

**LEGOUXSA**  
CONSULTING ENGINEERS (PTY) LTD



**LEGOUXSA**  
CONSULTING ENGINEERS (PTY) LTD

**TRANSMISSION LINE & ELECTRICAL INFRASTRUCTURE SPECIALISTS**

**CONTACT**

Landline: +27 11 475 1414  
information@legouxsas.com  
www.legouxsas.com

*LEGOUXSA is a dynamic Consulting Engineering company mainly focused in the field of power engineering. Our main expertise is in the design and project management of overhead power lines, substations and overhead reticulation. Le Goux SA also specialises in the development and design of structural steel structures.*

The LEGOUXSA engineering team consist out of skilled transmission line, electrical and mechanical engineers with over 30 years of specialized experience.

LEGOUXSA's knowledge, experience & innovative attitude enable the company to strive for creative, cost effective & practical solutions for any endeavour we undertake.

Our service and professionalism is our main priority & we will strive to maintain long term relationships with our clients and partners in the energy sector.

**LEGOUXSA work within ISO 9001 Quality standards and we are continually improving & maintaining our quality standards.**

## OUR VISION

To maintain our uniquely personal culture and core values of supporting employees, quality of services, positive attitudes, financial viability, and community improvement.

To uphold an entrepreneurial spirit that allows for the proactive adaptation and evolution of our services and methods that are harmonious with changing client needs.

We are a learning organization, focused on competence enhancement & people development. To provide a training platform to ensure continual skills transfer.

## OUR MISSION

Our Mission is to be a focused Consulting Engineering company, delivering efficient, practical, reliable and cost-effective services to promote electrical infrastructure growth in Southern Africa.

## OUR VALUES

Passion for customers, for our partners, & for innovation.

Honesty and Integrity.

Taking on big challenges & seeing them through.

Constructive self-criticism, self-improvement, and personal excellence.

**WHAT WE DO...**



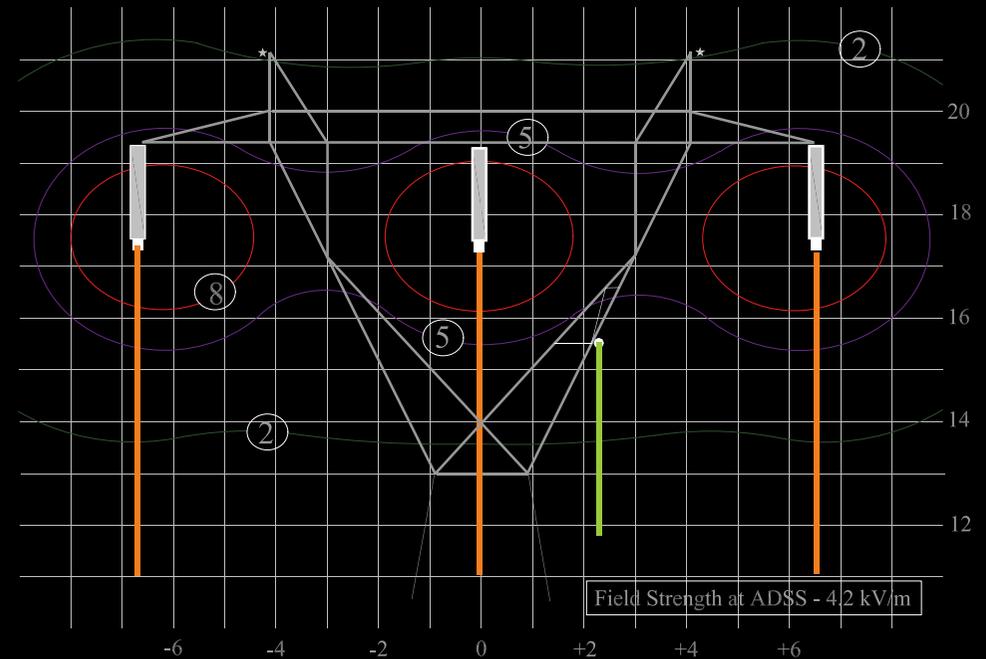
## **OVERHEAD POWER LINES 11-400kv DESIGN SERVICES**

- **Optimised Line Solutions**
- **Life Cycle Costing**
- **Optimised Line Profiling**
- **Structure Loading Calculations**
- **Structure Designs and Analysis**
- **Upgrading and Uprating of Existing Power Lines**
- **Refurbishment and Maintenance Investigations**
- **Foundation Designs**
- **Route Surveying**

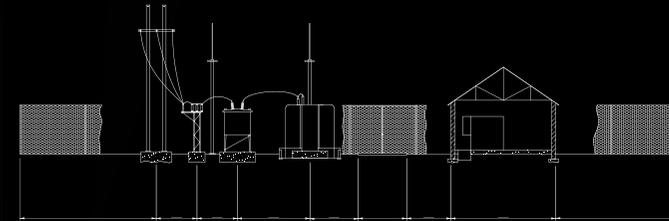
# WHAT WE DO...

## FIBER OPTIC'S FOR OVERHEAD POWER LINES

- Feasibility Studies
- Field Plot Analysis for ADSS Fiber
- Structural Assessments
- ADSS/OPGW Profiling
- Optimal Optic Fibre Positioning on Existing Power Lines
- Investigation and Analysis for Wrapped Fibre Technology

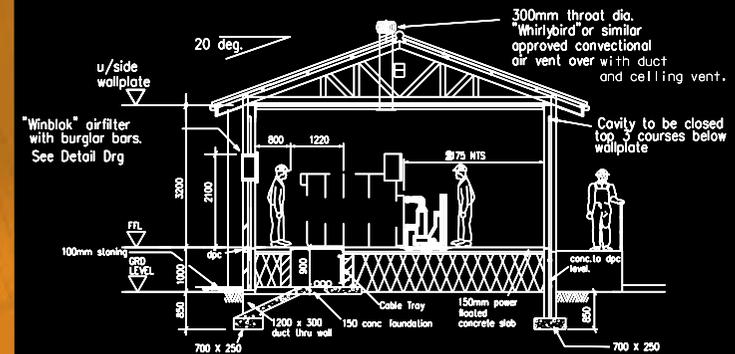


# WHAT WE DO...

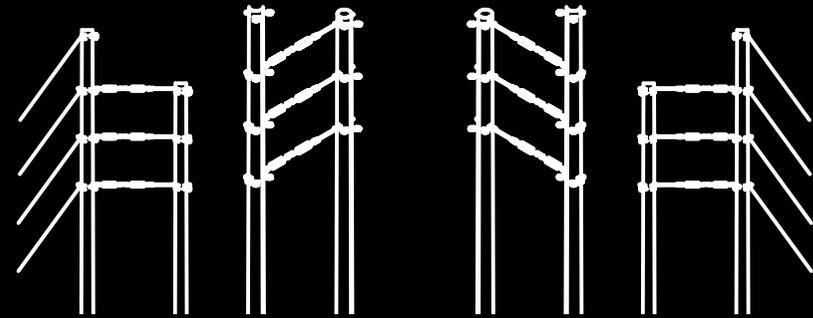


## SUBSTATION DESIGN 33KV-132KV

- Structure Design and Analysis
- 3D Substation Layout Design
- Earthing and Lightning Protection
- Substation Assessment
- Substation Refurbishment
- Substation Loop-in, Loop-out Solutions

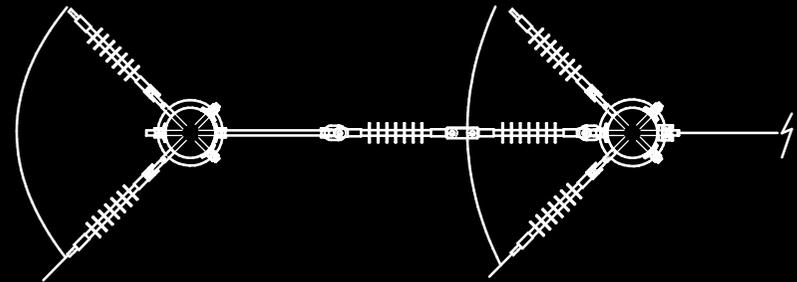


**WHAT WE DO...**



## **— ELECTRICAL RETICULATION —**

- **Urban and rural developments**
- **Overhead and underground reticulation**
- **Optimal design for cost effective developments**
- **Comercial Developments**
- **MV & LV Structure Analysis**



# WHAT WE DO...

## STRUCTURAL DESIGNS

### 1. POLYGON SECTION POLES FOR:

- Overhead Power Lines
- Telecoms
- Street Lights
- Short/Long Span Fibre Optics
- Reticulation

### 2. LATTICE STRUCTURES FOR:

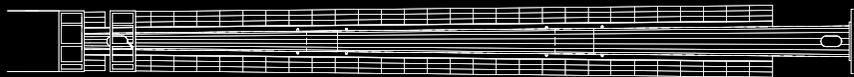
- Over Head Power Lines
- Sub Station Steel
- Telecoms
- PV Panel Structures

### 3. WOOD STRUCTURES FOR OVERHEAD POWER LINES

### 4. TUBULAR STEEL STRUCTURES

### 5. UPGRADING OF EXISTING STRUCTURES

*Legouxsa is in agreement with Industrial Poles and Mast PTY LTD for manufacturing of Polygon, Lattice and tubular steel structures.*





## WHAT WE DO...

## TRAINING

*LegouxSA provides dedicated training in the field of Overhead Transmission Lines.*

### **LEGOUXSA PROVIDE TWO TRAINING COURSES:**

**Basic Training** - provides basic skills and provide tools to enable the user to do a complete overhead line design by using line templates and basic calculations.

**Advanced Training** - Detailed training and understanding the loading of conductors, shield wires and various structure types. This training is essential for the use of advanced overhead line design software packages.

## SOFTWARE

*Legouxsa SA provides specialised software for overhead line designs.*

**RETIC SAG** - Basic sag and tension program suitable for MV and LV retic installations.

**VISUAL SAT**- Advanced sag a tension program Distribution line installations.

**DL-CADD** - Design package for Overhead Distribution Lines.

*Legouxsa can develop tailor made engineering software solutions to suit specific needs.*

## PROJECT & QUALITY MANAGEMENT SERVICES

- Onsite Quality Management
- Project Programming
- Budget Planning
- Project Implementation