



PROFICIENT ENGINEERING

CIVIL & STRUCTURAL ENGINEERING CONSULTANTS

COMPANY PROFILE

AFRICAN SKY COMPLEX
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PRETORIA

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14TH EDITION - 2016

COMPANY PROFILE

Proficient Engineering is a leading engineering consultancy, although small in numbers, highly productive.

Since its foundation in 2004, the company has grown into a highly productive organization employing, experienced and young, people with good character and judgment.

Specialist divisions within the company are:

Building & Industrial Structures

Infrastructure & Township Civil Services

Sports Stadia & Leisure

Road Traffic & Transportation

Clients of the company include many national and regional organizations, private industrial and commercial concerns, multi-national companies and numerous major private clients.

The Company provides clients with a totally integrated Design & Project Management service across a wide range of engineering disciplines including infrastructure, civil, structural, as well as, geotechnical specialties.

The Company has been at the forefront of engineering technology

with its designs, its expertise in fast-track construction techniques, and its many high quality economical buildings with low maintenance costs & flexibility for future change.

Many of our projects have been built in Pretoria and Johannesburg and other projects have been done across South Africa.

Our experience and expert knowledge in structures has resulted into having the knowledge to solve special problems and to apply certain techniques during design and construction, to finish them on time.

In recent years many of our projects required a comprehensive consulting service ranging from design, site investigations, site supervision during construction, and project management. We have been involved from the first stages of foundation design, to completing the roof structure. Sites with problem soils are increasingly being used for development because most of the good sites have been developed already. With our extensive knowledge of modern ground treatment techniques we have been involved in the assessment and development of a variety of such sites.

We have provided consulting services for a comprehensive range of projects for both public and private sector clients as well as other engineering consultants. These have included offices, shopping centres, banks, industrial buildings and estates, hospitals, schools, hotels and leisure facilities, residential and township developments. Detail design and project management has been carried out, in association with other consulting engineering firms, on projects shown hereafter.

We are also a member of the Green Building Council of South Africa and has done quite a few green designs.



HEALTH & SAFETY



1. It is the policy of Proficient Engineering to ensure so far as reasonably practicable, the health, safety and welfare of its employees at work.
2. The Company and its employees are to comply, as far as reasonably practicable, with the requirements of the Health and Safety Act and with all its statutory provisions. All employees are required to assist in achieving this aim.
3. Overall and primary responsibility for maintaining a safe and healthy working environment within Proficient Engineering CC, lies with the Company owner. The onus of overall and primary responsibility does not absolve individuals from their specific responsibilities under the Health and Safety Act.
4. Each and every employee is required, by the Health and Safety at Work Act, while at work:
To take reasonable care for the health and safety of themselves and of other persons who may be affected by their acts or omissions at work.
To co-operate with their Line Manager, or any other person, so far as is necessary, to enable them to comply with any health and safety duty, or requirement placed upon them.
To avoid intentionally or recklessly interfering with, or misusing anything provided in the interests of health, safety or welfare.
5. Where applicable, disciplinary action will be taken where breaches of regulations and/or wilful disregard of safety practices or procedures occur.
6. Training for these individuals, and other staff, will be provided by the Company as required.
7. All contractors or consultants working for Proficient Engineering will be required to comply with the Health and Safety Policy of the Company.



DETAIL DESIGN OF CIVIL & STRUCTURAL COMPONENTS

This two billion rand project has just been completed and also involved a multi-disciplinary design, project management & construction supervision for the last three years. The total building area are just over 450 000 sqm. It is also the first retail centre in South Africa to have a green star rating. A rating of 4 was achieved.

The design includes:

- Bulk Earthworks - 150 000 cubm
- Piled foundations - 836 off
- In-situ columns and concrete slab superstructure
- Steelwork roof over restaurants
- Civil services and Infrastructure
- Roads and Transportation upgrades.



RETAIL



SHOPPING MALL - PRETORIA



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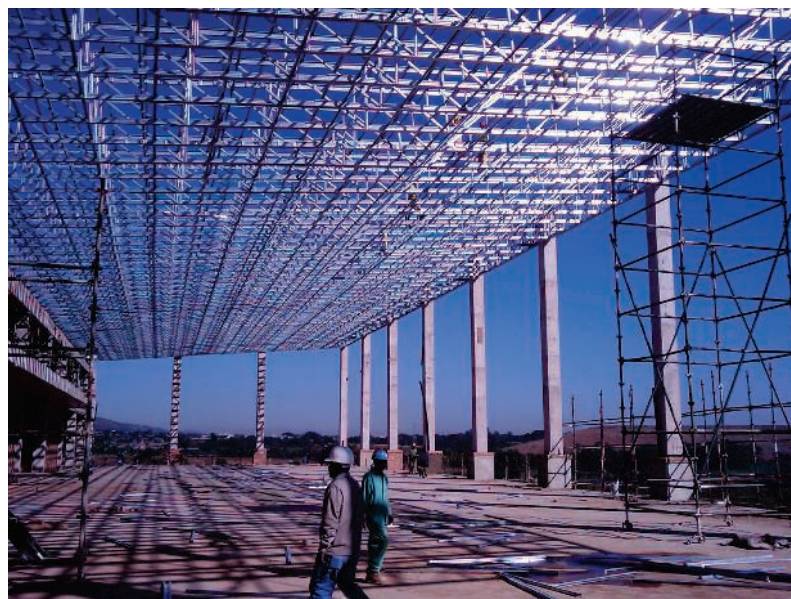
DETAIL DESIGN OF CIVIL & STRUCTURAL COMPONENTS

This 600 million rand project has just been completed and involved a multi-disciplinary design, project management & construction supervision for the last two years. The total building area are just over 250 000 sqm.

The design includes:

- Bulk Earthworks - 150 000 cubm
- In-situ columns and concrete slab superstructure
- Steelwork roof over restaurants
- Movie Cinemas
- Civil services and Infrastructure
- Roads and Transportation upgrades.

RETAIL



ZAMBESI MALL - PRETORIA

WAREHOUSES



DETAIL DESIGN OF CIVIL & STRUCTURAL STEEL COMPONENTS

A 17000sqm, 18m high Steel Warehouse. Built with concrete columns and steel girders & trusses.
Total Cost: 50 Million

The design includes:
Bulk Earthworks - 23 000 cubm cut & 17 000 cubm fill
In-situ columns and concrete slab
Steelwork - 367 tons
Civil services and Infrastructure
Roads and Transportation upgrades.

JD
GROUP



WAREHOUSES

JD GROUP - JET PARK

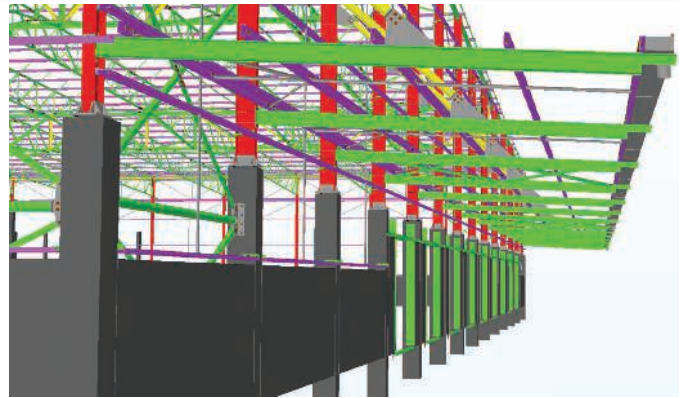
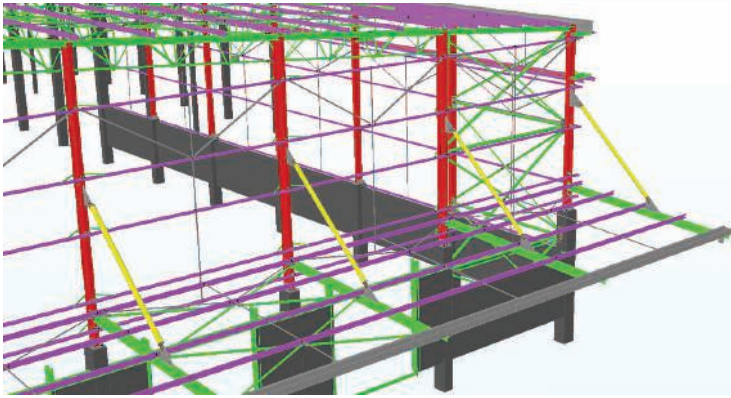
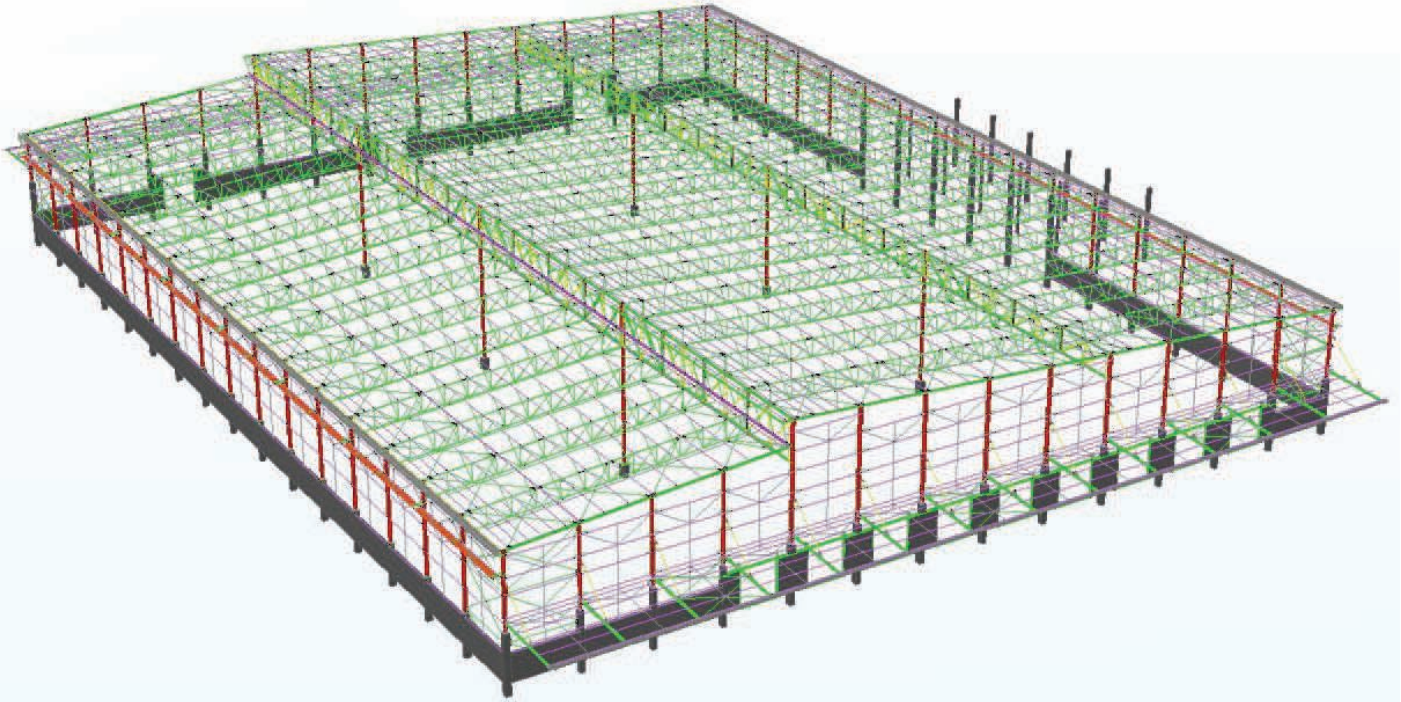


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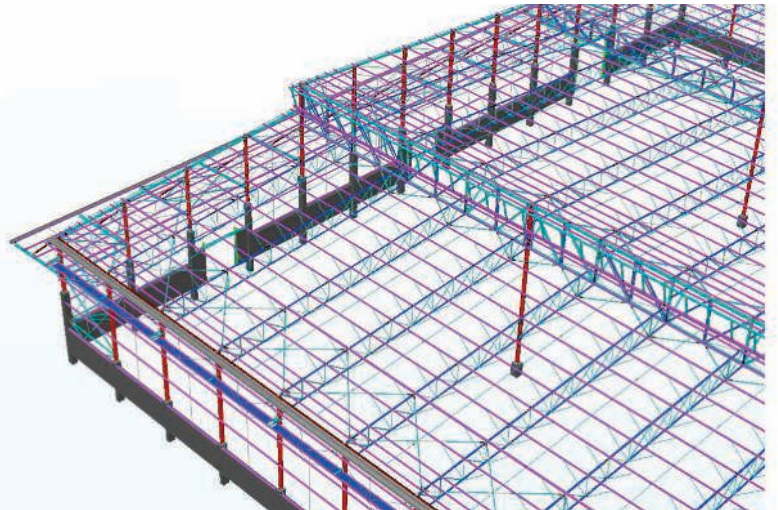
WAREHOUSES



DETAIL DESIGN OF CIVIL & STRUCTURAL STEEL COMPONENTS

A 6800sqm, 13m high Steel Warehouse.
Built with concrete columns and steel girders & trusses.

The design includes:
In-situ columns and concrete slab
Steelwork - 155 tons
Civil services and Infrastructure
Roads and Transportation upgrades.



A graphical illustration of the warehouse detailed up to the last bolt

JD
GROUP

WAREHOUSES

DISTRIBUTION WAREHOUSE - GAUTENG

A 15000sqm steel superstructure distribution warehouse with cold and freezer rooms with loading docks.



The design included:

Bulk Earthworks 80 000 cubm

In-situ columns and suspended slabs

Angular truss and girder steelwork structure

Civil services and Infrastructure & Internal roads.



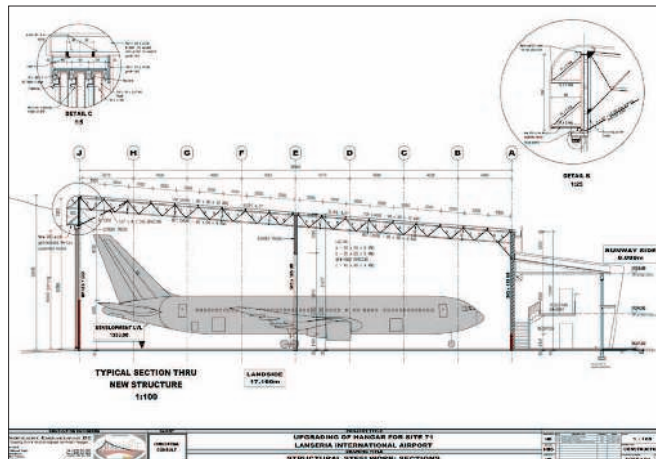
PARMALAT WAREHOUSE -
GAUTENG

DC-9 HANGAR - LANSERIA

An existing hangar built in the early 1950's was modified to fit a DC-9, as Lanseria Airport was gearing up for the World Cup 2010.

The design included:

Measurements on site, remodeling the hangar and checking all existing members that were strengthened where needed.



DC-9 HANGAR
LANSERIA

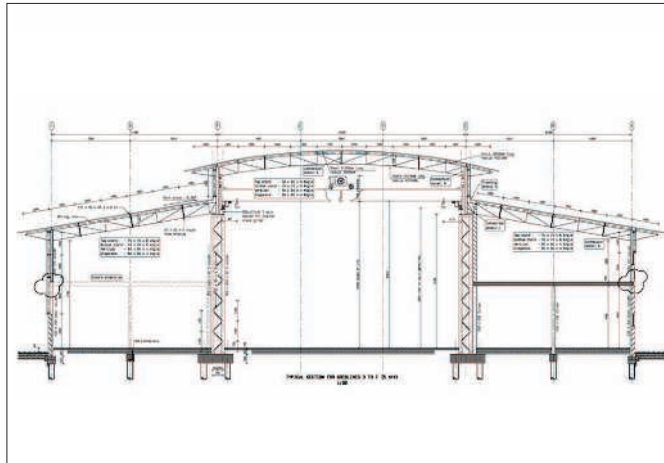
FACTORY with 20 ton CRANE - CENTURION

A detail section of a Warehouse using a 25ton crane for lifting equipment.

The design included:

Concrete foundations & slabs.

Structural Steelwork taking the crane into consideration.



FACTORY 20 TON
CRANE CENTURION

WAREHOUSES



A circular shaped steel roof structure. The girder truss also serves as a rainwater gutter.

The design includes:

Normal strip and pad footing
In-situ columns and concrete slab superstructure to take forklift loads.

Circular shaped steelwork structure
Bulk Earthworks
Civil services and Infrastructure
Internal roads and circulation.



CTM WAREHOUSE
SOUTHGATE - JOHANNESBURG



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Residential Apartments





DETAIL DESIGN OF CIVIL & STRUCTURAL STEEL COMPONENTS

A 15000sqm, 10 storey concrete building with 268 apartments.

Total Cost: 85 Million

The design includes:
Bulk Earthworks, Parking, Concrete Columns, Slabs & Shearwalls.

The building is supported by Auger Drilled Piles



HOUSING



BUA APARTMENTS - KEMPTON PARK



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Roads & Stormwater in yard area.

CIVIL WORKS



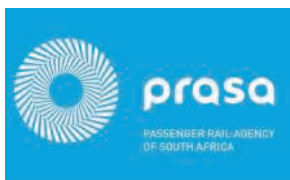


Road signage & geometric designs were done according to the requirements of City of Tshwane.

CIVIL WORKS



Main entrance to the Depot from Gautrans road K8 were geometrically designed according to Gautrans specifications and layerworks.





The Culvert extension were designed & Water Usage Licence Application (WULA) was obtained.



Water reticulation -
Hydrants & taps were
installed with anchor block,
trenches & layerworks,
compacted to specifications
of City of Tshwane.



Manholes, pipework, trenches & beddings as well as slopes were designed and installed as per city of Tshwane's specifications and standards.

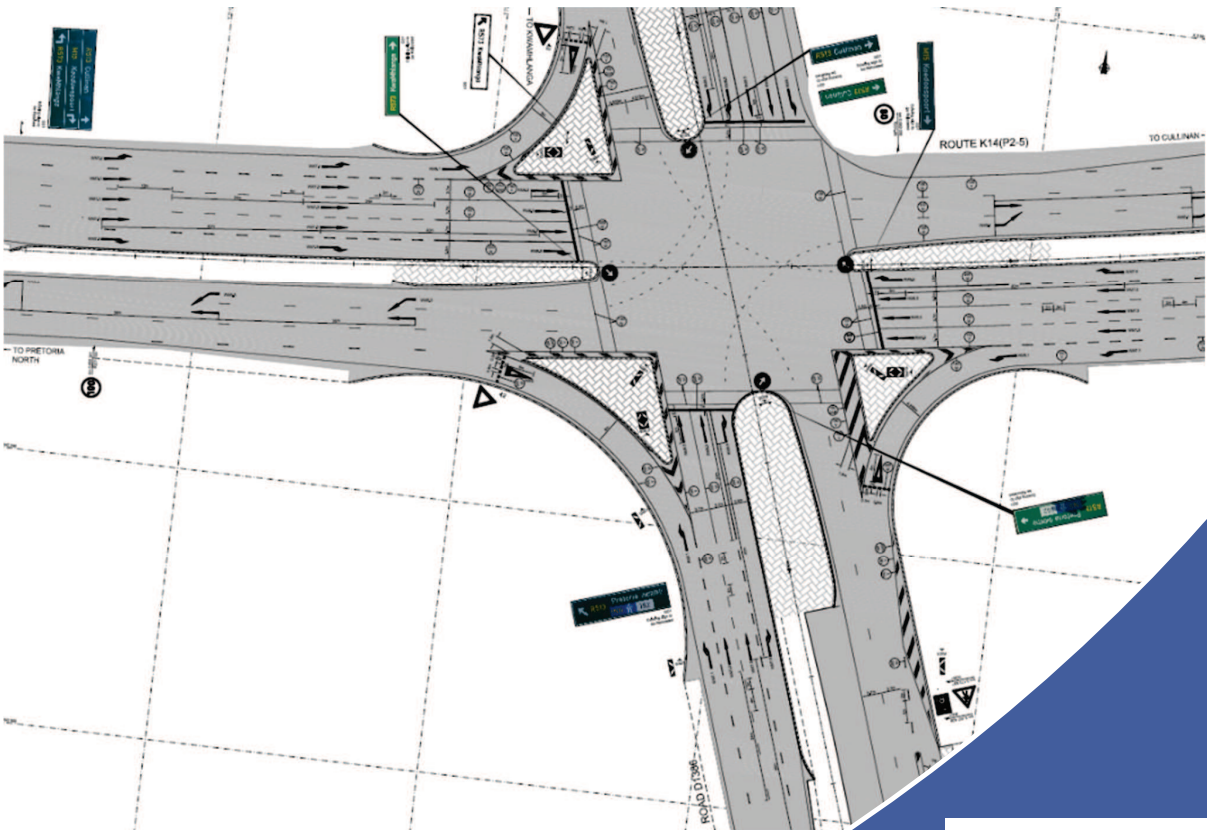
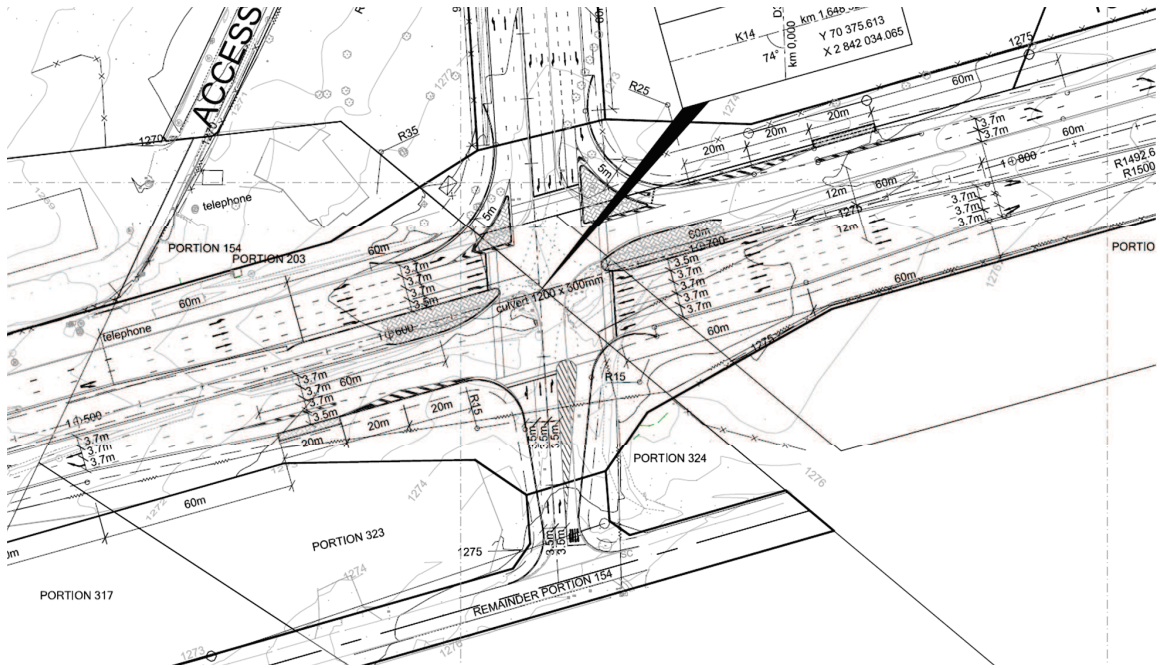


Hardstands & layerworks designed for forklifts & 30ton trucks.

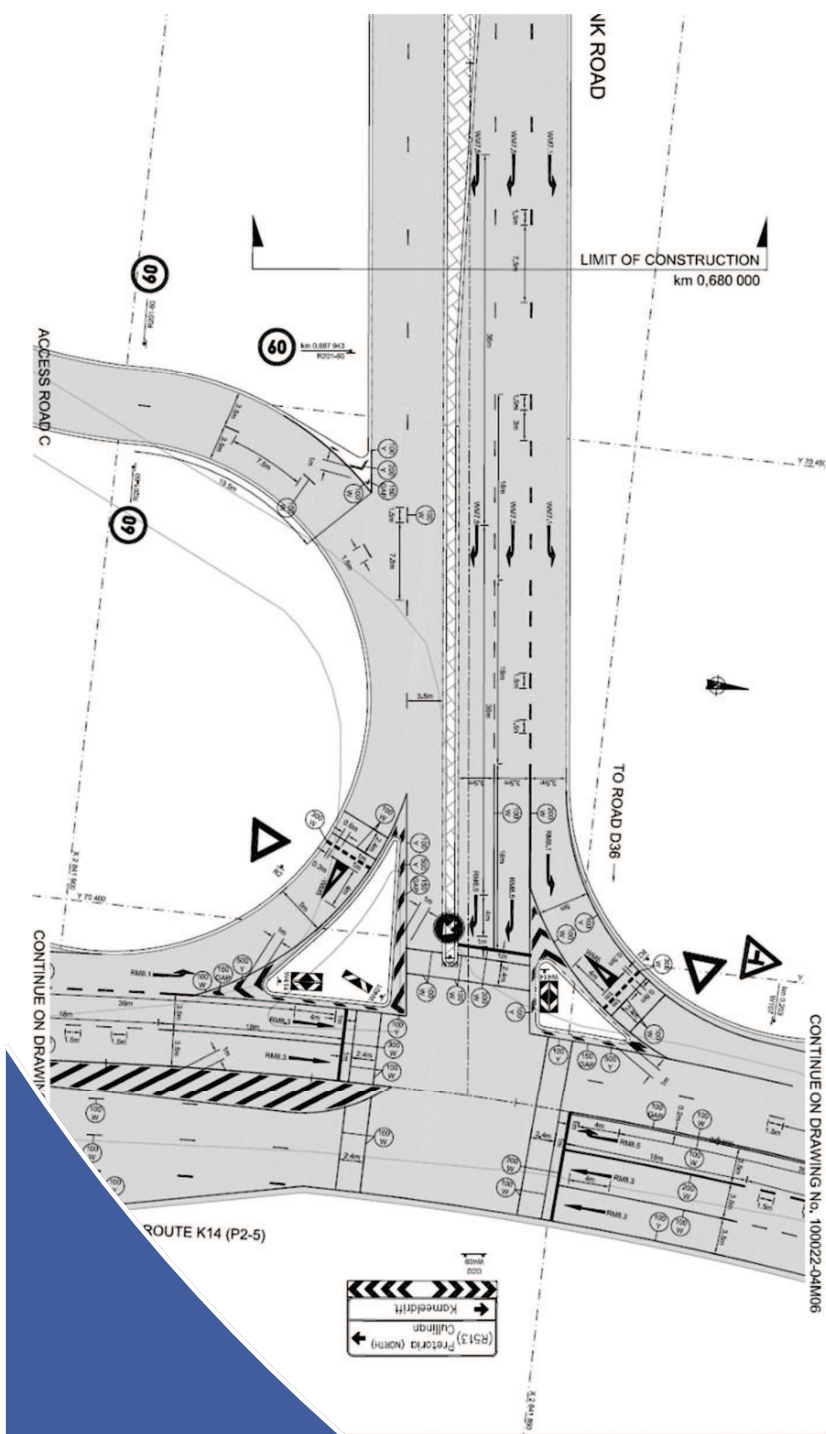




KI4 ROAD UPGRADE



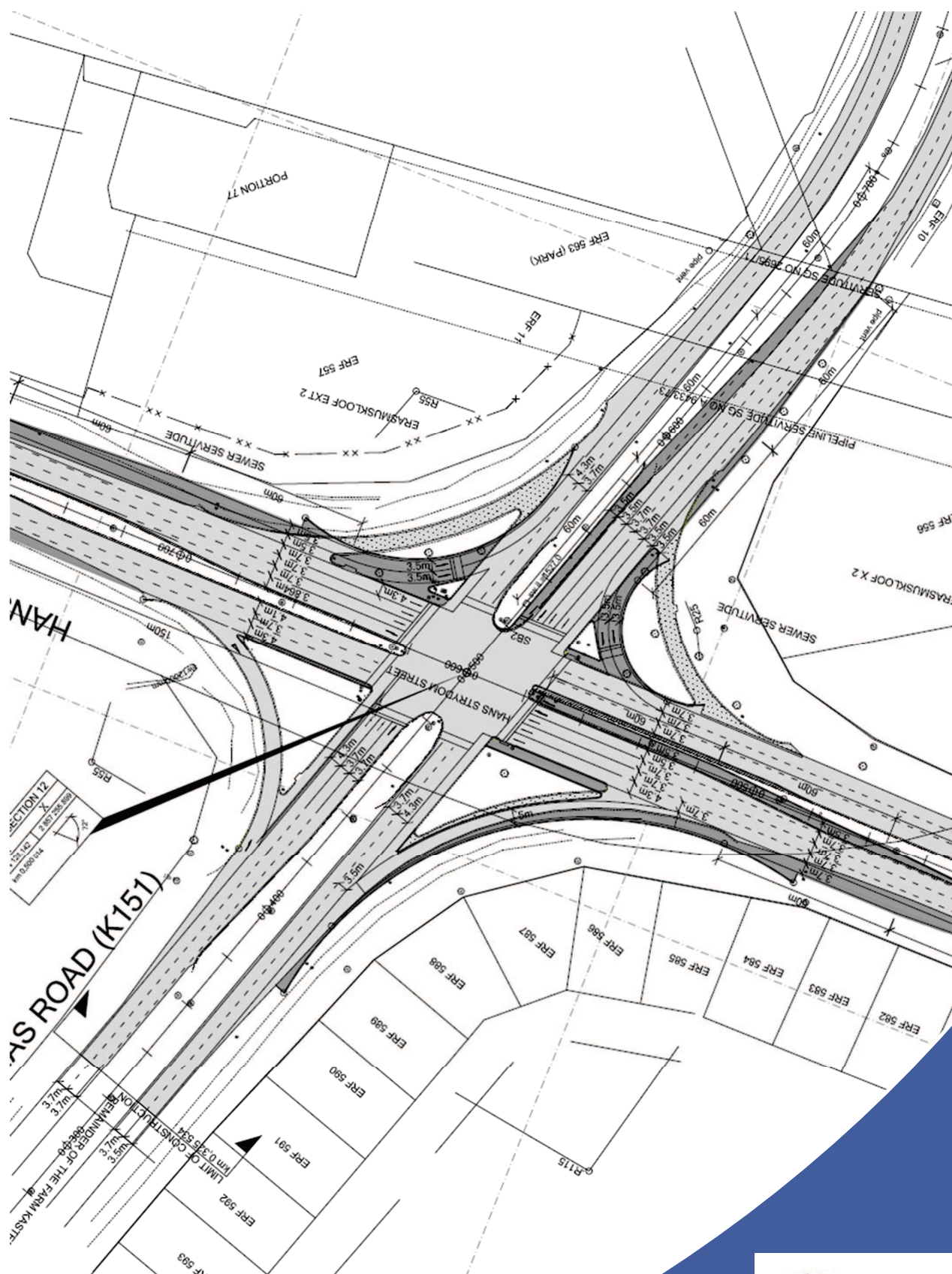
KI4 ROAD UPGRADE



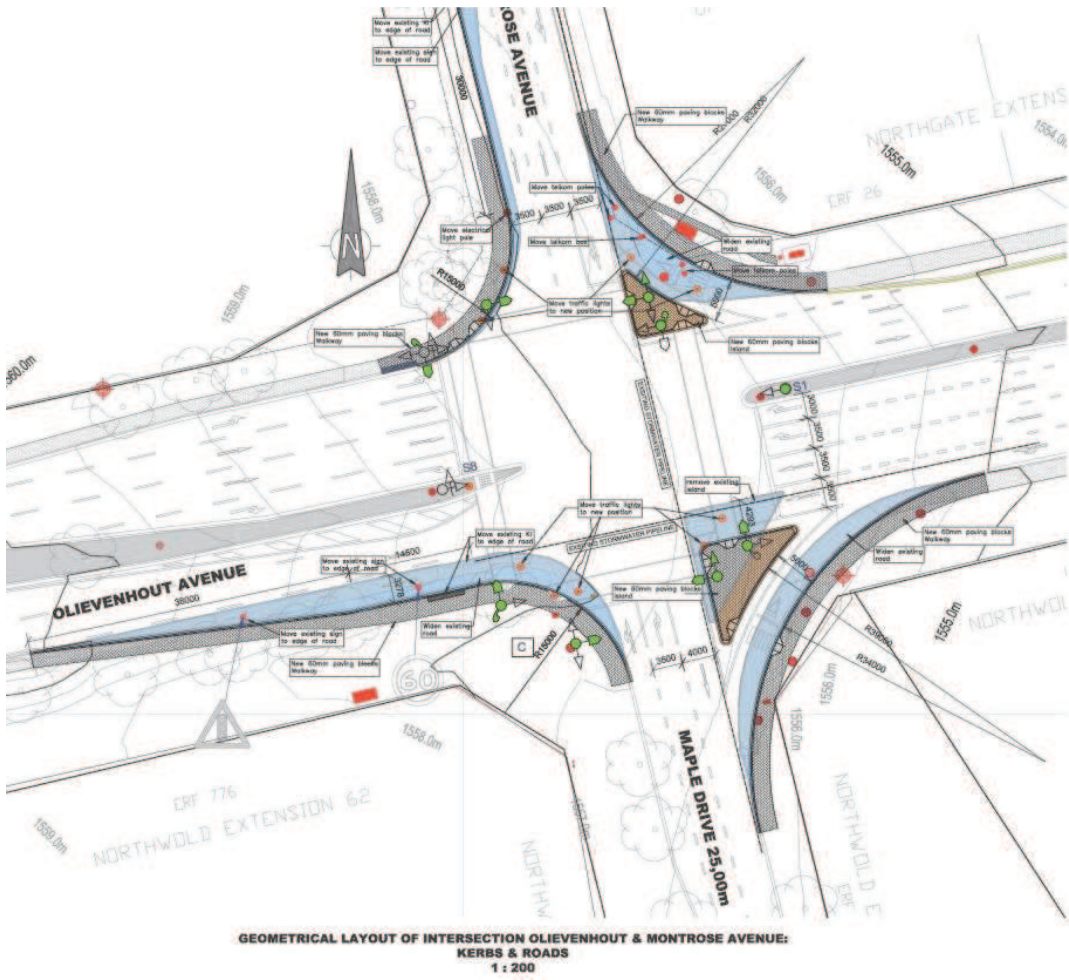


R50 INTERSECTION

R50 INTERSECTION



OLIEVENHOUT / MAPLE RD INTERSECTION



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OLIEVENHOUT/MAPLE RD INTERSECTION