

CHAPTER 5: CONCEPTUAL DEVELOPMENT

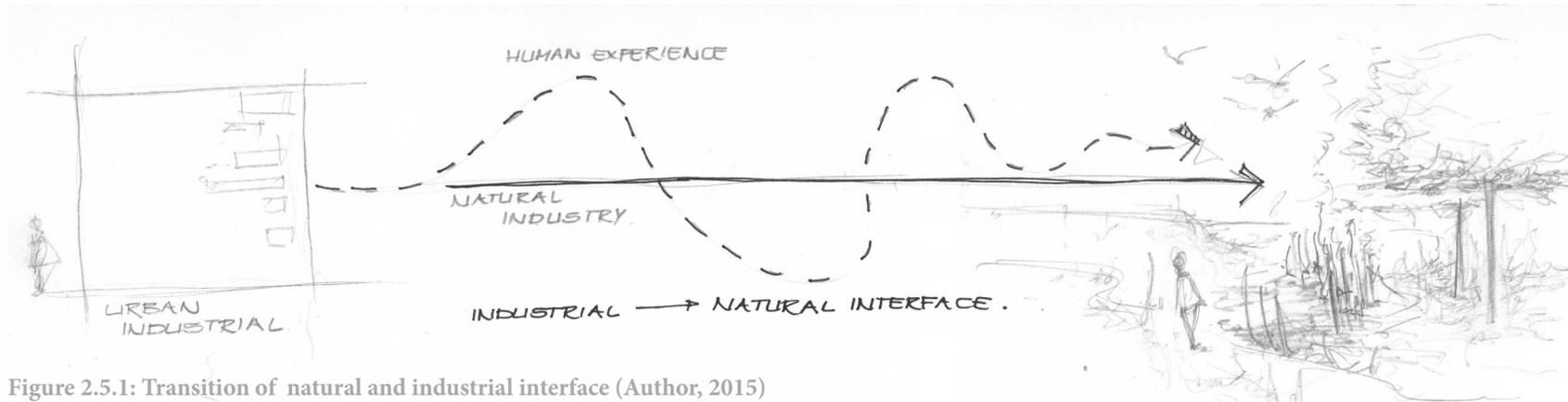
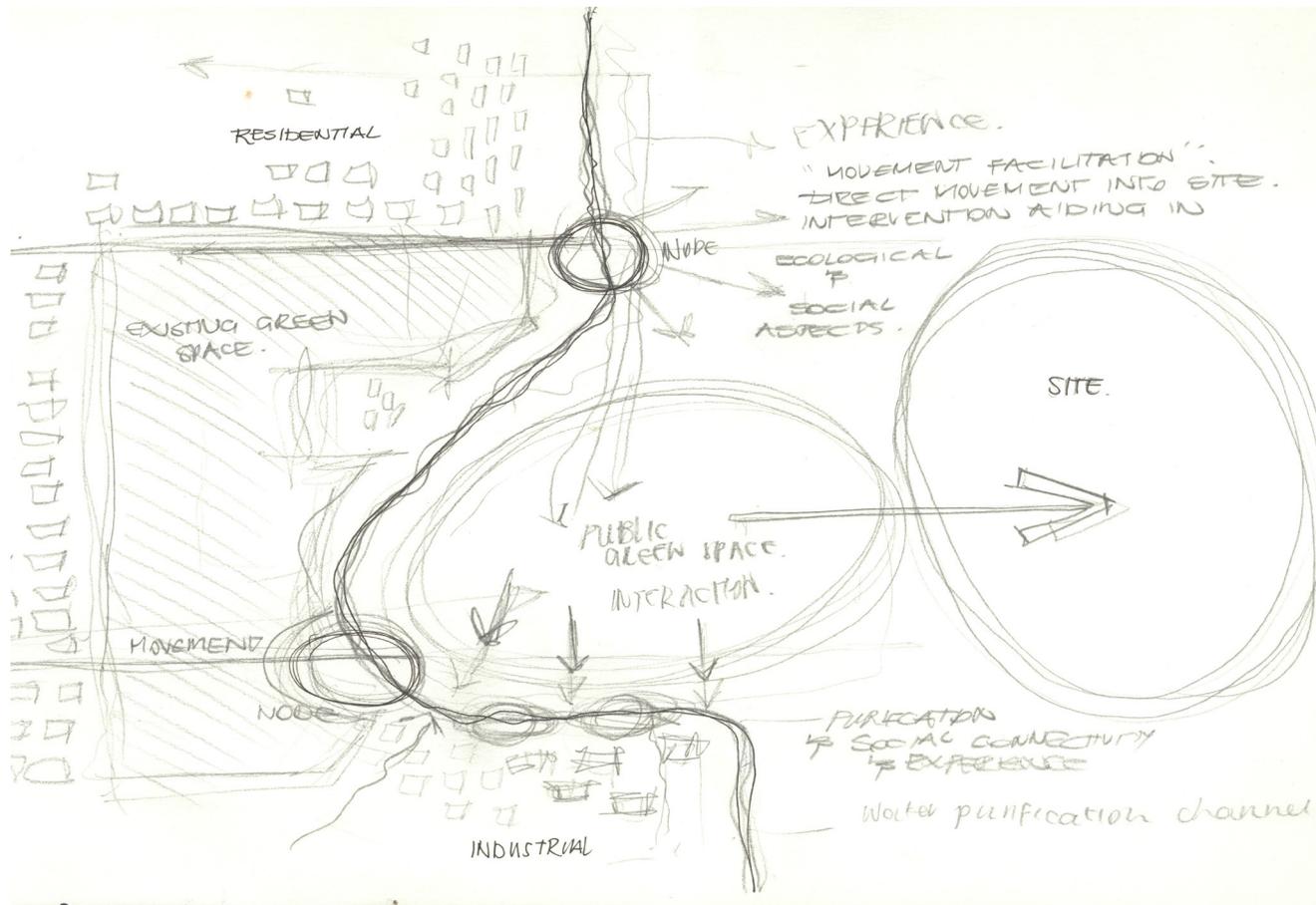


Figure 2.5.1: Transition of natural and industrial interface (Author, 2015)



The main intention of the design is the integration and immersion of man into the natural environment. The development and design of the interface between industrial and natural environments. The creation of various levels of connections between people and environments.

Figure 2.5.2: Linking surrounding residential environment to the design intervention (Author, 2015)

RIVER RESTORATION

The main intention of the intervention was the purification of the Moreleta Spruit. Focusing on both the Moreleta Spruit and the Rietspruit tributary, these two rivers border the site and converge to the north of the quarry.

The river systems are the most prominent and important element in the design, forming the base on which the rest of the design will be built and feed from. Each river system will be purified through the incorporation of a number of purification processes which deal with the type of effluent and pollutants present in the water, enhancing the river system and associated ecologies.

This phase is concerned with ecological connectivity.



Figure 2.5.3: Concept Development Diagram for Ecological Connection - River Purification (Author, 2015)

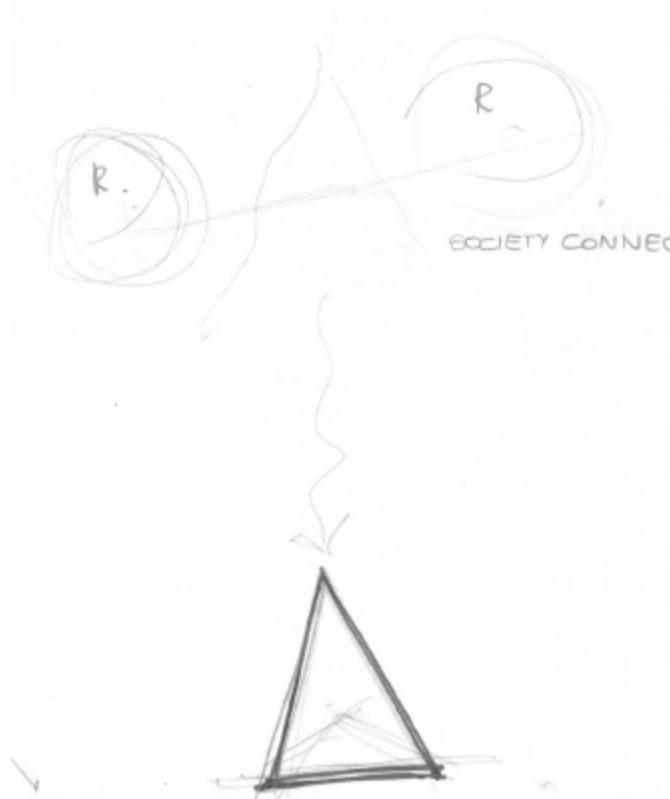


Figure 2.5.4: Concept Development Diagram for Social Connection (Author, 2015)

SOCIAL CONNECTION

The next development of the scheme was the connection of the separated societies of Jan Niemand Park and Eersterust, the connection forms a bridge between the two river systems and falls directly across the quarry, crossing both the historical infrastructural and natural boundaries.

This phase is concerned with the social connectivity between people, communities and societies.

RIVER AS A MEANS OF CONNECTION

As the connection between societies was defined through the bridge, the incorporation of water through the diversion of a portion of each river system, serves as both a visual and physical connection between societies.

The diversion of both the Moreleta Spruit and the Rietspruit into the quarry aids in connection and rehabilitation in a number of ways.

Firstly, the visual and physical connection of the river, emphasizing the social and now ecological connection between distanced communities transforms the river from a natural barrier into a means of connection.

Secondly, the manipulation of the river system into the decommissioned quarry is a means of bringing life back into a deserted space.

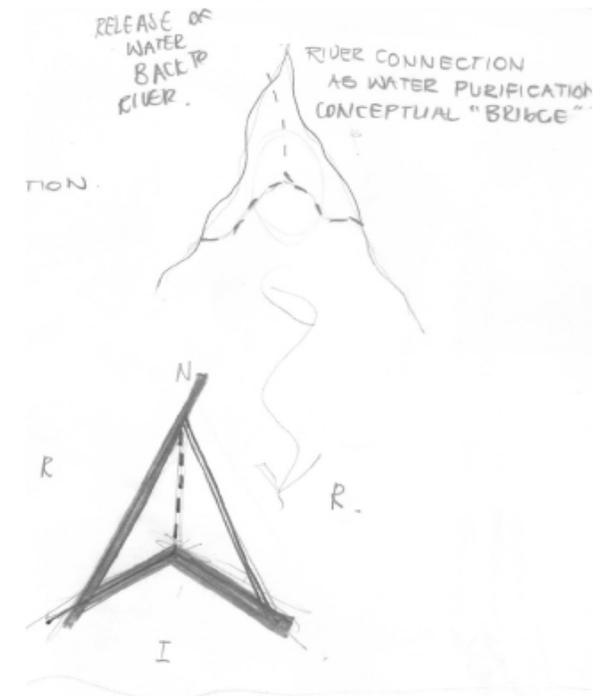


Figure 2.5.5: Concept Development Diagram for Physical Connection (Author, 2015)

ECONOMIC AND NATURAL INTEGRATION

Addressing the economic aspect which is brought to the intervention through the post-industrial landscape is an important interface and connection between the industrial and natural environments.

The river becomes the transition between the urban industrial environment and the natural environment through the incorporation of economic activities which rely on the river system for production. The transition from the urban environment to the natural environment in the quarry itself is experienced as a process of immersion in nature.



Figure 2.5.6: Concept Development Diagram for Natural Integration (Author, 2015)

SOCIAL INTERACTION, CREATION OF PUBLIC SPACE, PROCESS OF IMMERSION

The success of the connection created through the intervention depends on the social interaction, access and understanding of the importance and significance of the urban river system in terms of ecological, economic and social aspects.

The activities and levels of interaction which takes place along the connection will be responsible for its activation, providing public space and promoting human interaction with one another and the natural environment while experiencing natural systems and processes responsible for production within the industrial environment.

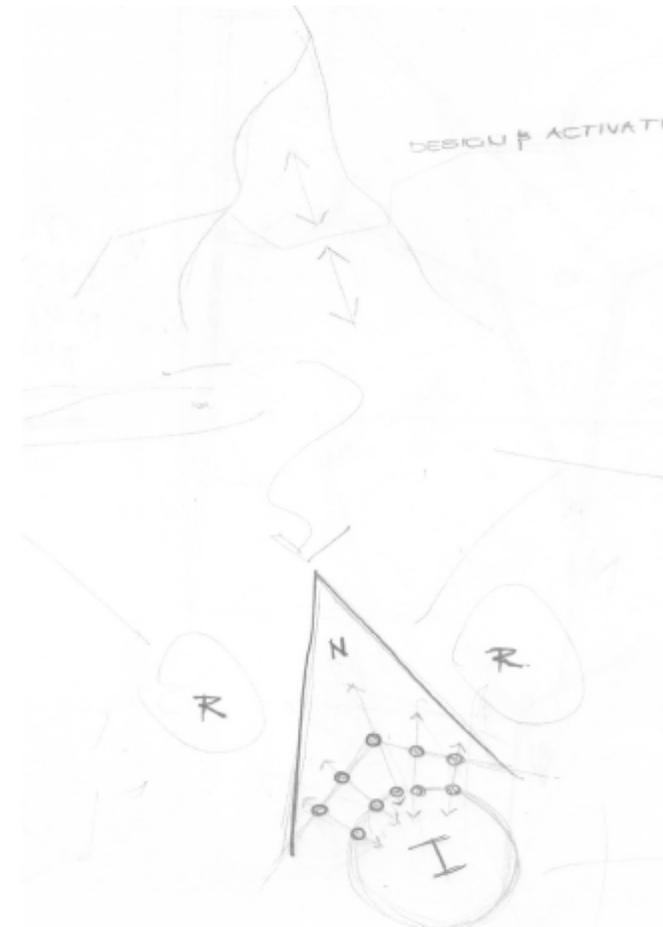


Figure 2.5.7: Concept Development Diagram for Immersion (Author, 2015)