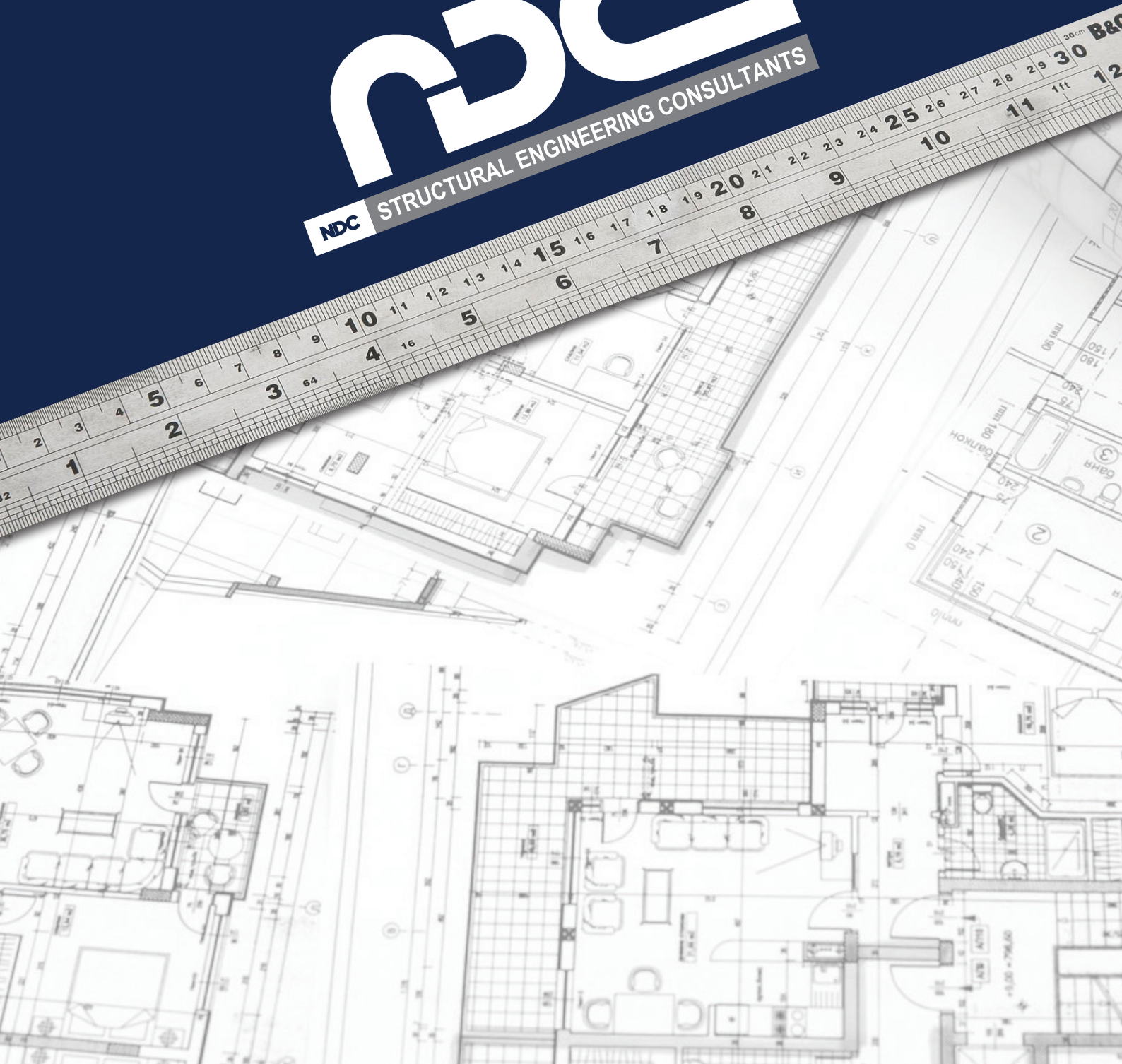


NDC

NDC STRUCTURAL ENGINEERING CONSULTANTS



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Unmatched experience in the Structural, Civil Engineering, Construction and Service Delivery fields has cast our name in stone as a leader in specialised Design and Construction Management of Abattoirs and Meat Processing Facilities.

For years (Est. 1992) our firm has been at the forefront of groundbreaking design and construction, which is not only supported by a legacy of satisfied international and local clients, but also backed by the friends we have made along the way. A specialised and efficient approach in Technical Design, Project Management, Customer Liaison, Service delivery and other merits keeps our clients in the know, and ensures a fully integrated approach to your specific needs.

With prior experience in numerous Industrial and Civil Engineering projects, NDC has accumulated years of history to back up our excellent resume. Industrial buildings, retail outlets, multi-million rand complex projects are all part of a full service, which will leave you confident of success with us as a business partner.

NDC are Members of:

- Engineering Council of South Africa (ECSA)
- Southern African Institute of Steel Construction (SAISC)
- South African Institution of Civil Engineering (SAICE)
- Concrete Society of Southern Africa (CSSA)
- National Home Builders Registration Council (NHBRC)
- Master Builders Association (MBA))
- Professional Indemnity

NDC Structural was established in 1992 to provide structural engineering services with transparency and honesty to both private and public sector clients worldwide.

Our solutions are consistent with the goals of our clients. We research, develop, and present multiple options and help to select the best solution.

A qualified team of professionals assists in maintaining the highest standard of customer service.

Our personnel comprises qualified Structural and Civil Engineering professionals, OHS specialist, HACCP and Hygiene Management and exceptional dedicated Project Managers.

Clients are assured they are dealing with a decision maker who is keenly aware of the importance of success on each and every project no matter the size.

NDC Structural is an all-in-one company specialising in Abattoir related industries and Meat Processing Facilities – new or to upgrade and conforming to applicable worldwide standards.

Please refer to our website www.ndcstructural.co.za for an in-depth look at our portfolio.

NDC takes pride in the synergy we have with our clients, cultivating long-lasting associations based on mutual respect.

We're committed to providing appropriate, cost effective, and innovative designs for our clients. We are committed to active involvement in the development of excellence in professional practice. We believe that, by virtue of their training, engineers and professionals should be altruistic in nature, and have an obligation to contribute to the betterment of society.

TEAMWORK...the actions of individuals, brought together for a common purpose or goal.

A multi-disciplinary consulting engineering firm with competencies in:

- Structural Engineering
- Architectural Designs
- Construction Management – Turnkey projects
- Hygiene management and Training
- Continued R&D -(Research & Development) on Energy efficient & serviceability design of structures.
- Carbon Footprint - Bio Gas Plants, LED and Motion Sensor Lighting, Solar Energy, Rain Water Harvesting, UV Sterilization.
- Integrated IT management systems (cctv, networking, grading, weighing, bar coding and traceability)
- The above core disciplines of a project are produced in house, including:
 - MEP - mechanical, electrical, plumbing
 - HVAC - heating, ventilation and air conditioning.
 - BIM - Building information modelling & project management schedules.



New, Upgrades, Renovations

- Abattoirs, Meat processing plants and Value added facilities:
 - Complying to the Far East, Middle East, E.U., Local and African export standards.
 - Species: Bovine, Camel, Ostrich, Sheep, Pig, Game and Poultry.
 - Catering for the Halal and Kosher requirements.
 - The design, manufacture and installation of Abattoir (slaughterhouse) plant and equipment.
- Industrial buildings
- Retail outlets
- Cold storage
- Tanneries and Feedlots
- Residential - in situ slabs, retaining walls, foundations, rib and block, beams and columns.



BEFORE



AFTER



BEFORE



AFTER

NDC designed and constructed the first E.U. standard abattoir to export five species:



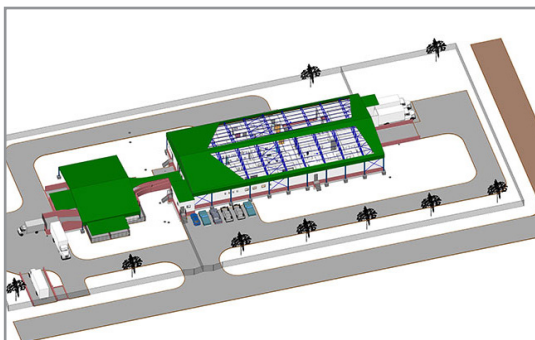
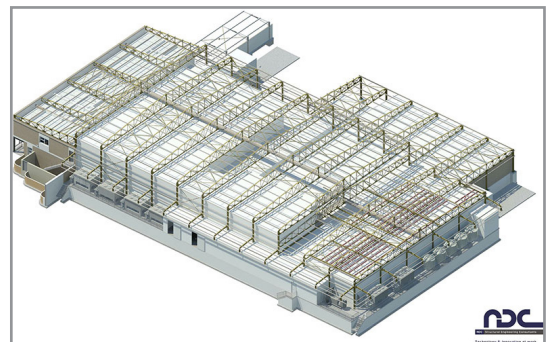
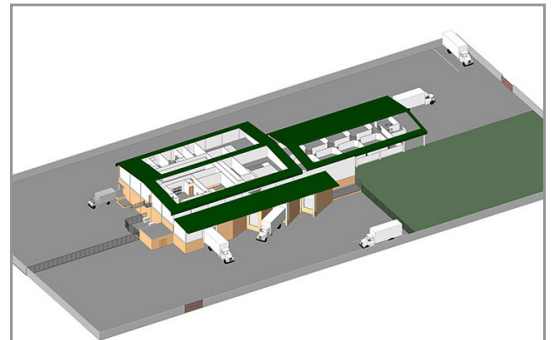
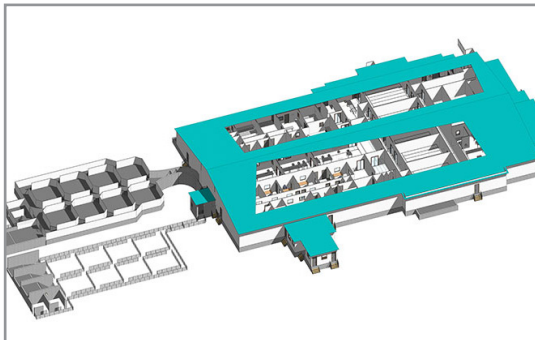
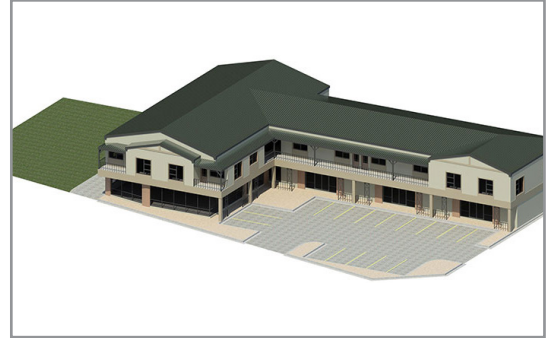
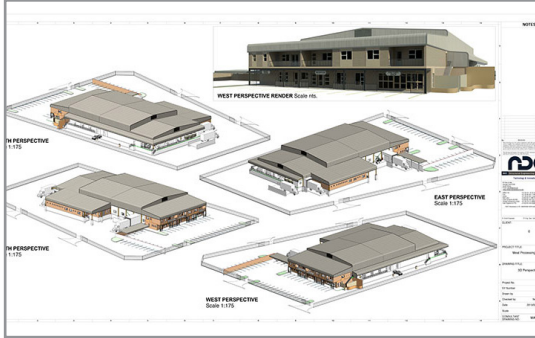
- Bovine
- Small Stock
- Pig
- Game
- Ostrich
- Camel

NDC was one of the first offices in South Africa to use Autodesk Revit design software. We have a fully integrated design system, utilizing (BIM) Building information modelling

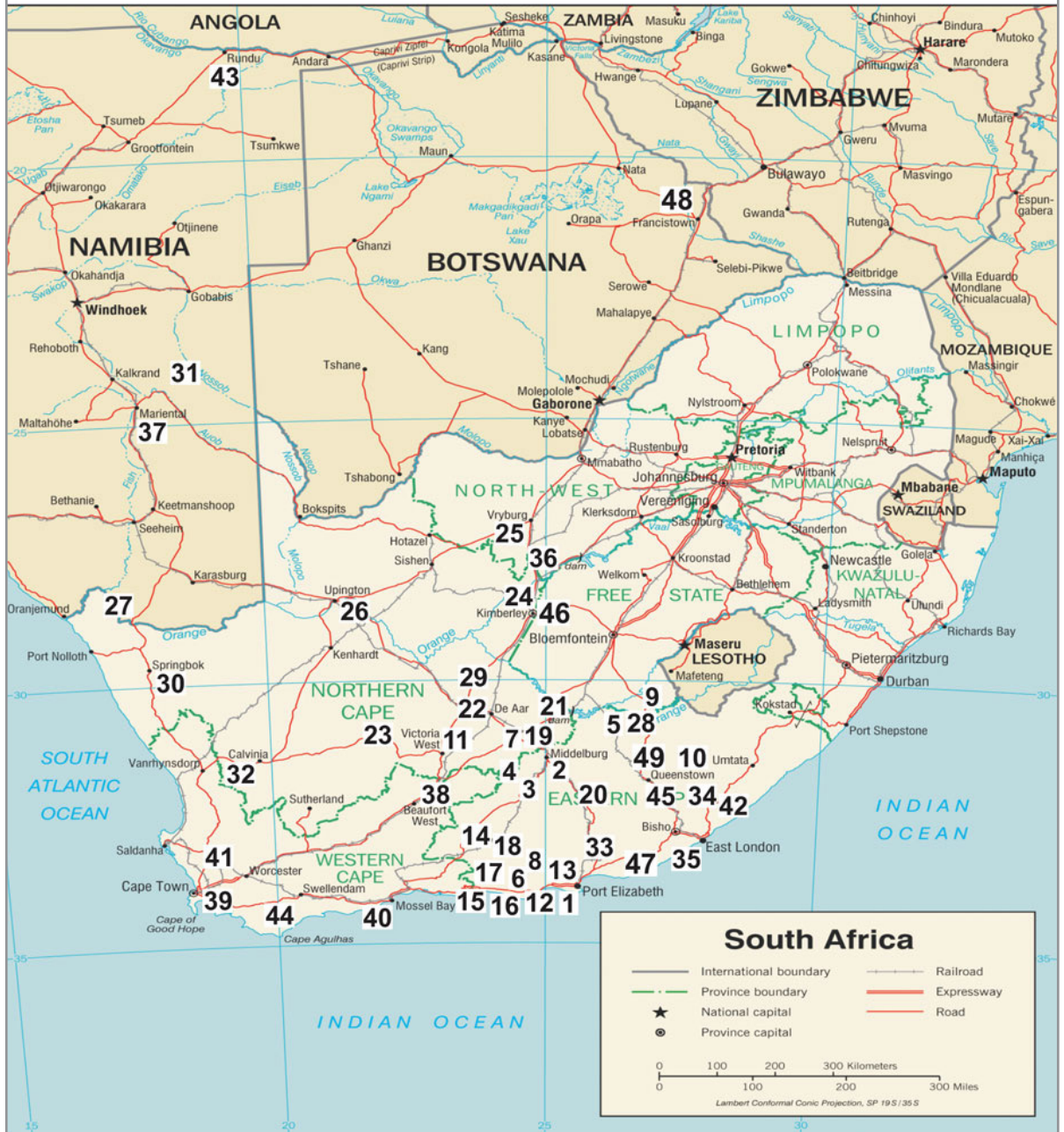
Modest project makes a big point

Cape based architectural and structural engineering specialists have teamed up to evaluate the interoperability of specialist building information modeling (BIM) software programmes and their initial reports confirm overseas research - efficiencies achieved by a firm using BIM for a specific discipline are multiplied when it integrates with other modellers.





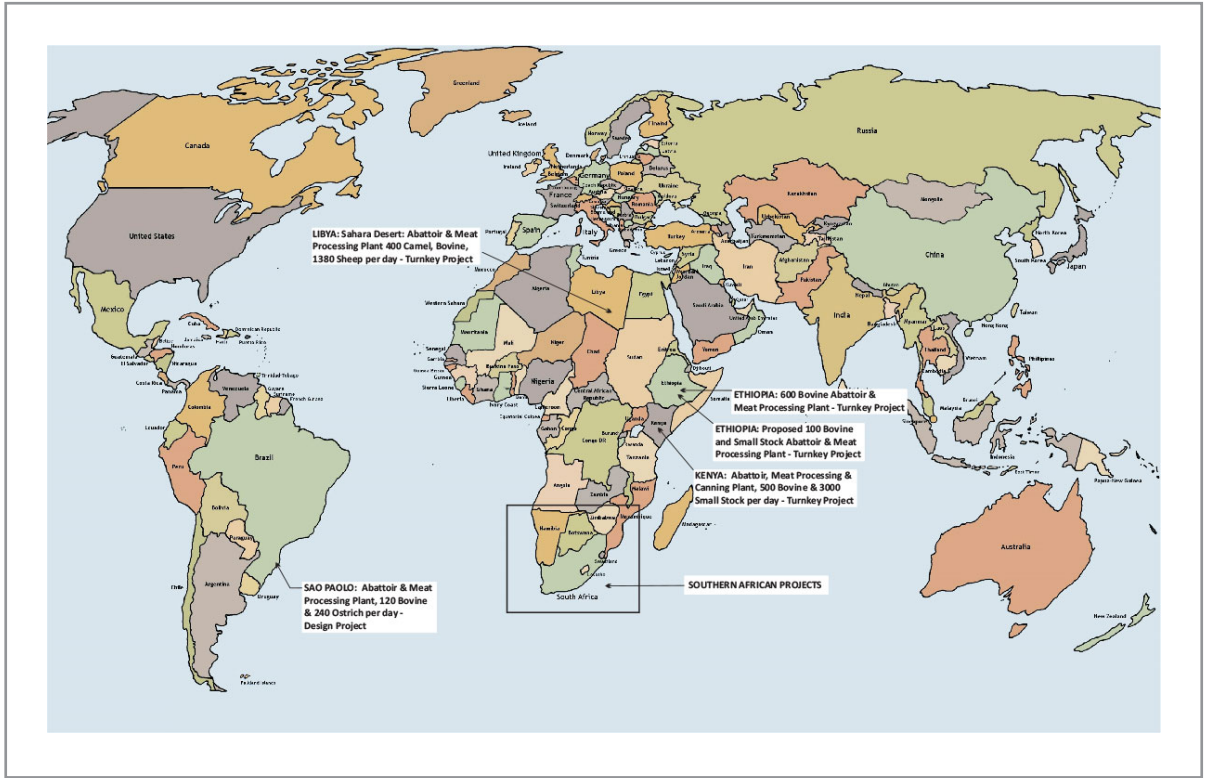
NDC STRUCTURAL cc PROJECTS IN SOUTHERN AFRICA



NDC STRUCTURAL cc PROJECTS IN SOUTHERN AFRICA



1. **Port Elizabeth**
 - Design and Construct Furniture Factory
 - Design and Construct Motor Component Factory
 - Design and Construct Heavy Vehicle Repair Centre
 - Design and Construct Timber Warehouse
 - Design and Construct Carton manufacturing factory
 - Design and Construct Car wax manufacturing factory
 - Design and Construct Precision Machine Tool outlet
 - Design and Construct Jigs & Fixture Factory for motor industry (BMW, M/Benz, VW)
 - Design and Construct Automotive Engineering facility
 - Design and Construct Textile Factory
 - Design, Construct and Upgrade Port Elizabeth Abattoir - EU Standard (first globally that can export five species. Capacity: 500 Bovine, 3000 Sheep, 400 Pigs, 250 Ostrich and 400 Game per day.
 - Design Oyster Processing Plant
 - Design Citrus Processing Factory
 - Design Fish Cold Storage Facility
 2. **Middelburg (Eastern Cape)**
 - Design and Construct Precision Engineering Facility
 - Design and Construct Supermarket
 - Design and Construct Coca-Cola Boiler Facility
 - Upgrade Coca-Cola Bottling Factory
 - Design and Construct Motor Vehicle Testing Facility
 - Design and Construct 2 Hardware Retail Outlets
 - Design and Construct Abattoir, Processing Plant and Chillers for 1500 Sheep per day
 - Design and Construct Motor Spares Retail Outlet with Mezzanine Floor
 - Design and Construct Florist Shop
 3. **Graaff-Reinet**
 - Design and Construct Motor Spares Retail Outlet
 - Structural Designs for Sheet Street Retail Outlet
 - Design Distillery Plant Layout
 - Design and Construct 2 Churches
 - Design and Construct Supermarket
 - Design and Construct Heavy Vehicle workshop for Local Council
 - Upgrade Abattoir and Meat Processing Plant for 200 Ostriches and 600 Game per day
 - Design and Project Manage Christian Cross
 - Design and Construct Union High School Cantilever Deck
 - Design of Portable School Pavilions
 - Design and Construct Taxidermy Facility
 - Design and Construct New Equine Stable Facilities for Rembrandt Group
 - Design and Construct 2 Motor Showrooms
 4. **Murraysburg**
 - Design and Construct Aircraft Hanger
 - Design of Bridges
 5. **Burgersdorp**
 - Design and Construct Cheese Factory
 6. **Kareedouw**
 - Design and Construct Filling Station Canopy
 7. **Richmond**
 - Design and Construct Lift Shaft
 8. **Hankey**
 - Design and Construct Meat Processing and Cold Storage Facility
 9. **Lady Gray**
 - Design and Construct Agricultural Co-op Retail Outlet
 10. **Adelaide**
 - Design and Construct Agricultural Co-op Retail Outlet
 11. **Victoria West**
 - Design and Construct Community Centre
 - Designs for Upgrade of Abattoir for 500 Sheep per day
 12. **Humansdorp**
 - Design and Construct Fertilizer Warehouse
 - Designs for Abattoir and Meat Processing Plant Upgrade
 13. **Patensie**
 - Design and Construct Citrus Packing Warehouse
 14. **Rietbron**
 - Design and Construct Church, Turnkey Project
 15. **George**
 - Structural Design of 4 Residential Properties
 - Structural Designs for George Wastewater Treatment Plant
 16. **Knysna**
 - Structural Designs for Knysna Wastewater Treatment Plant
 17. **Uniondale**
 - Design and Construct Church
 18. **Willowmore**
 - Design and Construct Motor Vehicle Testing Facility
 19. **Hanover**
 - Design and Construct Community Centre
 - Design and Construct Pavilion
 20. **Cradock**
 - Design and Construct Heavy Vehicle Workshops for Local Council
 21. **Colesberg**
 - Upgrade Meat Processing Plant (Woolworths Standard)
 22. **De Aar**
 - Upgrade Abattoir and Cold Storage, EU Standard 2000 Sheep per day
 23. **Carnarvon**
 - Upgrade Abattoir 1500 Sheep per day
 24. **Kimberley**
 - Designs for Upgrade of Abattoir for 100 Pigs per day
 - Design and Construct Pork Meat Processing Facility, 27 Ton/day
 25. **Vryburg**
 - Designs for Upgrade of Abattoir to 150 Cattle per day
 26. **Upington**
 - Designs for Upgrade of Abattoir to 2000 Sheep per day
 27. **Assenkehr**
 - Design of Assenkehr Spar Retail Outlet (Building Information Modelling)
 28. **Molteno**
 - Design and Construct Biltong Factory (Woolworths Standard)
 29. **Strydenburg**
 - Design and Construct Abattoir and Meat Processing Plant for 250 Ostrich, 1000 Sheep and 500 Game per day
 30. **Springbok**
 - Designs for Upgrade of Abattoir to 1500 Sheep per day
 31. **Stampriet**
 - Designs for Abattoir and Meat Processing Plant
 32. **Calvinia**
 - Designs for Upgrade of Abattoir and By-products
 33. **Grahamstown**
 - Design Poultry Plant
 - Design Game Slaughter Facility
 34. **Nosandla Hatchery**
 - Design and Construct Hatchery, Turnkey Project
 35. **East London**
 - Designs and Construction of Claremont Abattoir Upgrade and Cold Storage, Turnkey Project
 - Design and Construct East London Abattoir Upgrade, all species to export Standard, Turnkey Project
 - Design Pie Factory
 36. **Reivilo**
 - Design Ostrich Abattoir and Meat Processing Plant
 37. **Mariental**
 - Design and Construct of Abattoir (Cattle, Pig & Sheep), Turnkey Project
 - Design and Construction of Hardware Retail Outlet
 38. **Beaufort West**
 - Design of Carport Facility for Local Council
 39. **Cape Town**
 - Design and Construct 1600 Pigs per day Abattoir to export standard, Turnkey Project
 40. **Mossel Bay**
 - Design and Construct Indoor Elephant Boma, Viewing Facilities and Accommodation
 - Design for Swimming Pool
 41. **Riebeeck Kasteel**
 - Design and Construct Sheep Abattoir and Meat Processing Facility, Turnkey Project
 42. **Butterworth**
 - Design and Specialist Consultants for Mnqumashe Cattle, Sheep and Pig Abattoir
 43. **Rundu**
 - Design and Consulting for large Multi Species Abattoir
 44. **Bredasdorp**
 - Design and Construct of Abattoir Upgrade
 45. **Queenstown**
 - Design and Construct Meat Traders Abattoir Upgrade, Turnkey Project
 46. **Kimberley**
 - Design and Construct Malu Pork Meat Processing Plant
 47. **Alexandria**
 - Design of High Throughput Abattoir
 48. **Francistown**
 - Design and Construct of Francistown Abattoir Upgrade, Turnkey Project
 49. **Queenstown**
 - Design of Meat Processing Plant
- Also:**
- Numerous Low-Cost Housing Projects, in excess of 150 units
 - Design of Movable VIP Toilet for SA Government
 - Design of Mobile Abattoir Facility
- | | |
|---------------------------------|------------|
| Total Structures Erected | 271 |
| Total Design Projects | 236 |



Meat Traders Abattoir:

Please view the links for further information:

<https://plus.google.com/105049231361157517515/about?gl=za&hl=en>

Verdebeef, Ethiopia:

Please view the links for further information:

www.verdebeef.com

Windburg Chapel & Cross:

The Windburg Cross is the world's 2nd highest illuminated cross and the world's 9th highest cross.

Please view the links for further information:

<https://www.facebook.com/818466394896452/photos>

[/a.818483021561456.1073741827.818466394896452/912600458816378/?type=3](https://www.facebook.com/818466394896452/photos/a.818483021561456.1073741827.818466394896452/912600458816378/?type=3)

Cape Eastern Livestock:

Please view the links for further information:

www.livestocksa.co.za

Mnqumashe High Throughput Cattle and Sheep Abattoir, Butterworth:

Specialist Sub-Consultants for Department of Rural Development and Land Reform:
Eastern Cape

Zorb Caryer**Camdeboo Abattoir and Meat Processors****Ostrich and Game, EU Standard Facility**

Tel. +2771 351 6875 or

Piet Neethling (current MD) +27 82 377 5063

<http://www.camdeboo.co.za/index.html><http://www.camdeboomeat.com/ostrich.htm>**Glen Page****East London Abattoir and Processing Plant****Multi Species Export Abattoir**

Tel. +27 82 771 3596 or

Frans van der Vyver +27 82 577 0977

<http://claremontfarming.co.za/aboutus.htm>**Clive O'Connell****Kei Livestock Multi Species Abattoir and Meat****Processing Plant**

Tel. +27 82 320 0220 or +27 43 745 2316

http://www.callupcontact.com/b/business/Kei_Livestock/158329**Gary Moorcroft****Port Elizabeth Abattoir (now Lentaba)****Multi Species Abattoir Upgrade, EU standard, Port Elizabeth**

Tel. +2782 652 1757

gary@lentaba.co.za<https://plus.google.com/118073052028283521635/about?gl=za&hl=en>**Dr Hannes Van Niekerk****Veterinary Services, Port Elizabeth**

Tel. +2741 402 6208 or +2782 327 1991

Ben Kaiser +2783 722 1166

Dr Wolhuter – South African E.U. accredited vet.

Tel. +27 74 104 2020

Jack Miles - Meat Traders**Multi Species Abattoir and Processing Plant, Queenstown**

Tel. +2782 922 70 77 or +2745 838 30 12

jemiles@isat.co.za<https://plus.google.com/105049231361157517515/about?gl=za&hl=en>

Ken Ramjee**Engineering Council of South Africa**

Tel. +2782 561 3611

<https://www.ecsa.co.za/default.aspx>**Heno Bosman - BC Designs – client****Structural Designs for the Aussenkehr Spar in Namibia**

Tel. +27 060 335 1808, designs only

<http://www.spar.co.za/Home/Store-View/SPAR-Aussenkehr>**David Way or Mike Hopley – client, MD Lonya International****Abattoir and Meat Processing plant – Sahara desert Libya**

David: Tel. + 44 1273 4925 44 or

South Africa Mike Hopley: Tel. +2782 65 77 447

Gideon Goosen**Mariental Abattoir, Namibia****Multi Species**

Tel. +264 63 24 1462

Piet Strachan - Royal Haskoning DHV Consulting Engineers**Mnqumashe Abattoir, Butterworth**

Tel. +2741 396 1700

piet.strachan@rhdhv.com**Dr. Rozani – State Vet Export Control**

Tel. +27 82 779 9606

Andrew Major Peace Farms**Multi Species Abattoir**

Tel. +27 83 381 2665

Franco Arnot - Cool Maintenance**Business associate for 20 years**

Tel. +27 83 259 3083

<http://www.coolmaintenance.com/>

Head Office: Tel/Fax: +27 (044) 870 7836 or Leiza: +27 (0) 82 343 1571

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