

Rather than being bulldozed, this striking and ambitious yet badly performing house in Adelaide's Eden Hills has been reconfigured and extended to provide better flow and connect it to its bush setting.



New pop-out windows bring much-needed light and ventilation to the round 'silos' of the original house. The choice of bright colours, straight lines and different metal cladding for the new parts of the house provides contrast with the existing structure and reflects architect John Maitland's view of the project as "a long-term connection of disparate

elements... like in a human relationship."

WORDS Anna Cumming PHOTOGRAPHY Keiren Macdonald, Snapme Media Group

#### THE FIRST TIME CATH AND GEORGE

walked down the long drive of their unusual house in the Adelaide Hills, "we just thought, 'wow'." Tucked below them on a steep bush block, the house was a statement in glass and curved corrugated iron and looked north through flowering gums over the Watiparinga Reserve and Viaduct Creek, with a view of the Adelaide plains beyond.

But despite the enviable site and its unique design, the house had issues: "It was hot, airless and the layout wasn't terribly functional," explains Cath. They fell in love with it, but they also took pity on it. "We thought, if we don't buy it, someone else might just push it over."

Built in the 1980s by a recently graduated architect as his own home, the original house was an ambitious two-storey steel and glass cube with round 'silos' at three of its corners. Reminiscent of the classic Aussie water tank, it was striking but impractical. "I like a house to know where it is," says homeowner Cath. "but it wasn't connected to the outdoors. There was only one [external] door – dodgy from a bushfire



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The original house had no eaves, and only one external door. Fixed metal shade structures over the two large north-facing windows now help regulate internal temperatures, and the living room opens onto a generous deck with steps down to the sloped garden. The new main bedroom features one angled side wall and a large window that opens onto the bushland view.

point of view – and no deck or balcony. The living room was in one of the silos, none of which had any windows."

With two rapidly growing children, Cath and George needed more space: a new main bedroom, and a guest room for frequent interstate visitors. "We also wanted to improve the flow of the house, and do what we could with shading, insulation and cross ventilation to improve the heat management."

Cath and George enlisted John
Maitland of Energy Architecture to tackle
the renovation after visiting John's own
house one Sustainable House Day. John
designed a new master bedroom with
ensuite to the west, squeezed in a clever
cantilevered study/guest room almost
on the boundary to the east, opened up
and reconfigured the lower level layout,
and installed horizontal fixed shading
over the huge north-facing windows. The
living room was moved to the north to take
advantage of the view, and now opens onto
a new deck wrapped around the north side
of the house. Upstairs, the two bedrooms

and small secondary living space are largely unchanged, except for banks of louvres for ventilation and blinds for shading. With most of the non-curved walls made up of glass, replacing it all with double glazing was cost prohibitive, so John opted instead for installing "very efficient heat pump air conditioning"; newly available small-gauge ducting helped make the installation discreet.

Crucially, windows were added to the silos to bring in light and much-needed ventilation; they have deep brightly coloured box frames that provide shading and solve the geometric problem of installing flat windows in a curved surface. The splash of colour is deliberate: "I wanted the mode of the architecture to be distinct from the original," explains John, of the alterations and additions. "I wanted to honour what the [original architect] had done, the very pretty aesthetic of it, so I chose colour, orthogonal shapes and horizontal forms, to contrast with the existing silver, round, vertical."

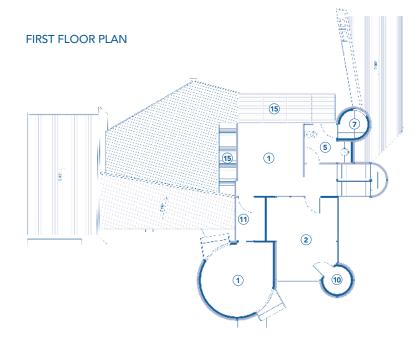
The extension, housing the new main

bedroom and its ensuite and walk-in robe. is in the form of a cube, tilted to follow the slope of the land. One side wall also slopes away from the perpendicular, providing an interesting interior element (and a furnishing challenge!). To the north, a concertina floor-to-ceiling window can be opened right up to bring the sounds and scents of the bush inside; a roll-away insect screen keeps airborne visitors out and is surprisingly visually unobtrusive. On the sides seen most, the box is clad with Corten steel that will weather to a rusty patina. It was chosen for its texture and colour, and to echo the metal finish of the existing house without matching it. John included a generous vent space behind the cladding to regulate heat transmission into the room.

The study/guest room extension is also clad in Corten. Wedge-shaped to fit the space available, it hovers over the steep slope at the north-east corner of the house. Cath credits John with the inspiration: "I thought that corner was a full stop. It was John's idea to put the guest room out there," she says. It's accessed through the

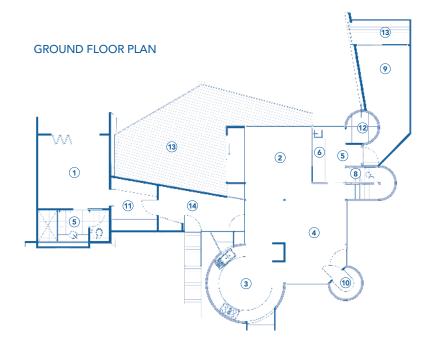
downstairs bathroom – with two other bathrooms in the house, this arrangement isn't a problem for a room that's not occupied full-time. The room's small balcony puts visitors right amongst the trees, with clusters of cream-coloured gum blossoms almost close enough to touch.

The bankruptcy of their first builder made for a longer than anticipated build, but the family was able to move into their much improved home in November 2015. Already they are loving it. "We recognise that in many ways starting from scratch would have had many benefits, both thermal and financial," reflects Cath, "but this would have ignored that sense of fun and place that drew us to the initial house. More importantly, we couldn't bear to waste a house that still had a good few years in it."





- 1 Bedroom
- 2 Living
- 3 Kitchen
- 4 Dining
- 5 Bathroom
- **6** Laundry
- Shower
- 8 Toilet
- 9 Study
- 10 Storage
- 11 Robe
- 12 Bath
- 13 Deck
- 14 Entry
- 15 Eaves



## **Eden Hills**

## -Specifications

#### Credits

#### **DESIGN**

John Maitland & Daniel Manno

#### **BUILDER**

Adelaide Prestige Homes

#### **PROJECT TYPE**

Renovation and addition

### PROJECT LOCATION

Eden Hills, Adelaide

# **COST** \$610,000

#### SIZE

Land: 2760 sqm House: 255 sqm

## **BUILDING STAR RATING**

6 Star

#### Sustainable Features

#### **HOT WATER**

- Retained the existing solar hot water system: Edwards solar system. Manual electric boost
- Hot water pipes in the addition are insulated.

#### RENEWABLE ENERGY

 2kW solar photovoltaic system, soon to be installed.

#### WATER SAVING

- Ri-Industries 22,000L underground rainwater tank plumbed to whole of house except kitchen
- Ri-Industries 2000L retention tank with Fielders first flush system, slow discharge to landscaping.

#### **PASSIVE DESIGN**

- Extensions oriented north for maximum solar gains; fixed metal shade devices added to existing window frames and external shading devices to northern living room windows
- Light-coloured roofing to lower heat loads
- Edmonds roof ventilator –
   TurboVentura
- Raven door seals throughout.

#### **BUILDING MATERIALS**

- Insulation: CSR Bradford hi-performance R5.0-6.0 ceiling batts, CSR Bradford Soundscreen Plus R2.5 to walls, Enviroseal wall wrap to external walls and Thermotec reflective unsulation and foam double layer to roof
- Walls: Onesteel Corten steel
   3mm; James Hardie rendered
   fibre cement 9mm; Fielders
   Colorbond custom orb metal
   sheeting
- Roof Fielders Colorbond Klip-Lok 700 roof sheeting.

#### **WINDOWS & GLAZING**

- Trend aluminium-framed, natural anodised, doubleglazed windows throughout new addition
- Full width flyscreen in the main bedroom by Freedom Screens.

#### LIGHTING

 Clipsal LED light fittings throughout.

## PAINTS, FINISHES & FLOOR COVERINGS

- Dulux Weathershield acrylic to walls, eaves and fascias
- Deck oil is Livos, plant-based
- Sikkens clear finish to timber elements
- Universal Tiles porcelain tiles to ground floor living/utility areas
- Carpets to bedrooms and upstairs living are sisal natural fibre.

#### OTHER ESD FEATURES

- Home office so Cath can work from home and avoid commuting
- Low water garden the garden currently comprises three raised vegie beds, which are being converted to wicking beds, and an assortment of local and or other hardy plants. No watering system is required
- On the lower side of the site similar water management work is underway, with indigenous grasses and shrubs.

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The position now occupied by the living room used to be closed off as the main bedroom. "My favourite thing is watching the changing light on the hill across the gully," says homeowner Cath, "and being able to do it from the couch, or the deck – I used to have to sit on the edge of my bed for that view."

