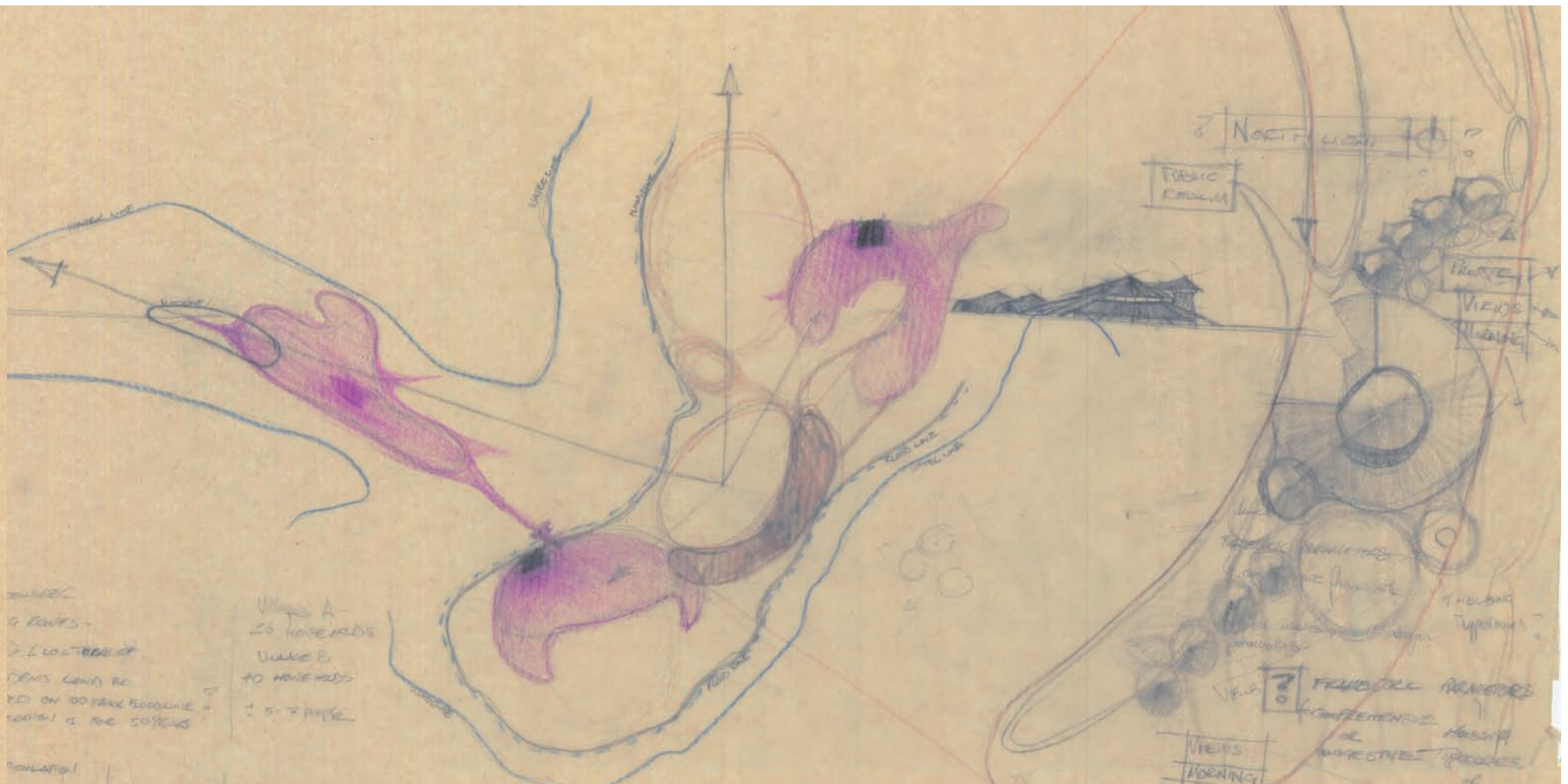


Refining the framework, as indicated above, the proposal suggests that the amenities be strung between the new relocated community of Tsekong and the existing community of Ha Konki. The activity spine would tie the two communities together. Central to the spine, equidistant from

either community, the hotel would be positioned. Explorations in this direction indicated that the framework would be directly in the path of the wind. Also, its positioning championed the interests of Communities A and B well above those of C, which would have to be catered for

in the framework. A different direction would ultimately have to be explored. Above, on the right however, an initial impression was proposed for the framework in the current location.

Figure 039. [RIGHT]
 "Process 004 - Framework Location"



4 RAILS -
 → LOW-BELL OF
 (THIS LAND) RE
 ED ON DOORX ECONOMIC -
 CONTROL IS FOR 50 YEARS
 DOLLAR!

Village A
 20 HOUSEHOLDS
 Village B
 10 HOUSEHOLDS
 : S-F PAPER

Figure 040. [LEFT]
 "Process 005 - Framework Proposal"

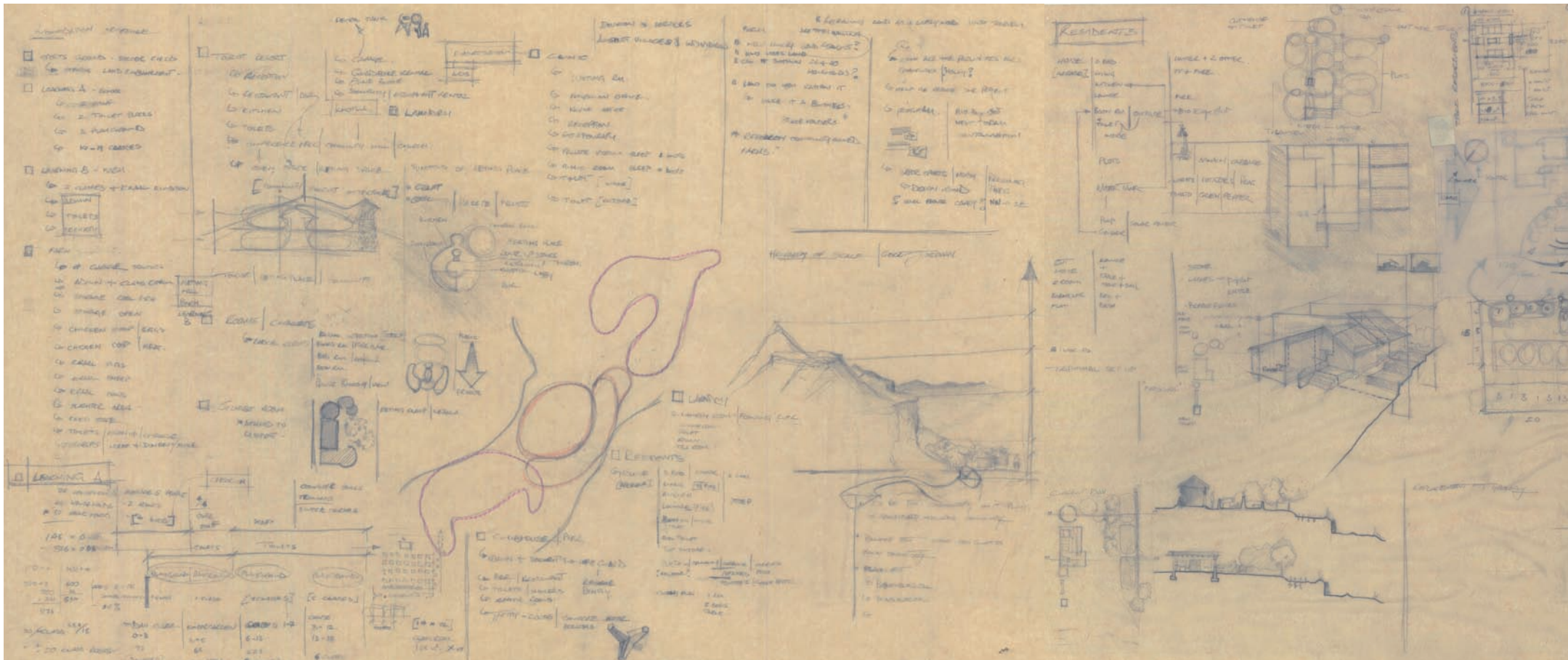
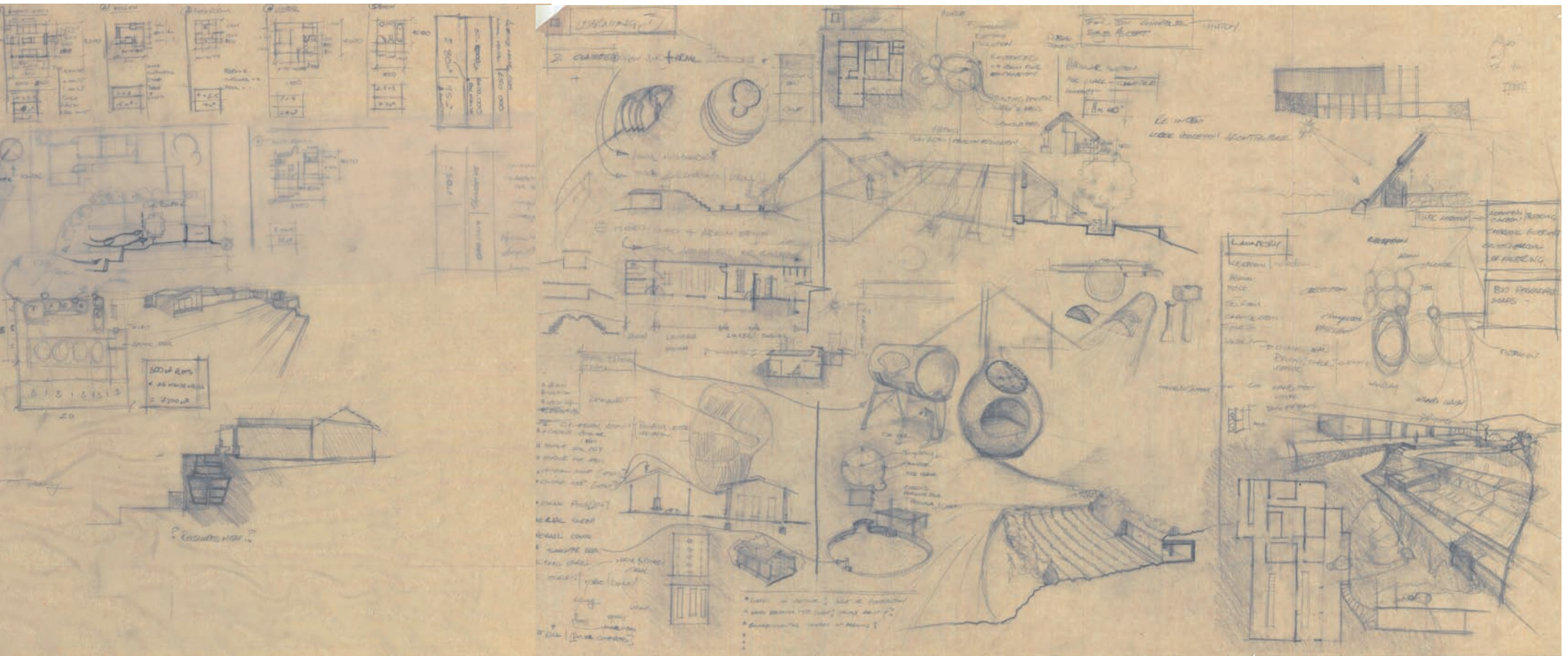


Figure 041. [RIGHT]
 "Process 006 - Framework space norms"

Further exploration fleshed spatial requirements of the components to accommodate the required elements of each building. This was done so to determine sizing, which would impact placement and the spatial requirements of each building. With reference to the school for example,

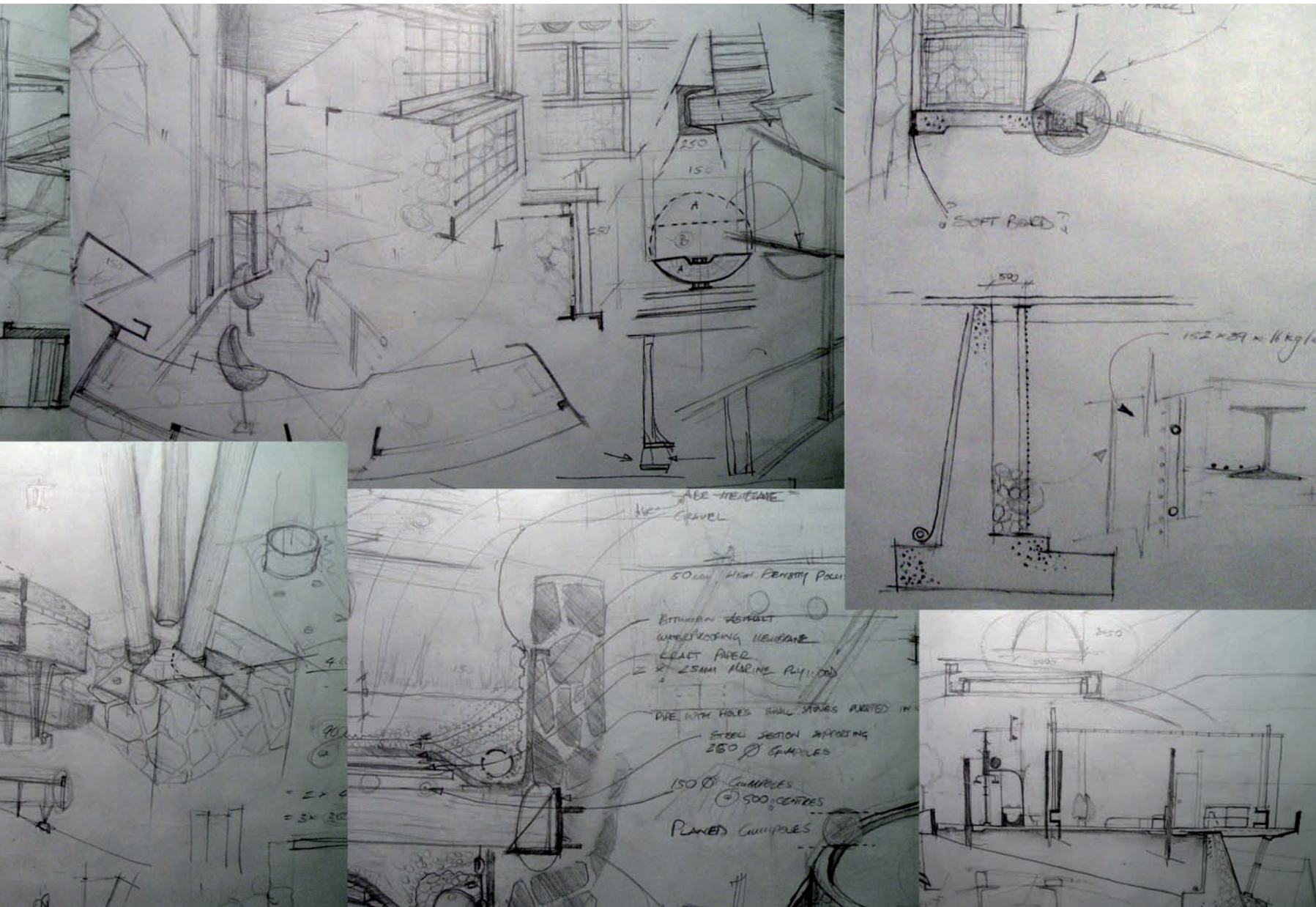
classroom sizes were based on a percentage of average household members that may require schooling. This applied to various schooling grades, provided preliminary estimations to sizing of school class rooms. In subsequent calculations, the housing to be designed was

determined by the land portion each relocated household may require. Drawing directly from the current lifestyle of the locals, the houses as designed were intended to be adequately accommodative with out being detached from the environment as current



trends tend towards. Inspiration was drawn from hillside settlements and farming methods of the locals. A language of terraced embankment was conceived and applied as a potential style for the hotel. The thatch roofs and gum poles however, were derived from current tourist trends in

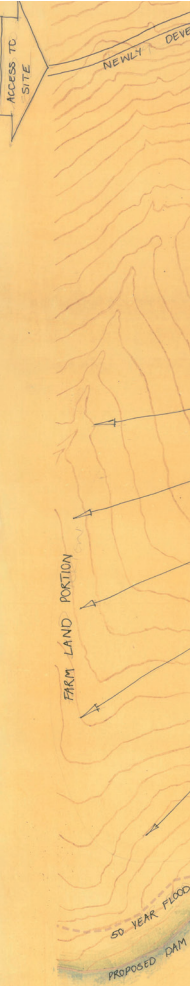
Lesotho. These “trend derivatives” initially appeared to be uninventive and were explored in depth. The underlying ideal was to refresh and reinvent existing architectural paradigms.

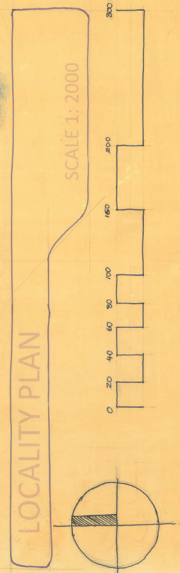


800_development proposal

801 Framework

801 Framework nts

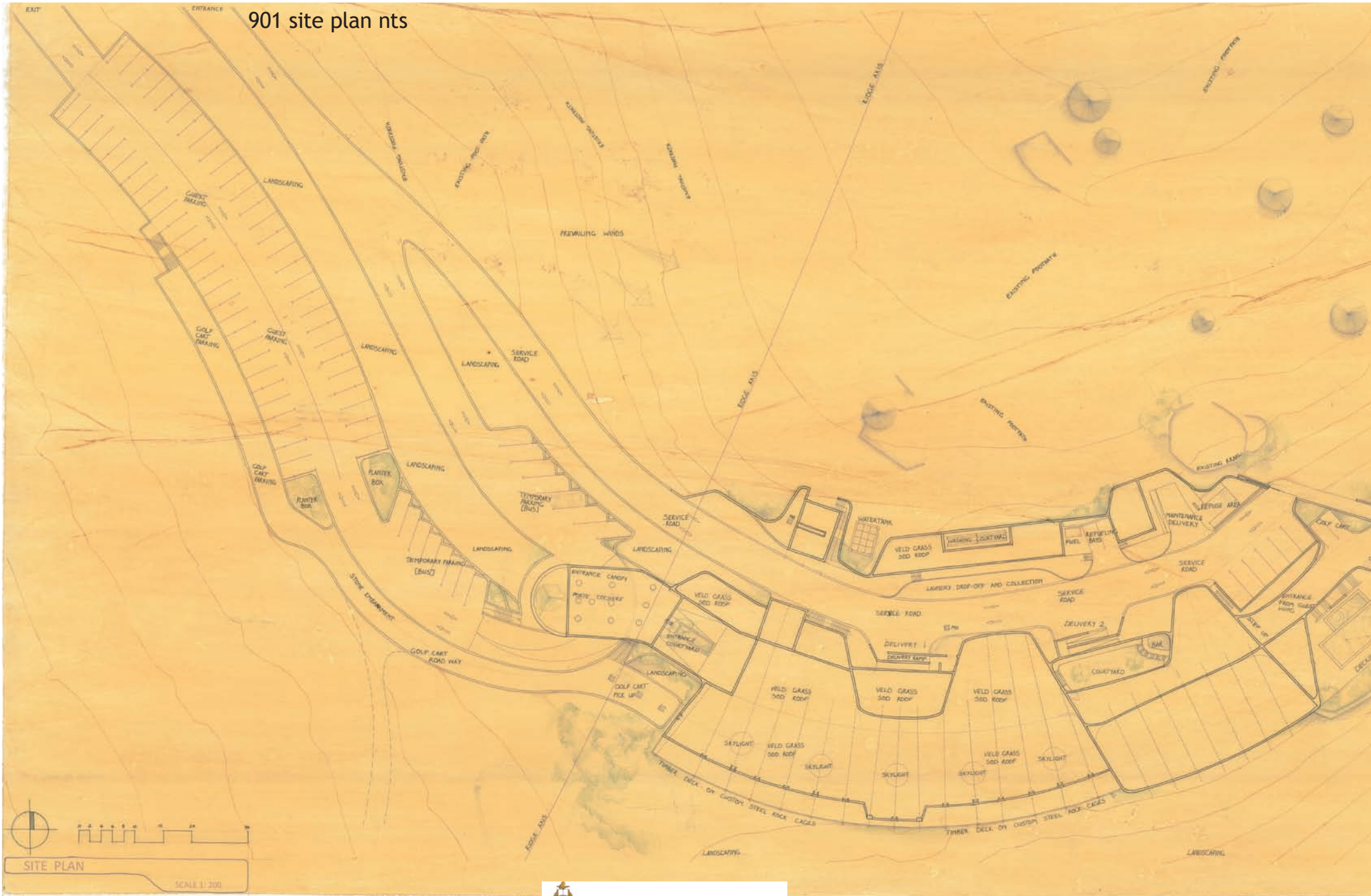




900_ design and documentation

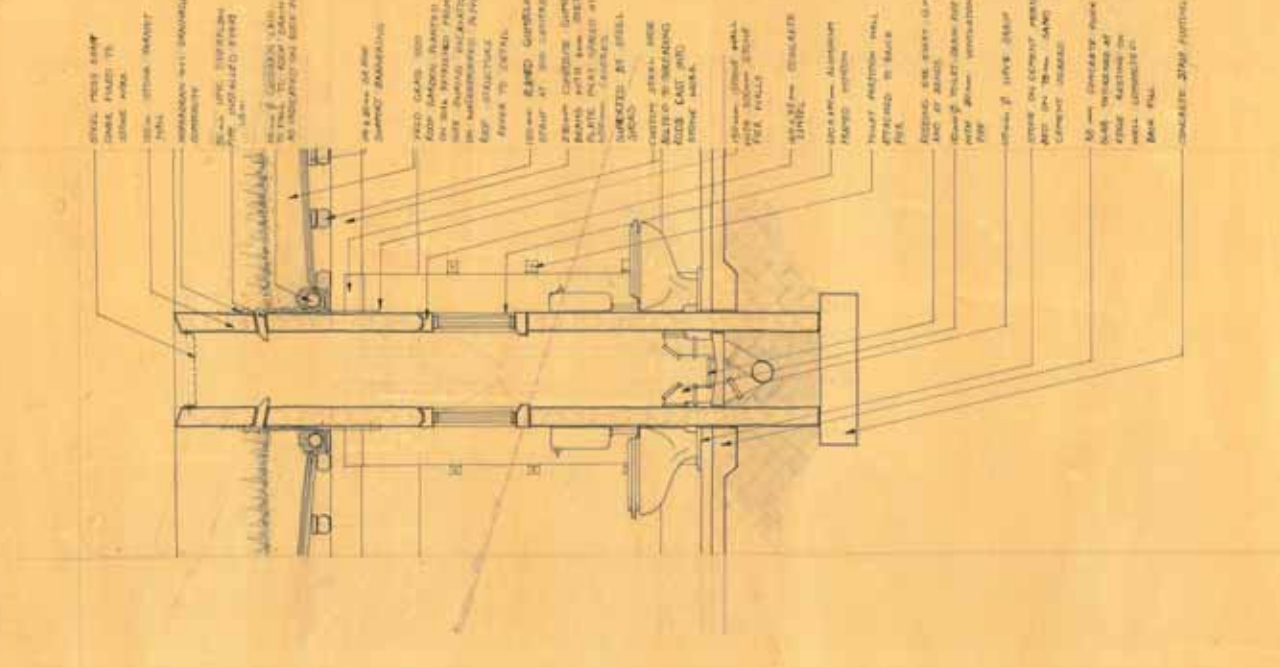
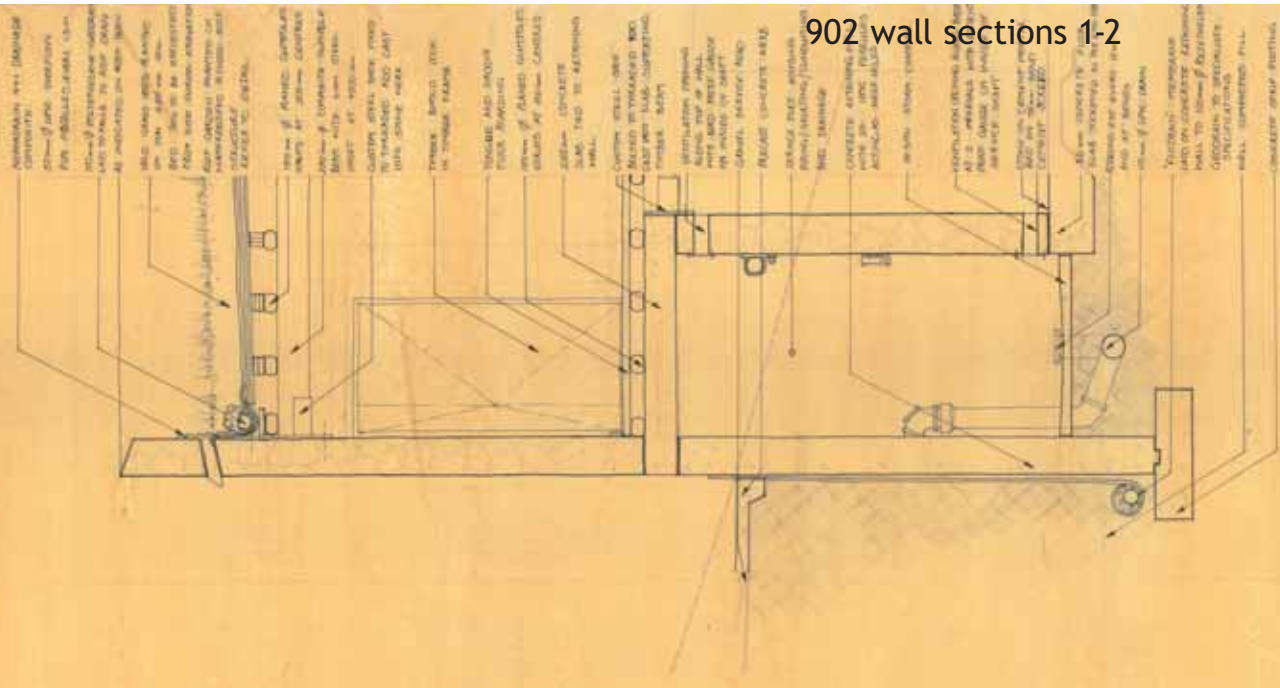
- 901 Focus
[phudihadi hotel resort]
- 902 Technical resolution
plans | sections | details

901 site plan nts





902 wall sections 1-2

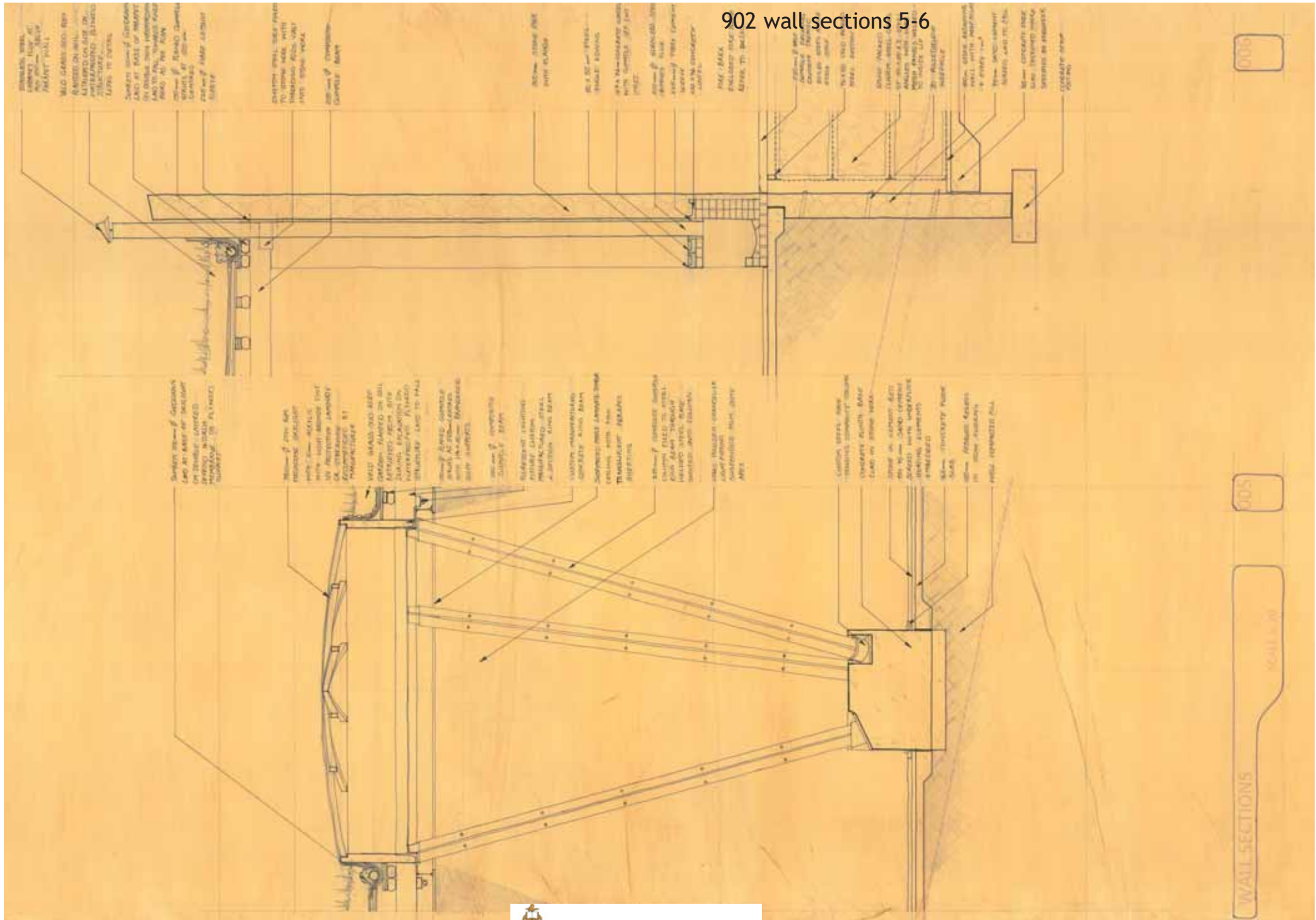


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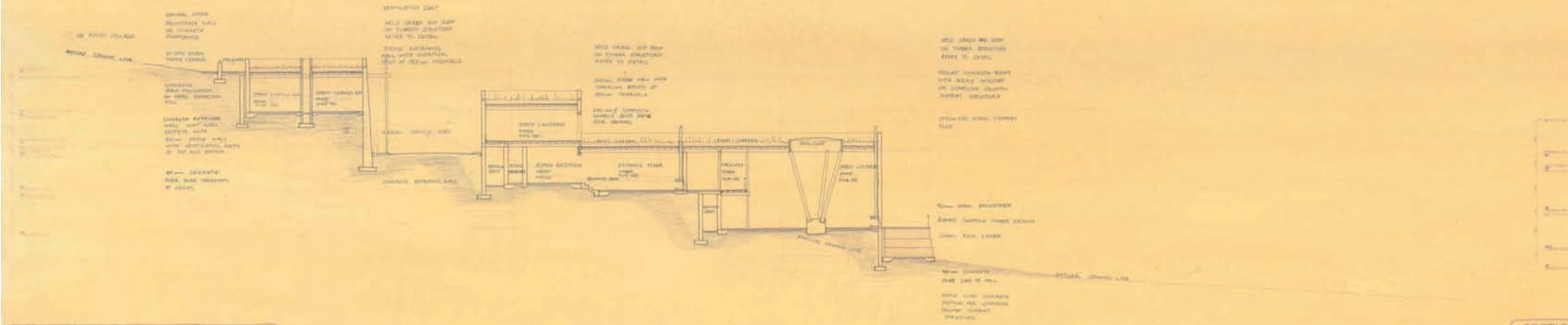
901

WALL SECTIONS

902 wall sections 5-6

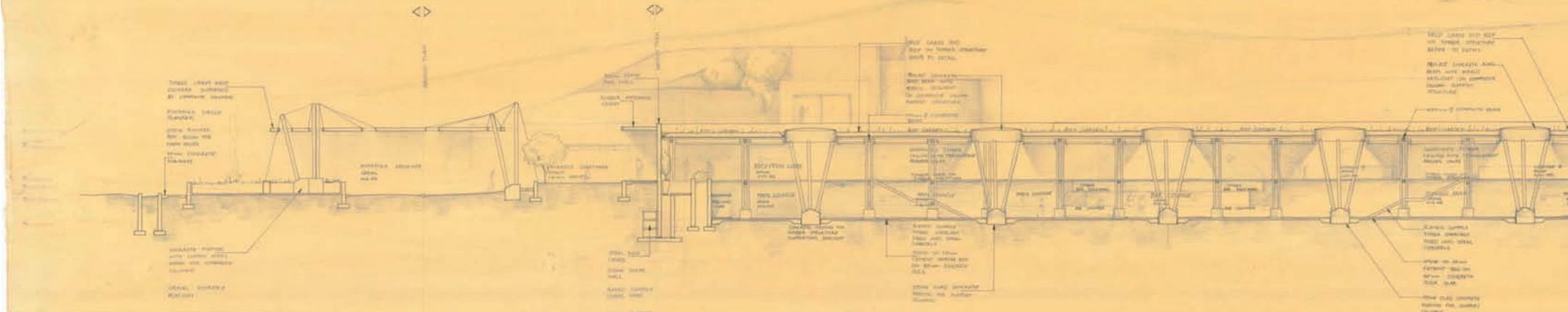


901 sections a-b-c-d nts

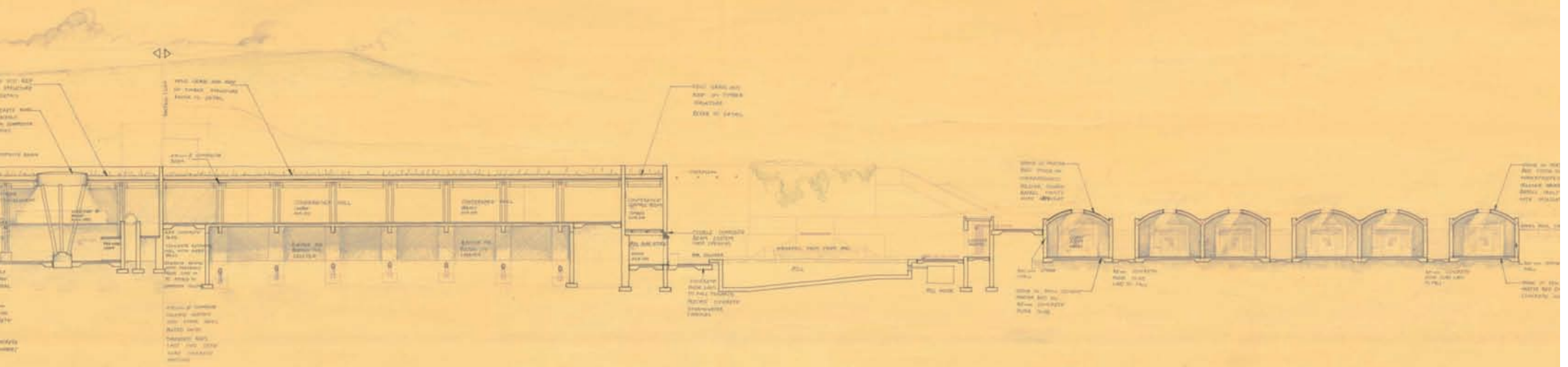
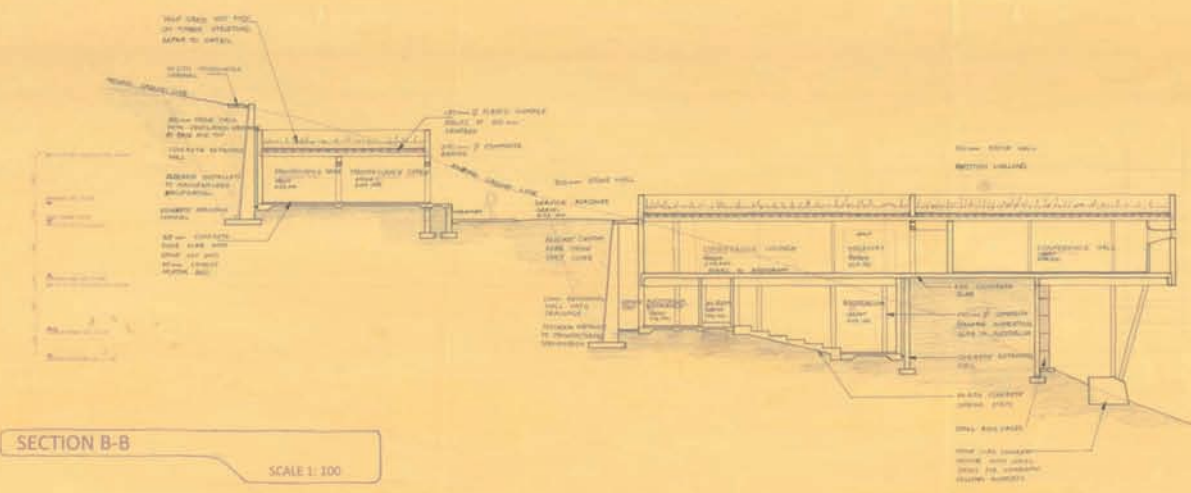


SECTION A-A
SCALE 1:100

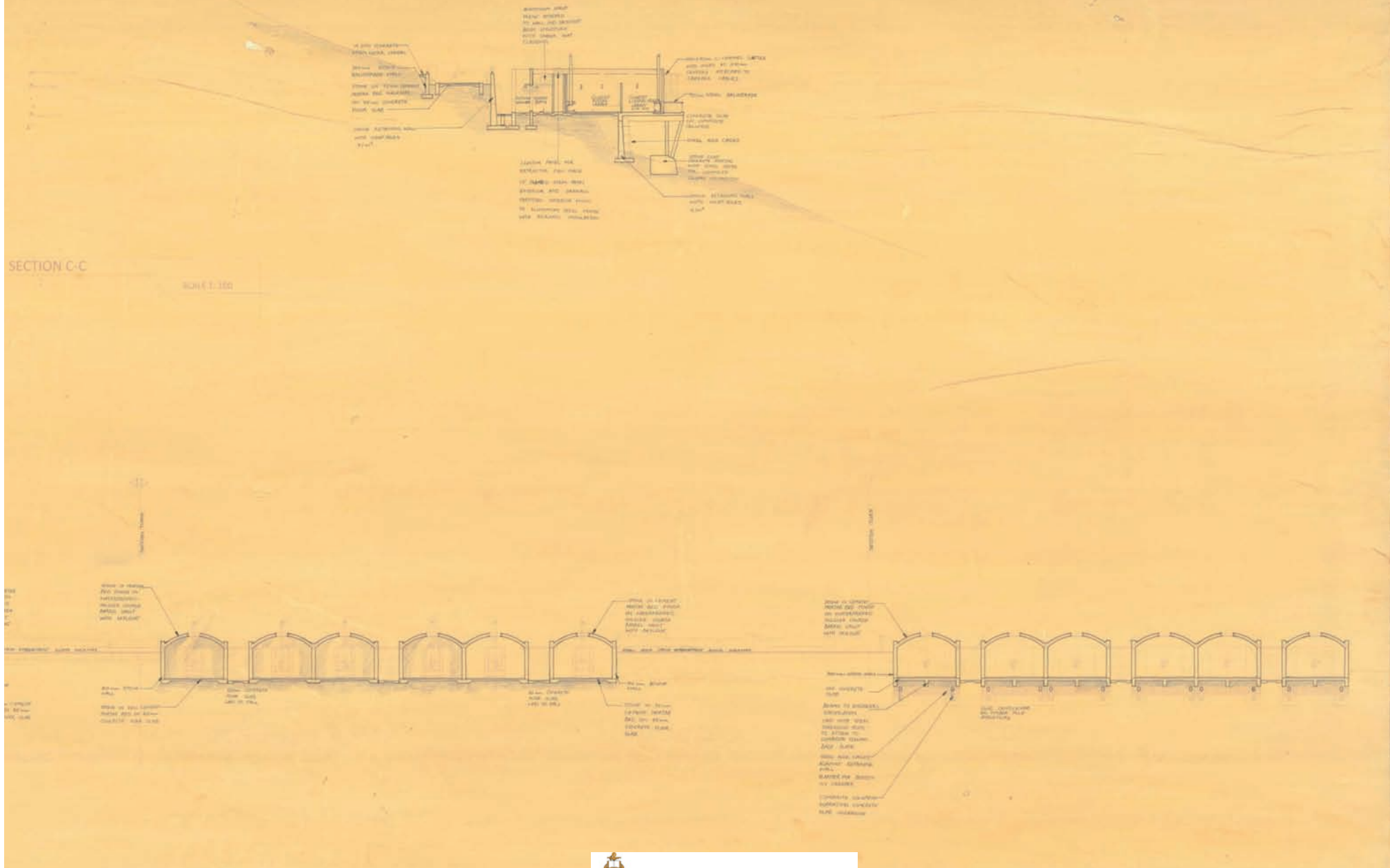
SECTION

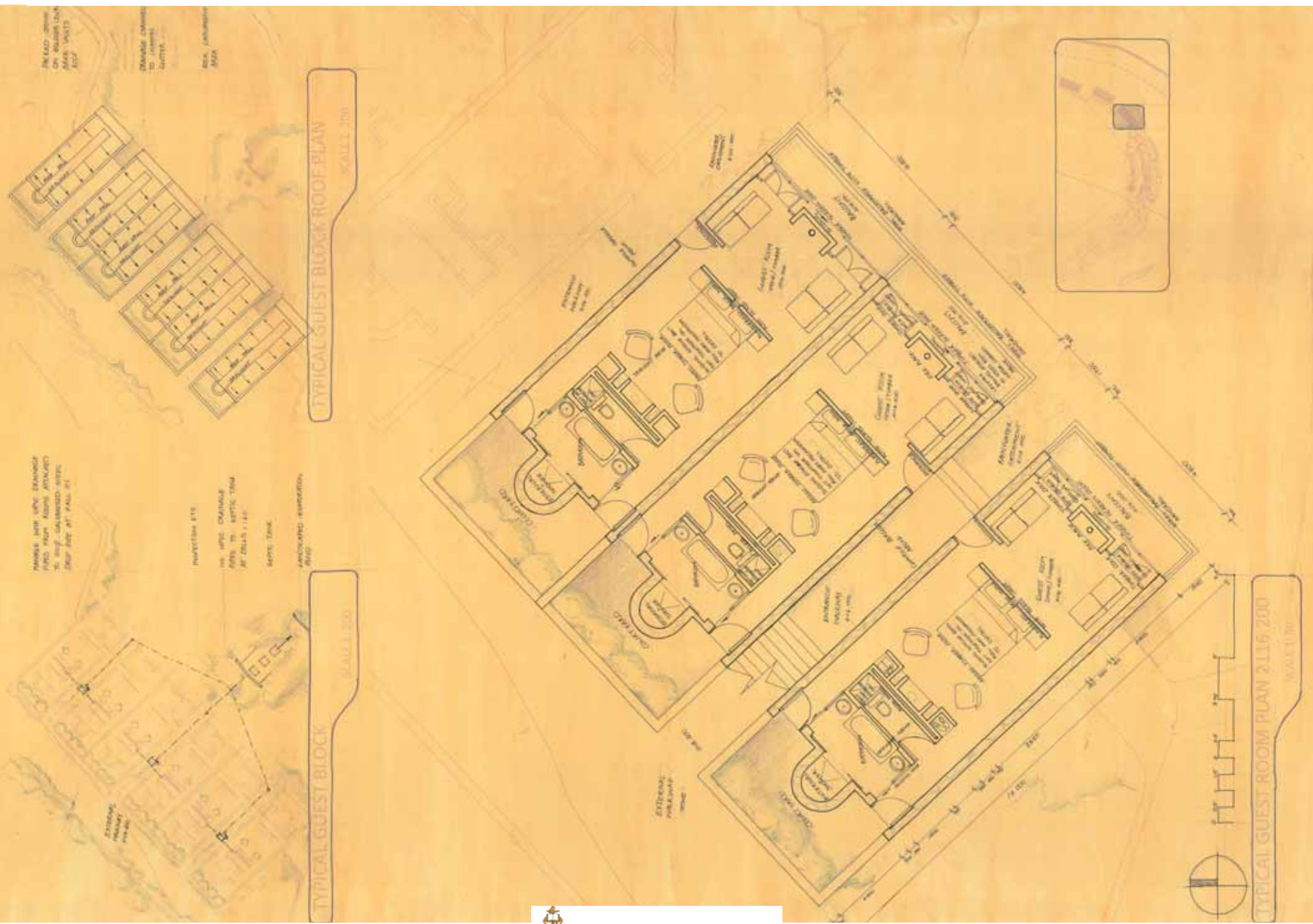


SECTION D-D
SCALE 1:100



901 sections a-b-c-d cont nts





IN LAD ROOM ON WALLS FOR MAKE UP

DOUBLE CHAIRS TO (HALL) ENTRY

REG. (HALL) AREA

TYPICAL GUEST BLOCK ROOF PLAN
SCALE: 1/200

WALKS INTO UPVC ENTRANCE FROM MAIN ALLEYWAY APPROX. 5.0m. GALVANISED STEEL DOOR SET AT WALL #1.

WATER TANK

100 UPVC CHAIRS APPROX. 20 SEATING TINA AT BELLIS 1.10

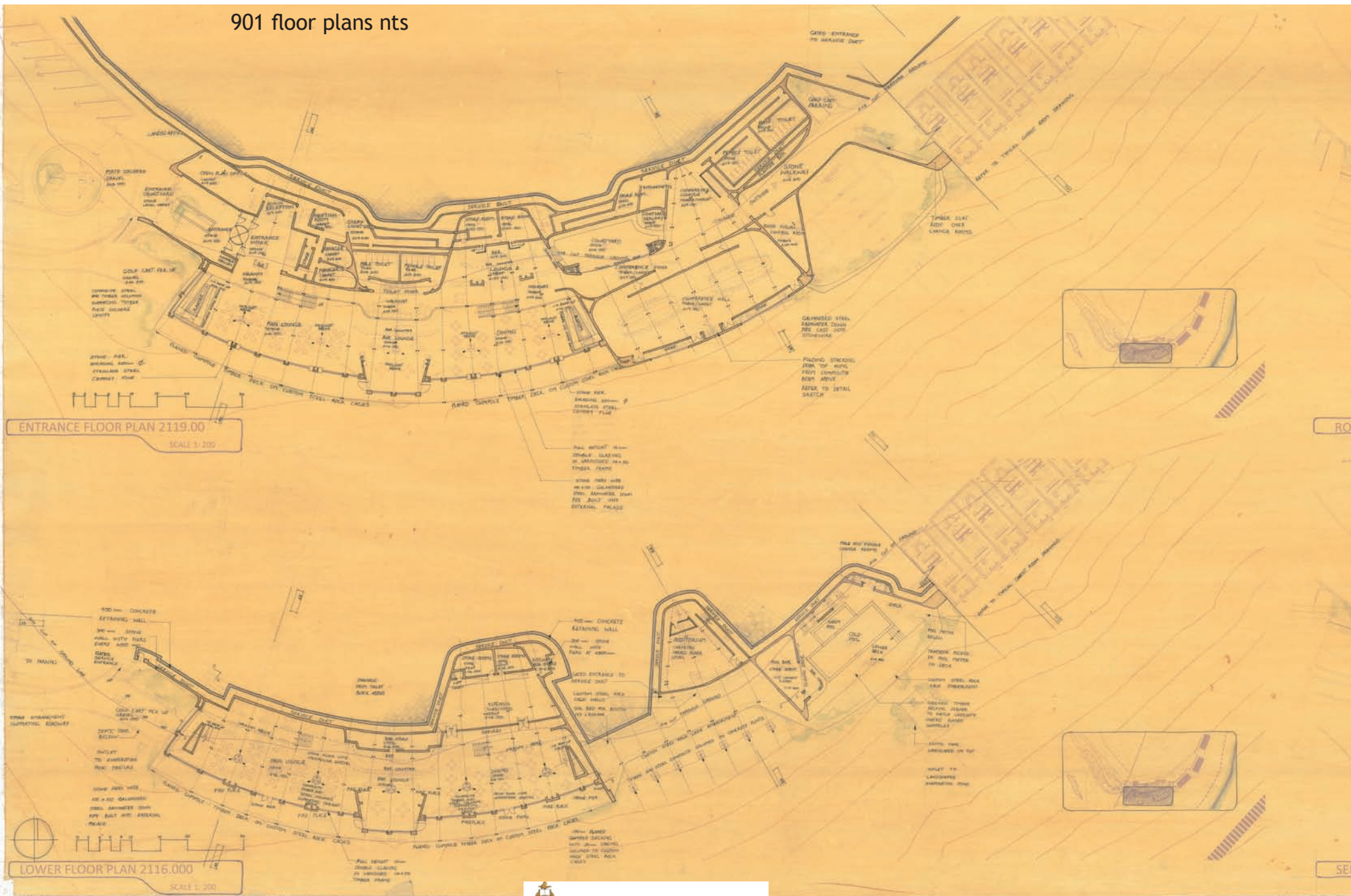
SEWER TANK

ACCURATED INFORMATION

TYPICAL GUEST BLOCK
SCALE: 1/250

TYPICAL GUEST ROOM PLAN 2/116/200
SCALE: 1/200

901 floor plans nts





ROOF PLAN

SCALE 1:200

SERVICE FLOOR PLAN 2123.00

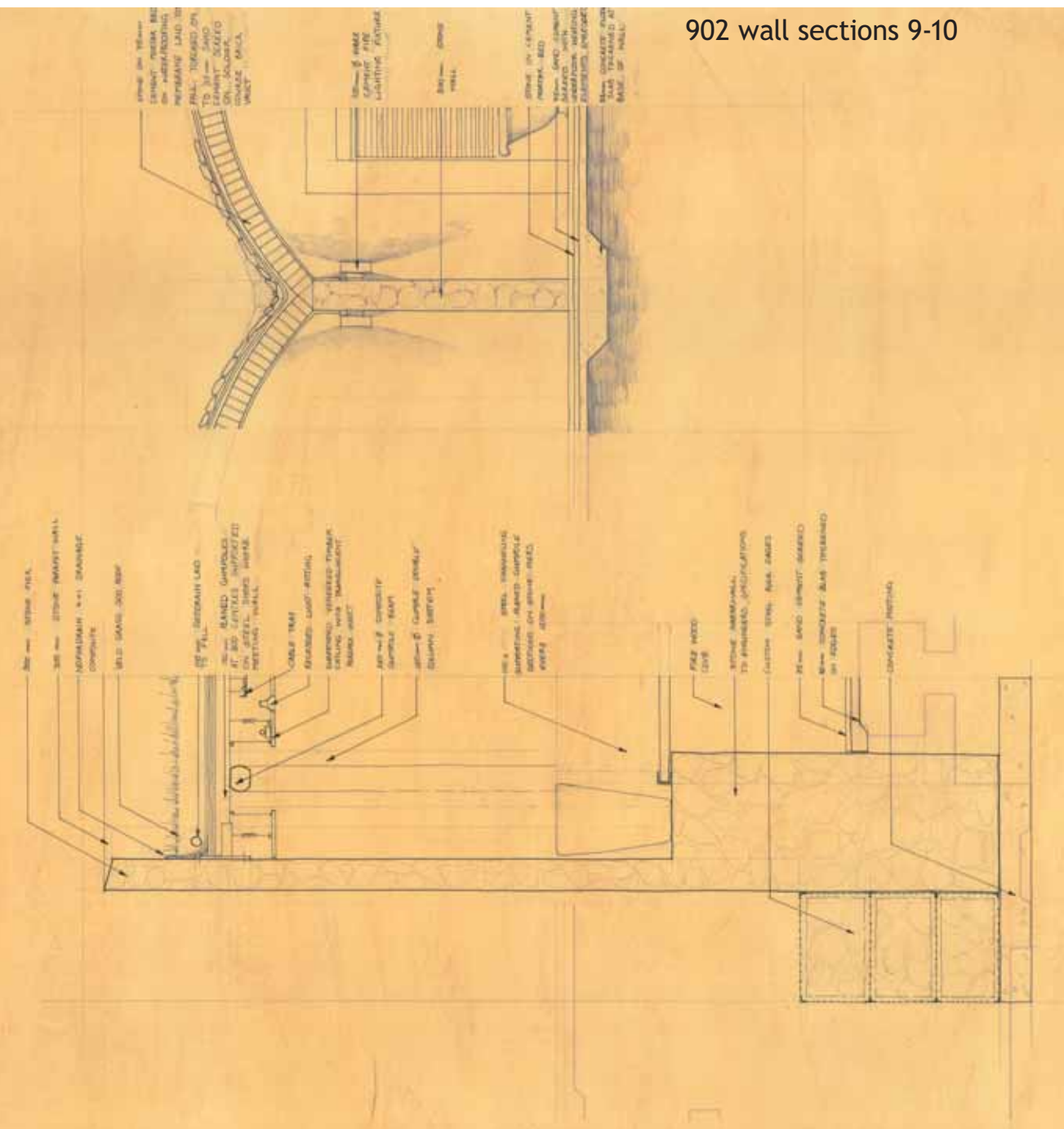
SCALE 1:200



901 typical hotel room nts



902 wall sections 9-10



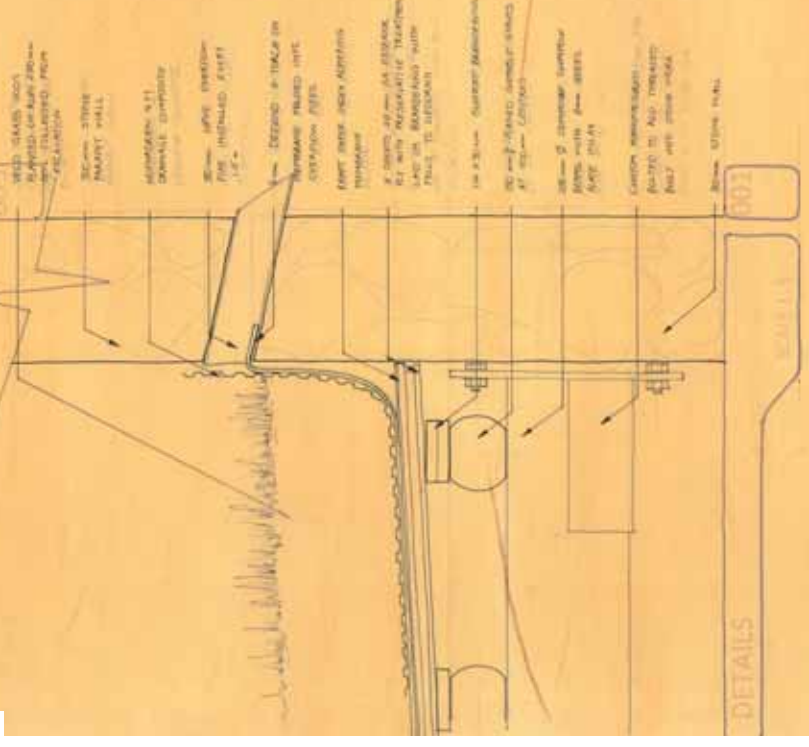
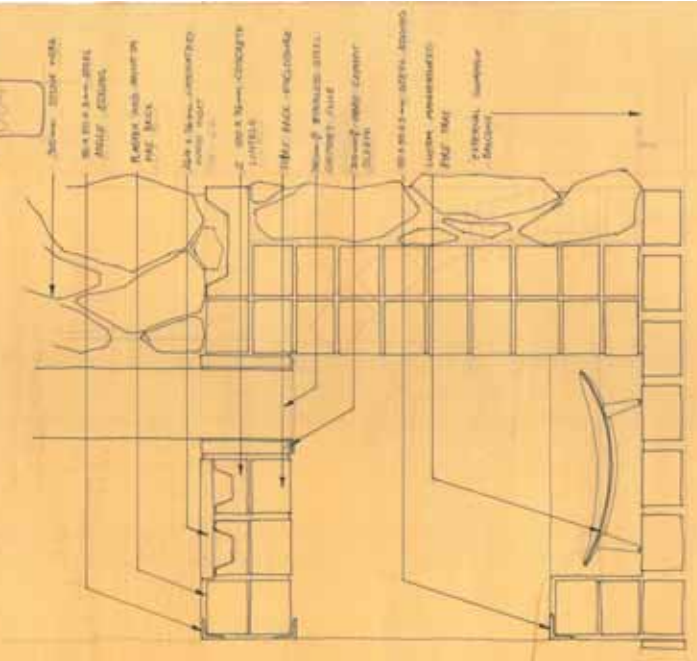
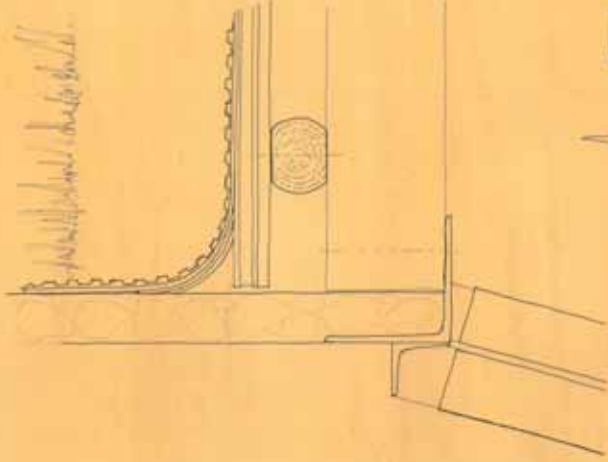
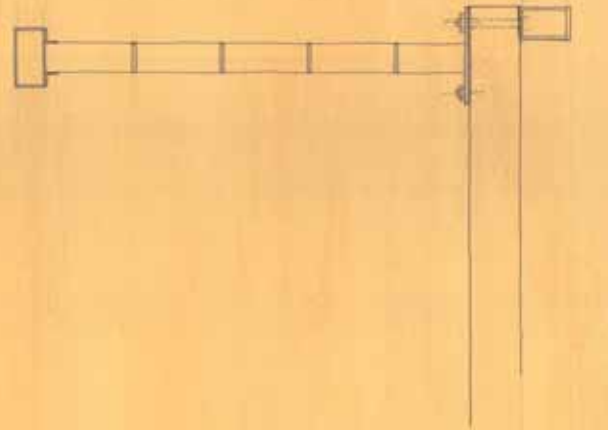
902 details 1-5



1. All work shall be done in accordance with the specifications and standards of the Department of Public Works and Engineering, Pretoria.

ROOFING

Roofing shall be done in accordance with the specifications and standards of the Department of Public Works and Engineering, Pretoria.



9002

9002

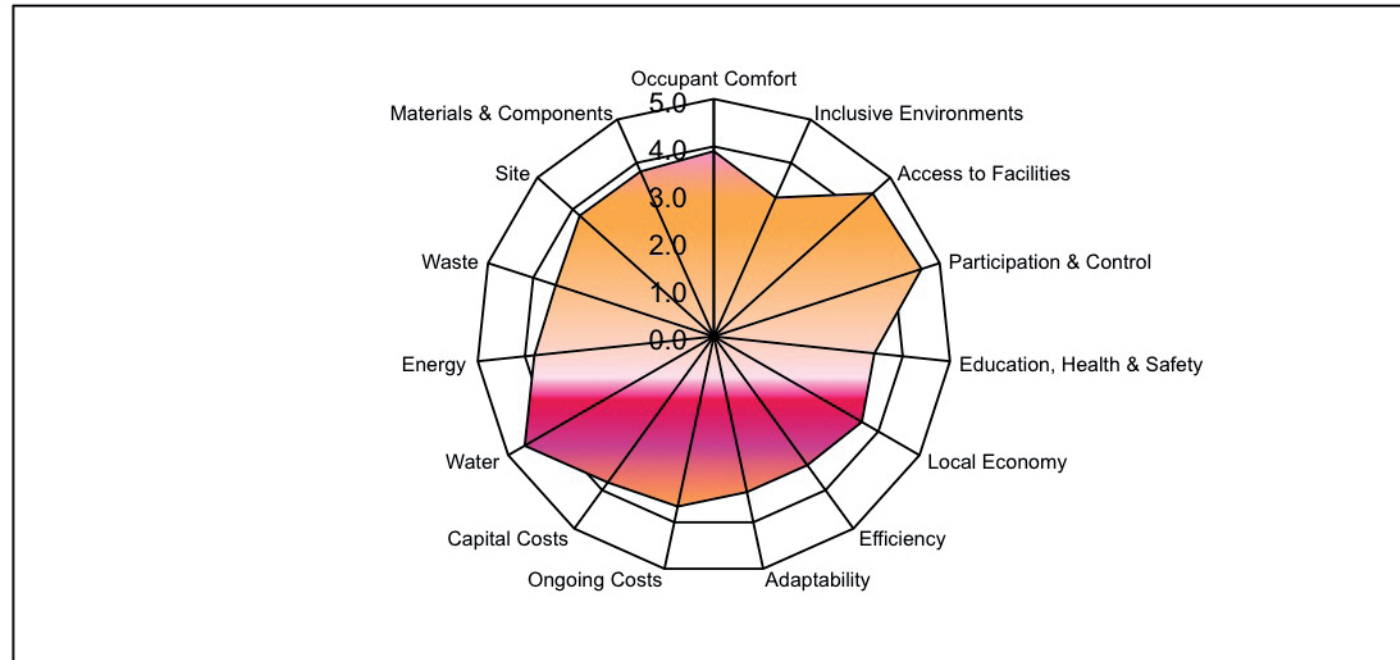
DETAILS

1000_Addendum



SUSTAINABLE BUILDING ASSESSMENT TOOL (SBAT- P) V1

PROJECT		ASSESSMENT	
Project title:	Pulihadi Lodge	Date:	22-Sep-09
Location:	Mokhotlong, Lesotho	Undertaken by:	T.senaoana
Building type:	Hotell/ Lodge	Company / organisation	University of Pretotia
Internal area (m2):	3500sqm	Telephone:	Fax:
Number of users:	100	Email:	



Social	3.9	Economic	3.6	Environmental	3.9
Overall	3.8	Classification			



000_Sources

- 001 References
- 002 Figure References

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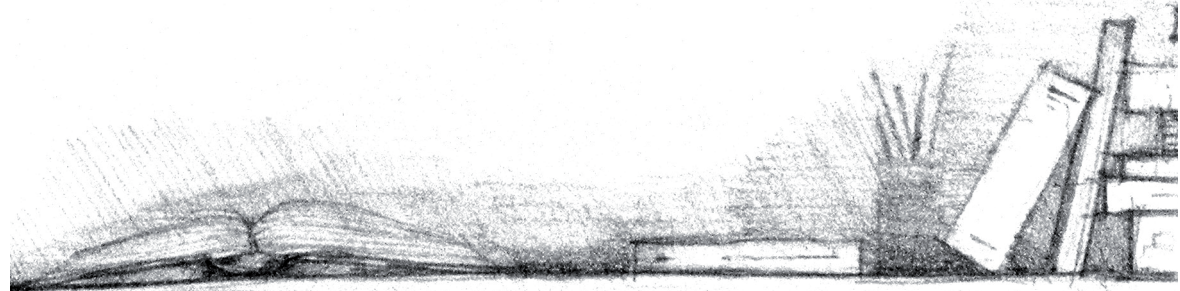
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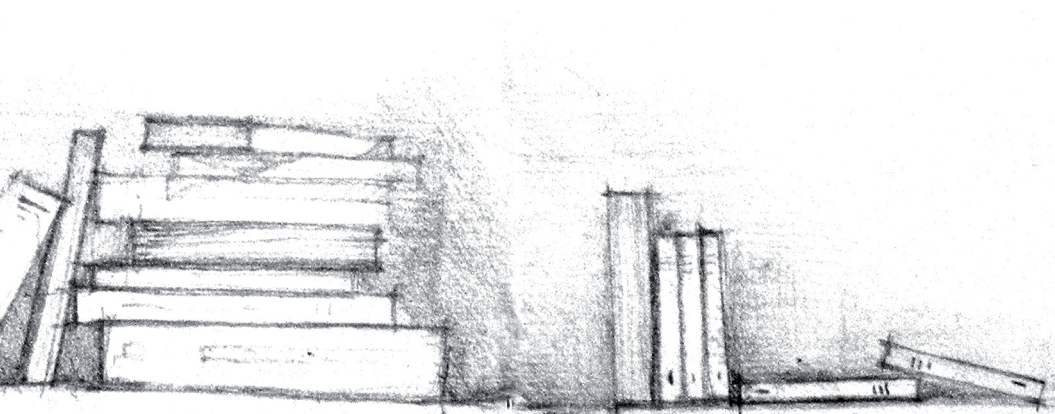


Figure 056. [LEFT]
Reference book sketch

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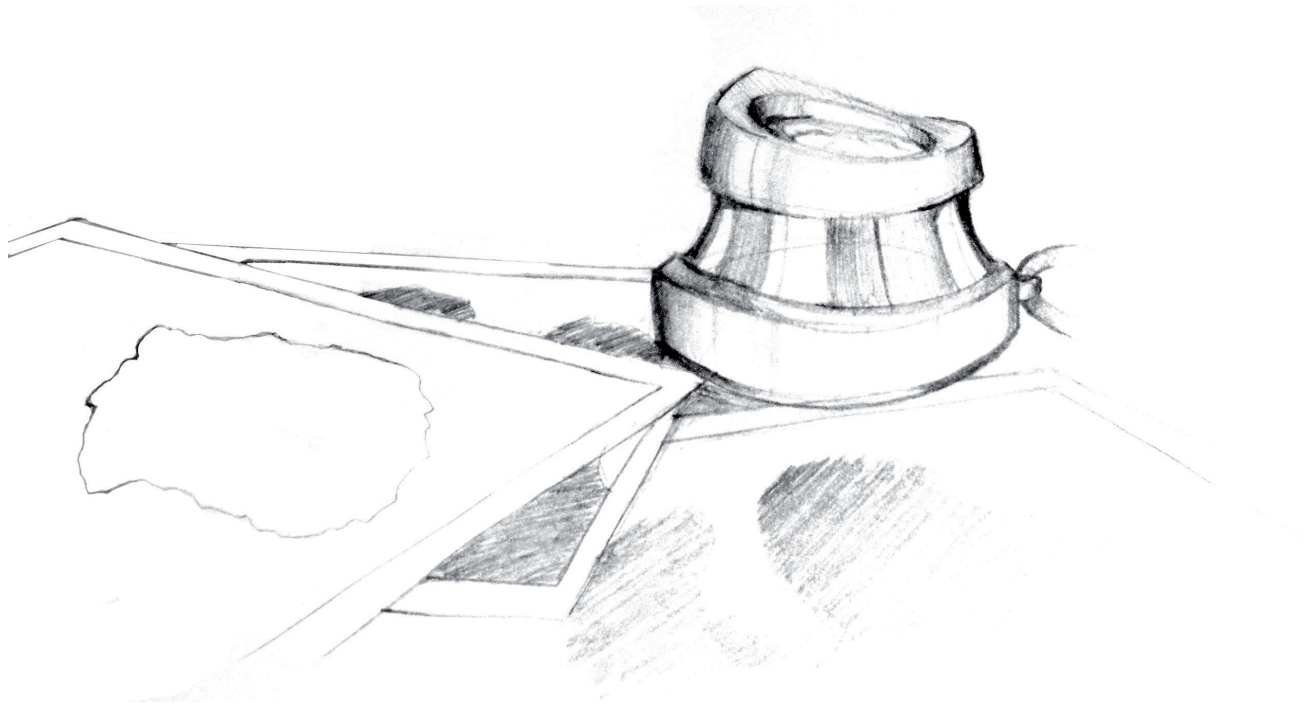


Figure 057. [Left] "Figure Sketch".
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