



CASE STUDY — OFF-GRID INFRASTRUCTURE & LAND DEVELOPMENT

Small World Farm

Transforming a feral 2ha smallholding into a fully integrated off-grid homestead — Western Cape, South Africa

PROJECT SNAPSHOT

Location

Western Cape, South Africa

Duration

3 years — phased development

Site

2-hectare smallholding

Sector

Off-grid residential / regenerative land development

Role

Owner-side Project Coordinator & Design Lead

Project Type

Owner-led private development

KEY METRICS

2ha

Feral smallholding, dense alien vegetation, no usable infrastructure at acquisition

3 yrs

Phased delivery across water, power, dwellings and land systems

4x

Sale value compared with similar regional smallholdings

ECOLOGICAL & PRODUCTIVE SYSTEMS



Branded beehive — productive and ecological systems integrated into the site

THE SITUATION

A feral site with no usable infrastructure

The starting point was a feral, undeveloped 2-hectare smallholding, densely covered in alien vegetation, with no usable infrastructure in place. Water, power, sanitation, access, and any productive use of the land all needed to be built from scratch — on a constrained budget, without easy access to contractors or materials. The site had real ecological potential, but required a coherent phasing strategy before any investment could be made intelligently.

THE COORDINATION CHALLENGE

Multiple interdependent systems, limited budget, remote conditions

The project could not be approached in isolation. Earthworks had to precede water systems. Water, power, sanitation, access, dwellings, and landscape works had to be sequenced so that each phase supported the next. Procurement was remote, contractors were intermittent, and every sequencing error cost real money. Ecological intent also had to be balanced against practical performance at each stage.

MIKE'S ROLE

Owner-side coordination across the full project lifecycle

Mike coordinated all technical and manual teams across the three-year build: design coordination, phased sequencing, contractor management, remote procurement, budget and timeline control, and quality assurance. He managed the integration between systems — ensuring each phase set up the next — and made the practical decisions that prevented drift and cost overrun throughout.



SYSTEMS INTEGRATED

Full utility & land-use backbone, built in phases

- Borehole
- Water filtration
- Gas hot water
- Rainwater harvesting
- Composting toilet
- Fencing
- Swales & ditches
- Stone terracing
- Tree systems
- Solar pump
- PV solar array
- Water reticulation
- Greywater reuse
- Access roads
- Modular dwellings
- Pond
- Windbreaks
- Beekeeping zone

WHAT WAS PUT IN PLACE

The project was structured as a phased transformation. Early work cleared alien vegetation, established access, fencing, water, power, and basic living infrastructure. The next stages introduced sanitation, modular dwellings, and productive landscape systems. Later phases focused on ecological stabilisation: terraces, swales, windbreaks, pond development, and tree systems. Where possible, on-site stone was reused for retaining walls, terraces, and structural landscape elements — reducing transport cost and tying the built environment directly to the site.



Utility trench coordinating water, drainage and electrical routes beneath stone retaining walls

OUTCOME

A fully integrated, self-sufficient rural property

- ✓ Feral 2ha smallholding fully transformed over three years
- ✓ Integrated water, power, sanitation, access, dwellings, and productive landscape
- ✓ Fully off-grid at completion: water, power, sanitation and productive land systems
- ✓ Sold at four times the average value of comparable regional smallholdings
- ✓ Reference case for phased resilient land transformation, Western Cape

WHY THIS MATTERS NOW

This project shows the ability to coordinate complex, multi-system land and infrastructure work — from uncertain starting conditions through to practical, sequenced delivery. The same approach applies to off-grid homesteads, retreat properties, water-resilience upgrades, and owner-side infrastructure coordination.