



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
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Stripped

A Vehicle Disassembly
Plant in Pretoria West

by Marius Snyders

Course Coordinator: Jacques Laubscher

Study Leader: Gary White

Submitted in partial fulfilment of the requirements for the degree Masters in Architecture (Professional)
in the Faculty of Engineering, Built Environment and Information Technology,
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dissertation information

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In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this thesis, which I hereby submit for the degree Master of Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my thesis has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

Signature
Marius Snyders

project summary

Programme: Vehicle Disassembly Plant
Site Description: Rebecca Station, Pretoria West

Client: National Association of Automobile Manufacturers of South Africa (NAAMSA), in association with the International Organization of Motor Vehicle Manufacturers (OICA).

Users: Employees and Management of the plant, the general public

Site Location: Erf R/96, Pretoria West

Address: c/o Rebecca Street and Carl Street, Pretoria West, Pretoria, South Africa

GPS Coordinates: 25° 40'26.44"S, 28° 9'16.75"E

Architectural Theoretical Premise: Architecture Versus Automobiles
Architectural Approach: Investigation of the relationship between architecture, automobiles (technology) and people – the connection between the social and industrial realm.

Research Field: Environmental Potential

_for my parents

abstract



Fig 1.1: Crushed Cars, Lee Jordan 2007

The key theme of this research document is the negative impact of an increasingly expanding motor vehicle industry. The urban infrastructure and dependence on individual transportation has become an integral part of everyday life for many. Continual growth in the numbers of new automobiles within cities has resulted in the disposal of old and broken (end-of-life) automobiles.

This dissertation investigates the potential of industrial architecture in assisting with the regulation of waste management through adaptive re-use of lost spaces and materials. The main objectives include recycling, recycling-awareness and education, re-use of materials, architecture promoting low

embodied energy products, the production of energy and social consolidation.

Due to the high embodied energy of automobiles, the different range of materials used and the availability of discarded automobiles found within the surrounding industrial area of Pretoria West, a study of the recycling of automobiles will form the central theme for this dissertation.

A Vehicle Disassembly Plant, which would be located within the Pretoria West Industrial Area – West of the City of Tshwane CBD, would, by means of waste management, form the basis of the architectural intervention.

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