CONCLUSION

The dissertation investigation showed that industry can be placed within densely populated urban or peri-urban areas by connecting the inherent mechanised processes to the productive urban network and the surrounding community.

The abattoir at the Eerste Fabriek precinct acts as a nodal intervention, connecting two previously separated communities. It also acts as a generator, by understanding the industrial process, the inputs, outputs and waste thereof, these could be directly connected to the public, and aid the creation of a productive interface for industrial architecture.

The intervention responds to the historical context and revives the fallen industrial site into a new productive centre. The entire productive centre is built on the waste of the abattoir around which economic opportunities are exploited in the form of small business incubation centres promoting small businesses in the area to grow, and informal trading around the waste products.

To integrate industry into the public realm, the building had to act as a positive power plant, which harnesses the environment to optimise production and generates energy from its processes. By adhering to the Hannover principles for regenerative design the process of positively integrating the abattoir into the public realm was simplified. These principles also guided the project into making relevant and productive connections to all spheres of the abattoirs context.

Passive, active and sustainable principles were incorporated into the design, not only for the benefit of the public outside, but also for the worker inside. The building places emphasis on humanising the internal work environment. This is achieved by designing for ample natural light, ventilation and views from the building. Three courtyards are introduced into the building, allowing workers to escape the monotony of the repetitive industrialised process.

Mechanical systems are employed to aid these conditions where the passive systems inadequately. The mechanical system is designed as a closed loop system which feeds itself for energy generation.

The dissertation illustrates the immense potential inherent to industrial processes, how these processes can gain economic viability beyond their output and how once monofunctional architectural edifices can create multifunctional productive networks.