

Tigger's house

When a horse needs more room, a house is built

BY SUE MITCHELL

He was standing at the kitchen bench ... tall, blond, with huge brown eyes and very beautiful; casually eating his breakfast. I didn't think horses were supposed to eat breakfast in the kitchen, so was rather shocked to see him there, but Tigger had other ideas. I had mixed up his food and left the door open, so why shouldn't he walk across the verandah (dodging the washing), through the lounge and into the kitchen to eat it?

He had only recently come to live with me and as I had nowhere else to keep him he was living temporarily in the back

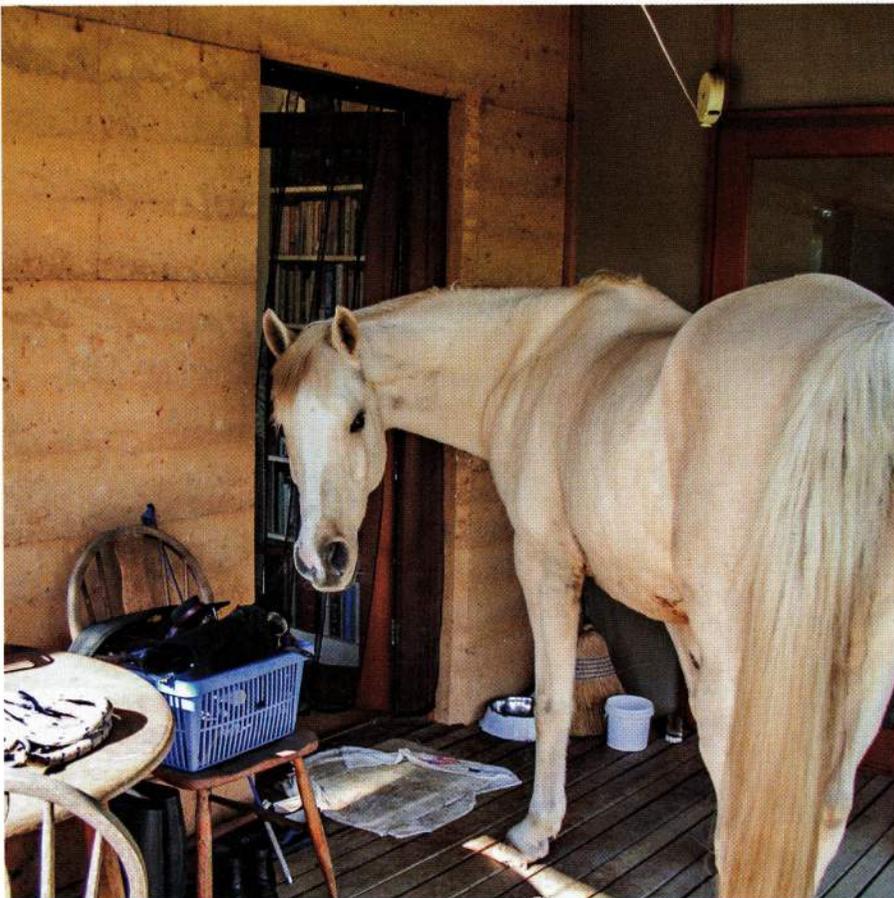
yard, with the orchard and vegie garden taped off. He wasn't terribly impressed with the accommodation. There was only a huge tree to stand under for shade and shelter from the rain, but no house for Tigger. He was used to better than this, and let me know by trying to come inside the house at every opportunity. I enjoyed his company so much that I decided I

would like to keep him living with me, but in his own house. I had been in this house for eight years, so the seven year itch had well and truly kicked in, and it was time to build 'the next house.'

Rural location

There were a few blocks of land for sale locally but finding a small block of land at a reasonable price was difficult, and most were in the 'Farm Zone,' which meant that getting a planning permit was not a sure thing. (In Victoria, in the Farm Zone you require 40.5 hectares to build a house without a planning permit, and many Shires make it very difficult to get a permit to build on anything less).

Through the agent who sold my house I found some one hectare blocks in the Rural Living Zone, on the edge of a nearby township, which were planned for the needs of people like me, who wanted some space for animals and trees, but not a whole farm. I bought one, and an old



Left: Tigger deciding he would prefer my house and inviting himself inside.

Below: Tigger's first 'house' which he didn't approve of and so necessitated the move.



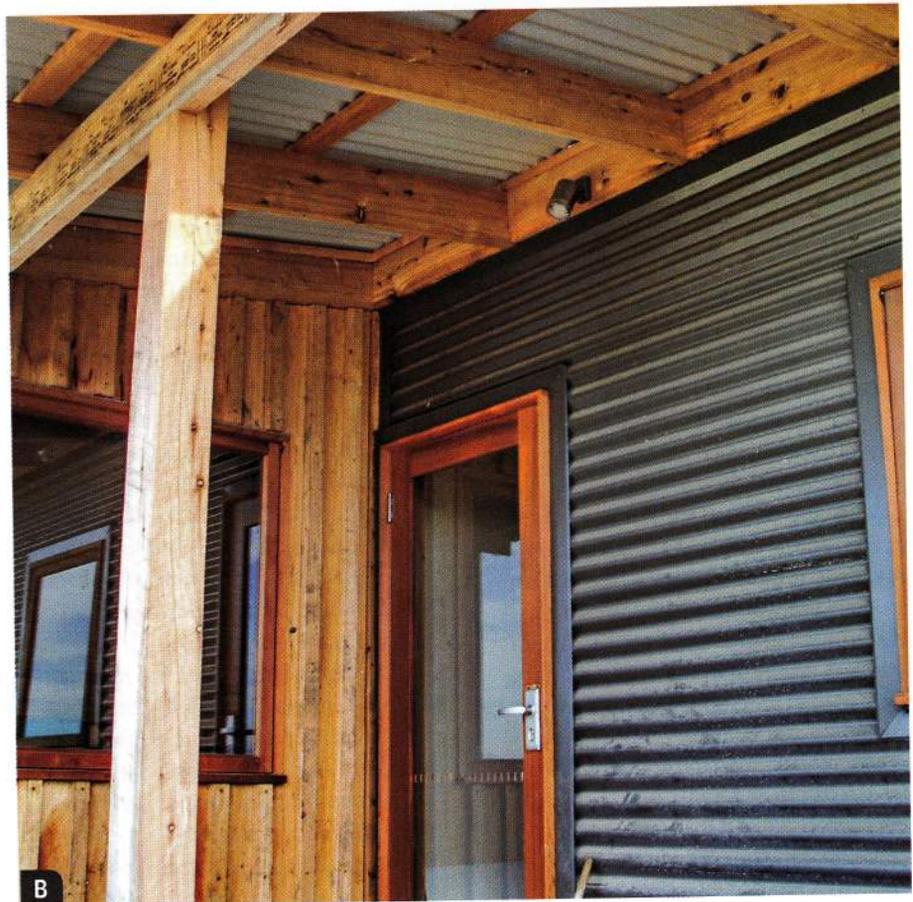


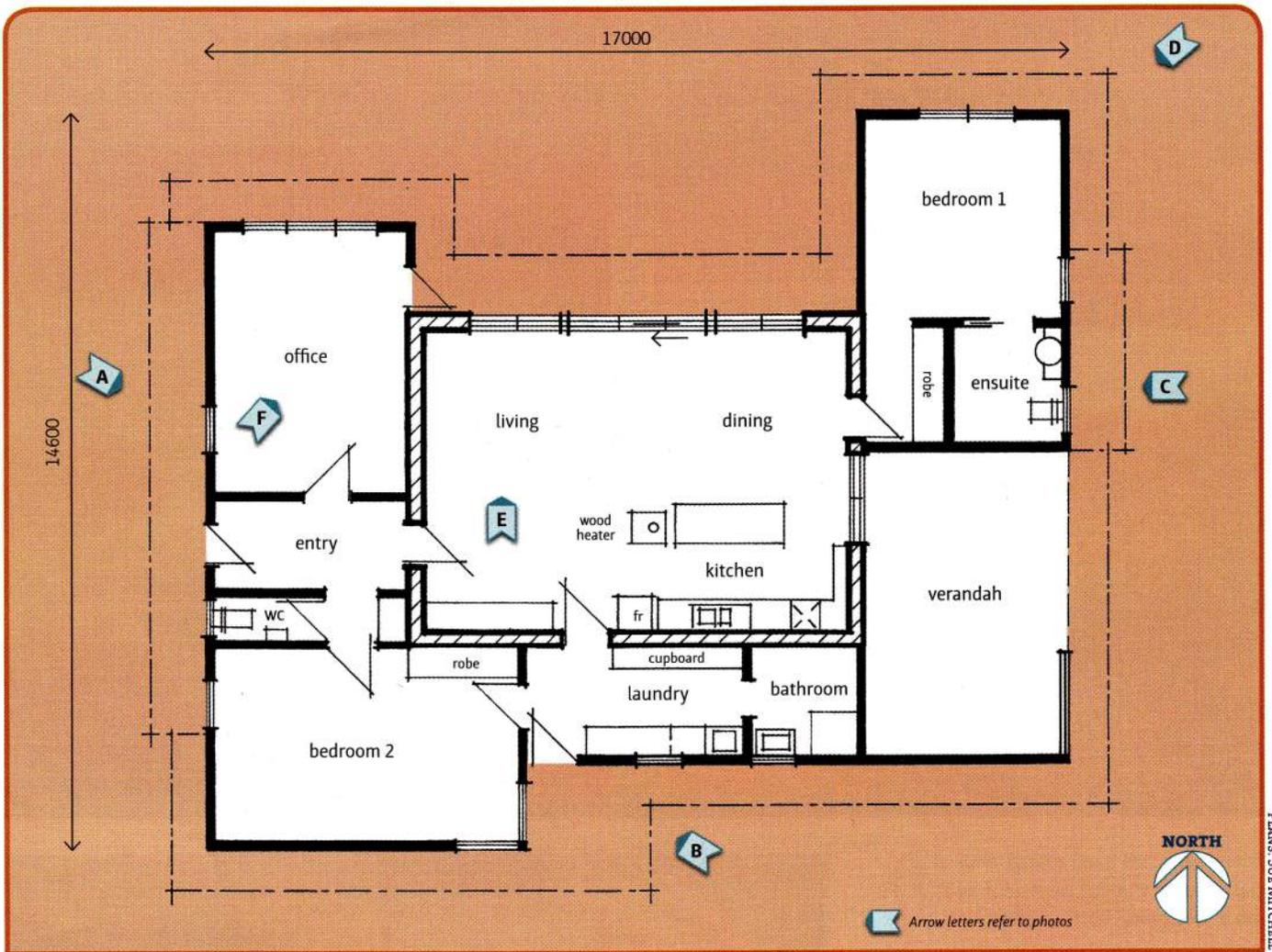
friend who had been a neighbour in the past bought the one next door, so I got the job of designing both houses.

Where to build?

The block slopes gently down from the road on the west side, with the flattest area in the northwest corner. It had a few large old eucalypts, of which two have since died, and the third is not looking good, and there were no other live trees. The site had a couple of major constraints, being a watercourse which runs diagonally across the site cutting off the south-west corner, and also the effluent envelope which is in the north-west corner at the highest point. Because of the watercourse on my block and another that runs through the neighbouring block, the effluent field had to be in this position in order to meet the required 60 metre setback from a watercourse.

This area is the flattest and driest land on the block, and closest to the road, and I couldn't build on it. The soil type here holds moisture and so required a very large effluent field of 600m², and this area has to be kept as mowed grass





PLANS: SUE MITCHELL

with no large trees, and can't be grazed by animals. However I didn't want to build too close to the road, so pushing the house towards the rear of the block gave me the privacy I wanted anyway, but added to the costs of services and driveway, and meant more site works because of the greater slope.

Apart from the house I needed a four bay 'farm shed' to house Tigger, hay, and the car and float. Fitting this on the block to the south of the house, but with 15 metres in between (to turn the car and float around) became a juggling act to avoid the watercourse to the south, the effluent field to the west, room for a paddock and yard to the east, and room for a garden and some privacy between the house and boundary fence to the north. Who would have thought it would be difficult to fit a house and shed on one hectare! In the end there wasn't much choice about where to site the house and shed, which made it simple.

Energy efficiency

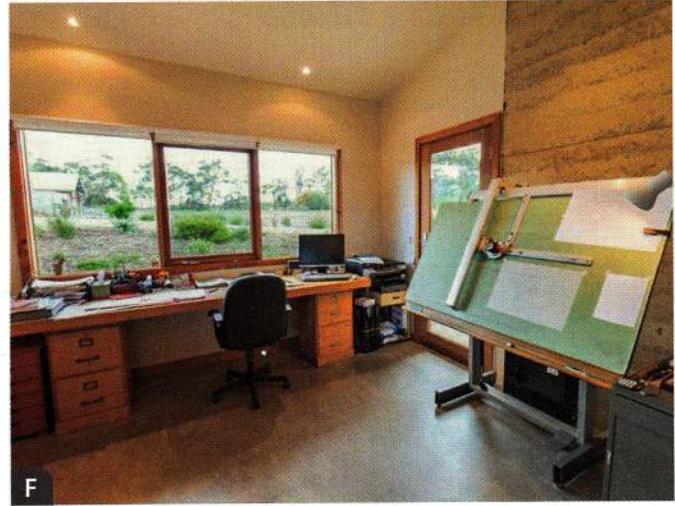
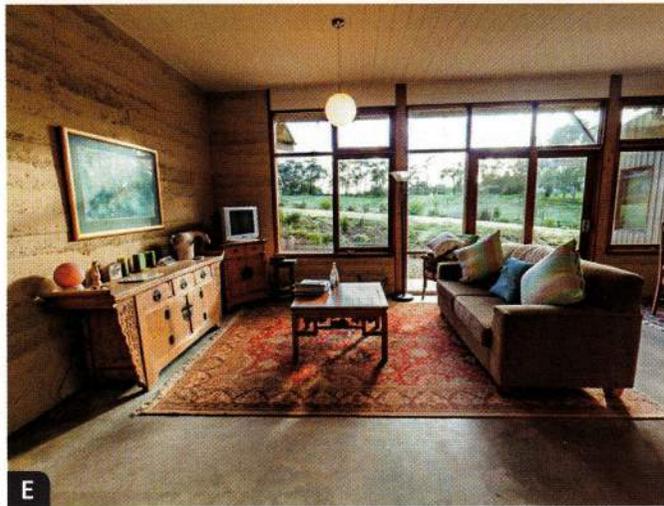
The house itself turned into an exercise in energy efficiency, and learning from the previous house. I wanted it to be smaller, with two bedrooms and an office (I work from home). I wanted my bedroom to get morning and midday sun, and the office to get all day sun and lots of light, so it has windows to the east, north and west, which is wonderful to work in. The living/dining/kitchen is north facing, with tall windows and a wide eave to the north, which allows winter sun to fill the room and doesn't allow summer sun in at all.

This central living area has rammed earth walls on all sides, with lots of glass to the north, and the other rooms 'wrap around' it as an insulating layer, with my bedroom and ensuite on the east, bathroom and laundry to the south, and the office and spare bedroom to the west. This makes the temperature in the living

area very stable. It has a huge amount of thermal mass with the concrete floor and rammed earth walls, and is very well insulated with the other rooms around it on three sides, as well as R6 insulation in the ceiling and foil backed blanket insulation under the roofing.

What this means in practice is that in winter I don't need any heating when the sun is out, because the large north facing double glazed windows let the sun in, and the walls and floor store it, to keep it warm for hours after the sun has gone down. Similarly when there is no sun and the wood heater is on, the house stays warm for a long time after the fire has gone out. (I don't turn down the damper and try to keep it burning overnight because that doesn't burn the wood efficiently, and creates smoke i.e. air pollution).

In summer the living area gets no direct sun, and stays very cool. The thermal mass does a great job of evening



out the temperature differences we have at this time of year, which currently go down to about 10 degrees overnight and anywhere from 20 to 35 during the day. On the last 'stinking hot' day we had, a visitor assumed that I had an air conditioner running because the house was so cool.

Walls and floors

The house is built on a waffle pod slab, which insulates it from the cold ground in winter. It doesn't get the cooling from the earth in summer, but we have far more cold weather than hot, so keeping the slab warm has higher priority. The rammed earth walls are internal apart from the north wall, which is mainly glass anyway. The north facing rammed earth warms up when the winter sun hits it, and transfers that heat slowly through the wall to the interior. The internal walls stabilise the internal temperature.

The other external walls are stud framed with R2.5 *Greenstuff* batts, with radial sawn vertical board and batten cladding. There is also some *Colorbond* cladding along the south side, which gets the worst weather, and in the gable ends, which are hard to reach for maintenance. Windows are double glazed in western red cedar frames, which need oiling externally every year, but it's not a huge job.

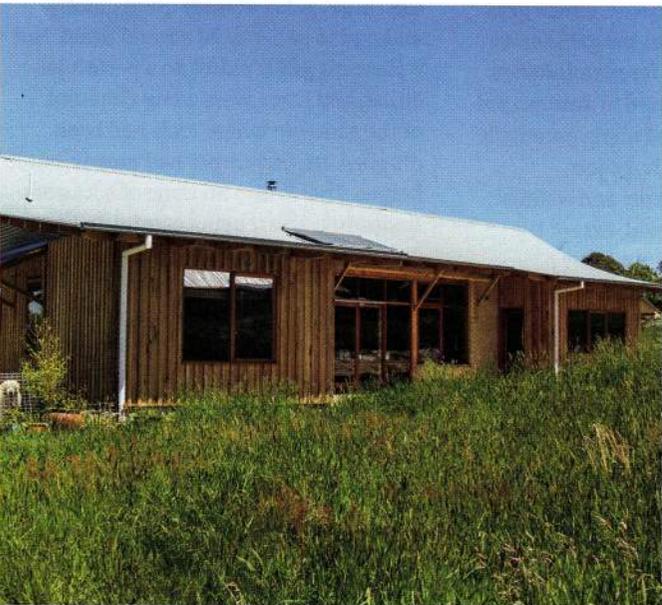
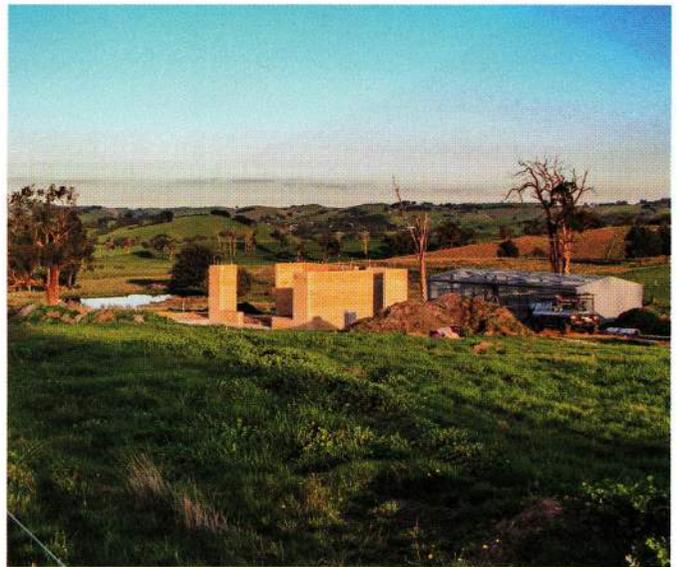
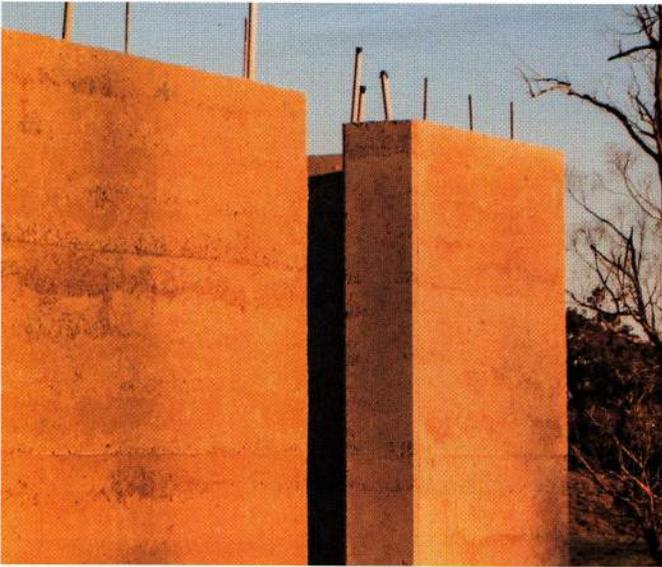
Internally the stud walls and ceilings are lined with plasterboard, except the ceiling in the living area, which is pine lining painted the same colour as the plaster. I like the texture of the lining boards, which add a bit of interest compared to plasterboard.

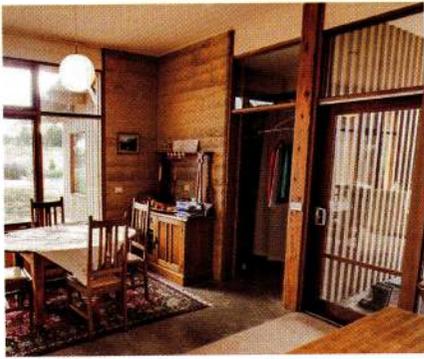
Sealing the slab

Once the slab was poured it was sealed immediately with a non-toxic waterproofing material, which is compatible with the final sealer I was

planning to use later. During construction it was protected with sheets of black plastic and old carpet over the top. The roof didn't go on till well into winter, so the carpet went mouldy quite quickly and had to be replaced several times. Not a pleasant job! It didn't do a perfect job either, and there were a few chips out of the concrete where tools had been dropped etc, and carpet had moved, but it helped. That is also an issue of educating tradesmen about being careful, but some choose not to hear.

Before moving in the floor was washed and sealed with a clear non-toxic finish in all areas except the living area, because there were still men working there. It has worked well in the bedrooms, but does mark easily (e.g. under my chair in the office) so is not so ideal in high traffic areas. The living area still hasn't been done so I'll probably do that with a *Livos* oil, which again is non-toxic but won't scratch. I used *Livos* oils on the floorboards





and jarrah bench tops in the last house and love how easy it is to apply and do repairs, as well as the pleasant smell.

Other finishes

The internal walls and ceilings are finished with *ecolour* paints, which are Australian made and non-toxic. Internal timber, including western red cedar windows and glazed doors, cypress skirtings and architraves, and bamboo bench tops are clear finished with *Livos* oil. Externally the radial timber board and batten cladding is finished in Quantum *Aquaoil* and the windows in Quantum *Timbre Plus Vertical* in clear, which are both oil based but wash up in water, non-toxic and locally made.

Heating is provided by a *Morso* wood heater, which was chosen for its high efficiency (in converting wood to energy) and low emissions. It has a flue generator, which backs up the solar hot water, and I also cook on it, though being cast iron it takes a while to heat up, and the top doesn't get extremely hot.

Solar

A 1.5 kW solar power system was added about a year after moving in and despite some teething trouble with billing, it has probably paid for itself already. I was lucky to get the 66 cents feed in tariff (so I get paid 66 cents for all surplus power I put back into the grid) and this year I am still in credit after my last winter power bill.

The experience

Owner building was a mostly positive experience. Watching the rammed earth walls appear over a couple of weeks was very exciting, and the guys did a wonderful job. There are a couple of tradies I would not work with again

(including one who would be in danger if he came near my place again!) but most were great. I knew the builder well, and he's a pretty laid back character. The saying 'It's all good Sue' is imprinted in my brain forever.

Timing was the only real issue as the predicted three or four months construction time dragged on to more than double that. My son was about to sit year 12 exams, so I informed them that we were moving in during the third week of September, whether they were finished or not. That had the desired effect and though not 100% finished, it was liveable.

Three years later...

It is now over three years since I moved in, and that time has been spent painting and getting the garden and paddocks organised. The vegie garden/orchard has been planted with fruit trees around the perimeter, and a few more that wouldn't fit have been planted in the lawn around the house. Paddocks were fenced, and another 'house' built for Tigger, which he now shares with his friend Max. The water course was fenced off, drains and a crossing to access the paddock on the other side put in, and hundreds of trees planted in it.

Trees have also been planted in the paddocks to provide shade and shelter, and the horses kept out with electric fencing until the trees mature. Because of the site cut a sleeper retaining wall was needed in the northwest corner; this area, and most of the area around the house, has been planted out in natives.

A broken leg meant I couldn't walk for four months last year, which slowed down progress on the garden, and the removal of the hardware a couple of months ago meant more time on crutches and the hobbling, but seeing all those jobs that need doing in springtime is a really good incentive to get walking again. The last job to finish is landscaping around the waste treatment plant, and that is just starting. It is an interesting design exercise to disguise the top of the tank but keep it easily accessible for yearly servicing.

Another move

Living in the house is a pleasure, and living here is the first time I have felt really warm and comfortable through

the winter. The beautiful views across the hills to the east (with Tigger and his friend Max in the foreground) are a bonus. The 'itchy feet' have struck again, and I have decided to down size and move closer to the coast, so this house is for sale...and yes, Tigger and Max are coming with me, and they will have new houses too. ♦

Sue Mitchell is an architect. If you are interested in her services – or the house – contact her on 03 5659 6331, sue.mitchell7@bigpond.com



Links & resources

◆ Olnee Constructions

Specialist rammed earth builders.

03 9551 5149,

www.olneerammedearth.com.au

◆ Radial Timber Sales

Radial sawn timber from Victorian hardwoods, sourced only from plantation or temperate regrowth forests.

03 9768 2100,

www.radialtimbers.com.au

◆ Livos Australia

A range of plant based non-toxic products for various surfaces.

03 9762 9181, www.livos.com.au

◆ Quantum Timber Finishes

Timber finishes manufactured in Victoria.

1800, 053 018, www.qtf.com.au

◆ Ecolour Paints

Non toxic zero VOC paints.

1300 326 568, www.ecolour.com.au

◆ Gippsland Solar

Premium quality solar power and solar hot water systems.

1300 447 765,

www.gippslandsolar.com.au

