And now the REAL work begins...

BY LYNDA WILSON

It was such a relief to finally reach lock-up, but I soon realised that we were really only about half way done and that major work lay ahead.

Once all the major structural work was done, all was quiet on site for a while as I gathered my thoughts and started organising the internal works.

Electrical plan

Even in a relatively uncomplicated house like ours, I have been amazed by the amount of wiring required and the time needed to do it all. To date, 10 days of work have taken place and $9255 has been spent – that is without light fittings and it is still not finished!

I have used David Watson for all my electrical, even though this involves a 200km travel charge and overnight accommodation. I 'met' David through the magazine, when he was mentioned in a previous article, and was impressed with the work he did for us when we lived in the Paterson area. He is methodical and neat, is conscious of providing energy saving solutions and has recently registered as a solar designer and installer.

I have deliberately steered away from any light fittings that require transformers (downlights, some LEDs etc) as this would have added more complexity, with additional wiring and siting of transformers. There is very little two-way switching and all lights are 'standard' 240 volt – only three of the living room lights have been set up to allow for dimming (extra wire required). There is no automation, with the only 'luxury' the inclusion of power winders on the clerestory windows.

Fully insulated walls and cathedral ceilings meant that we had to carefully consider where wiring would run, and once in place it is more or less stuck there – running additional wiring through insulation batts is pretty difficult.

A few mistakes have been made. The placement of the wiring for the wall-mounted bedside lights is a little low (my fault) and will affect the style of light chosen to compensate for this. The main power cable coming into the house enters under the eaves, runs inside the framing of an external wall to below floor level and is routed to the meter box, all the time 'unprotected' and carrying full current. For this reason, the section of wiring in the wall is not allowed to be captivated within a conduit, to reduce the risk of a nail or screw being driven through it. This regulation was only noticed after the cabling was laid in conduit, which meant that the section in the wall had to be redone – luckily this was discovered before the plasterboard was fixed in place.

The selection of light fittings has been a challenge – there are just too many choices! The idea of LEDs was appealing but I soon found that many were either well out of our budget or required more complicated wiring. I also wanted to standardise, as much as possible, the range of light bulbs used in the house while keeping to low energy versions. Many of the standard 240 volt fittings can take low energy compact fluorescent bulbs, or even GU10 LED bulbs. For this reason, I have restricted my selection to these.

Being only 250m from the sea, materials needed to be considered. I love the look of brushed steel and glass – but many of the 'steel' fittings are actually low grade and will rust or stain quickly, even indoors. The selection of marine grade or 316 stainless steel will reduce this, but even so we will need

Opposite page: Already a light and airy space. Left: Internal walls have also been insulated. Above: 'Simple' electrics – and this is just one!

to be vigilant. Outdoors this problem is compounded so good quality fittings (i.e. expensive) are imperative.

Something I nearly forgot all about was the TV aerial and socket points! Luckily I remembered a few days before the plasterer was due, and had two sockets installed on opposite ends of the living room. As the house is on piers, it would be relatively easy to add additional points if required at a later stage, but the insulated walls will make it a little more difficult. Previous experience of me changing the living area furniture configuration on a regular basis made the two socket points an obvious requirement.

Sewer saga sequel

At the end of November, after obtaining a new sewer plan and lodging a new application for a sewer connection with Hunter Water, the sewer connection could finally happen. This involved digging down 2.5m in order to connect to the sewer main, with the added requirement for shoring up and the presence of a safety officer when the plumber needed to descend into the sewer main (treated as a confined space). I had contracted an independent registered plumber to carry out this task, who had provided a reasonable quote of $4800 and let me know his hourly rate, including excavator, was $70.

I was rather dismayed when he arrived without shoring equipment, or even a crowbar to open the sewer. I was then asked to go to the hardware and buy ply, while he raided our waste timber pile for sections to build framework for a shoring box. So I was paying $70 an hour for an excavator operator cum plumber to build timber boxes! Then the box was too flimsy to be removed and reused, so another had to be built – this time using some discarded brick pallets...

The original quote had been a one-day job, which I had suggested would require more time due to the fact that a concrete apron needed to be removed as well as part of a fence. In the end, he was here for five days, mostly due to the inefficient shoring operation, and sent me an invoice for $8400! Needless to say, I threw all my toys out of the cot and refused to pay that amount.

It is the only serious problem I have had throughout, so I guess you could say I have been lucky, but it certainly has tainted the project and has made me very suspicious. There have been a few other minor issues, like work not completed to a satisfactory level at times, but these have been amicably resolved.

Plumbing plan

In line with my attempts to use local trades wherever possible, I got in contact with Luke Wagner of Wagner Plumbing Services. He has been patient with me – even when I hadn't yet made decisions that he felt were important – and has made the effort to accommodate our unusual requirements.

Again, the house plumbing is relatively simple (bathroom, ensuite, laundry, kitchen). We have installed 6000 litres capacity so far (3 x 2000–litre underdeck rigid water tanks), controlled via a *Bianco Rainsaver* and pump to service the house with automatic switchover to mains when required. I did not want a system that fills the tanks from mains water, as once the chlorinated water is in the tanks it is difficult to lose that 'town water' taste.

Ongoing costs to date

Brought forward	***$201,000***
(See TOB 162 Dec 2010/Jan 2011)	
Nov/Dec 2010	
Structure	$54,330
Kitchen appliances	$4930
Bathrooms	$6575
Solar hot water	$4570
Solar power deposit	$1000
Electrical	$9255
Water tanks & pumps	$6650
Garage loft odds	$3670
Sewer connection	$7750
Total to date	**$301,000**

Breakdown to date

Design, insurance, paperwork	$17,215
Site expenses	$11,830
Garage loft	$95,750
Tools	$1075
House:	**$175,310**
Structure	$99,500
Plumbing	$370
Insulation	$5300
Windows and doors	$36,650
Kitchen	$5400
Bathroom	$6575
Solar hot water	$4570
Solar power deposit	$1000
Electrical	$9255
Water tanks & pumps	$6650

However, as we are in an area of possible high contamination (coal dust, pesticide factories), we have decided to run town water to all 'drinking' points i.e. basins and sinks. All other water outlets will run from the tanks (bath, shower, toilets, laundry), with the kitchen having both. For the same reasons, the hot water system is filled direct from town water in order to prevent damage from contaminants.

I have tried wherever possible to purchase Australian products, and as such I chose all bathroom fittings from Caroma Dorf. The only exception is the vanities, which are wall hung units.

One issue that has proved vexing is the location of floor wastes, especially in the ensuite. It is all very well to decide where you would like it located (as I had) but then the reality of making the floor

Building diary...

Cont'd from previous page...

fall work can be the undoing of all your wonderful ideas. This was one of those occasions when I was very grateful for the fact that we are building on piers – nothing needs to be 'cast in concrete' right from the beginning, and if you change your mind then all you have to do is plug one hole and make another one!

The solar hot water system has been installed, which is a Hills evacuated tube system with an electric booster. The initial plan had been to have it gas boosted, but we decided that the additional $1000 cost would be better utilised by increasing the solar power system capacity – especially due to the fact that we don't anticipate having to switch the booster on very often.

Finishing starts

Shane Price, a local plasterer, was approached to do the internal plastering. Shane's best advert is his own home, which he has been meticulously renovating over the past 18 months. On the main road into the area, and with his sign in large letters on the fence, it is the best work in progress example any tradesman could have! Along with his apprentice Daniel, they spent 10 days completing the plastering. They have done a fantastically neat job, even with all the strange angles and square set corners.

I have not been able to locate a local, or even area-based, painter prepared to work with 'green' paints. I checked the Greenpainters website (*www.greenpainters.com.au)* and found one located on the southern fringes of Newcastle and another on the Central Coast. I am currently in negotiations for painting to start on 17 January, with an estimated timescale of seven days. We are having the painting done before any trim or flooring is installed, which will make it a lot easier. A little patching will be required at a later stage, but that is acceptable.

We had our hearts set on a solid timber floor, but the prices have made us have second thoughts. A fully installed secret nailed timber floor looks at costing anywhere from $20,000 depending on the species chosen, and will also require total isolation of the house during the installation period – especially during the finishing stages. We have had a quote for a bamboo floating floor, which looks great, for around $13,000. One problem with floating floors is that things like kitchen units and bedroom cupboards cannot be installed over it, as it needs to be able to move – these units need to be in place beforehand. In our case, that is just not going to happen, as the kitchen is the last item on the agenda! A way around it is if we know EXACTLY where units will be placed, so that the flooring can be laid up and slightly under that area (allowing for the units on legs with a kickboard).

Christmas 'break'

While all the trades knocked off for the Christmas period, Keith and I have used the quiet time to catch up on jobs that we had assigned to ourselves. The garage bathroom has finally been tiled and can be used, with the added bonus of being able to say goodbye to the chemical site toilet. All the downpipes have been plumbed into the water tanks, which in turn have had the overflow directed to the absorption pit. Slate wall tiles have been laid in the entrance area and bad carpentry in this area has been replaced. Decking and retaining walls have been planned.

So, all in all, it has been a good year. The current target is to be in the house by the end of February, with the end of March being the absolute latest due to visitors due in early April. Nothing like a deadline to get things done... ■

Follow progress of the build in more detail at http://theownerbuilder.wordpress.com

L–R: Very neat and thorough plastering job; slate tiles going on the walls of the entry area; the simple tasks are often the most rewarding!