



HOUSE OF THE BIG ARCH

WATERBERG
2019

TAGLINE

marrying sandstone cliff and riverine forest

THE SITE

the building occupies a unique place in a nature reserve in the waterberg mountains of south africa;
a landscape of remarkable plants, inspiring cliffs, and prodigious wildlife

THE BRIEF

a home that disappears into the landscape;
that sits amongst the rocks and trees and birds;
that offers animals and plants and humans equal opportunity to find shelter;
that treats the bushveld with its deserved respect

THE IDEA

the underlying concept was to bridge the landscape between riverine forest and sandstone cliff,
whilst raising the living space into the tree canopy, amongst the abundant arboreal life
the building is organised as one long thin building which slots between the forest trees.
the shapes of the additions to the central building are dictated by the position and size of the surrounding trees
(not one tree was demolished during the construction of this home)

MATERIALS

the building makes use of a very simple set of materials which all play their part in making the building part of its landscape
the most abundant material is a rough stock brick which was selected to match the site's weathered sandstone
the 'bridge' portions of the building are constructed from sustainably-grown timbers,
whilst glass and aluminium fill in the non-structural wall

PROGRAMME

the first floor offers to its inhabitants a planted courtyard, a reclusive lounge, a sunlit dining room,
a farmhouse kitchen and scullery, a tree-shaded deck, a small pool
and a fireplace - around which most of the cooking and living occurs
the ground floor provide yet more courtyards, a study, library and a small swing bench under the arch
the cellar creates a climate conducive to curing meats, storing food supplies and ageing wines

SOLUTIONS

we designed an incredibly thin building
- 3300mm wide -
this allowed us to thread the building through the treescape
any funky bulges and protrusions in the plan of the building were dictated by where trees allowed us to build
in order to further ensure that no tree would be harmed, we laser-scanned the entire site
we then converted this information into a digital 3D model
so that we could see every tree and every branch when making critical design decisions
we were in essence designing this building in a digital forest

CLIENTS

the clients are an elderly couple, whose love and knowledge of the bushveld is extraordinary and inspiring
every tree and bush and insect and bird and mammal is a personal friend of theirs
they are enthusiastically involved in the environmental education of underprivileged youngsters from the surrounding areas
opening up their farm to- and sharing their experience with these kids
when asked why they are so involved, their answer is typically salt-of-and-down-to-earth:
'there is too much beauty here for us to use up all by ourselves'

HOW IS THE BUILDING UNIQUE?

this building is a careful and direct response to
this particular portion of this particular riverine forest of this particular portion of the waterberg of this particular portion of the bushveld
this architecture could exist nowhere else in the world

SUSTAINABILITY

the entire house is off-the-grid - completely and utterly
water from the roofs is collected and filtered through the forest
black- and greywater is stored and processed before being filtered by the undergrowth
energy is harvested by 16sqm of solar panels
but more important than this,
is that the architecture works with its environment to create breeze and shade and comfort
which allows it to have minimal energy demands

CLOSING THOUGHT

we cannot ever divide architecture, landscape and gardening; they are one



ENGLISH