Once the foundations are laid, we can start on the next job which will be getting those car tyres in place and packed full of pea shingle!

We plan to appoint a project manager to co-ordinate actual building process.

We still need to raise more than £200,000 after we've completed the foundations.

We are aiming to make a start on the foundations *this Summer!*

This continues to be a massive project, and although it's taken longer than I initially thought, we've been making steady and very positive progress throughout. Many thanks to everyone for your prayers and support. Keep it coming!

Richard
March 20th 2016

Building Community with Straw Bales in Tulse Hill

It's an ill wind! Super-Trusses to the rescue…

The prayers of all supporting the Straw Bale project to build a new church community hub have been answered - in the unlikely form of "super-trusses".

Read on to learn more!

Last Summer, armed with planning consent from Lambeth Council, we thought we were finally on the home straight and that digging the foundations could begin soon. Wrong!

There were a number of reasons for the hold up. The most important, and from our point of view potentially disastrous, was the roof structure and overall rigidity.

Our building will be the largest community straw bale build in Europe – but would the roof stay up, asked the structural engineer?

A lot of thinking and re-drawing had to be done. But in doing so, we solved another massive problem that was waiting for us further down the line.

Super Trusses

To keep things as simple and cost-effective as possible, our original design used standard roof-trusses – about 50 of them.

Our Engineer, however, wasn't happy that these would be strong enough.

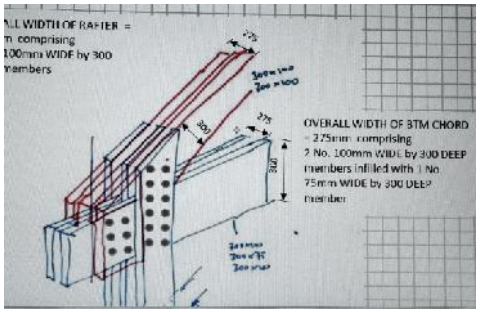
After looking at several options, we settled on putting in 11, much stronger, "super-trusses." At first it was disheartening to work through this major revision, but not when we realised the pay-off.

Why do we call them "Super-Trusses?"

They are super because:

1. They are much bigger and stronger than the original ones.

2. They can be built onsite - a massive saving in shipping and much easier than bringing in 50 standard trusses by lorry.



How the "Super-Trusses" will bolt together.

3. They'll be bolted to uprights set into the walls, making it easier to fix things to walls.

4. We can build the roof before we do the walls – weird but true as the walls will play only a small part in holding up the roof. Doing the roof first means we can then protect the straw walls from rain as we build them.

But using Super-Trusses had some further complications – and more great pay-offs.

Moving Sideways

Super-trusses mean we've had to shift the whole build half a metre towards the vicarage.

Again, this turned out to be a brilliant move. It gives us more space along the path next to St Martin's School and a straighter connection to the church.

Dividing Lines

Engineer Helen also said that in places the ceiling must cover the whole width of the hall.

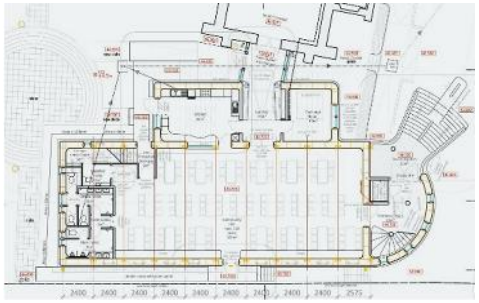
Yet again, what felt like a knock-back turned out to be a huge advantage.

Now, we'll have more storage space upstairs and more focused views towards the church. And if we want to add a sliding partition to the downstairs hall in future, it will also be much easier to do so.

The new First Floor Plan showing light wells in blue, alternating with extra storage spaces. The red lines show the Super-Trusses.

Ventilation

Another area we're working hard at is ventilation. The lower hall is a large area which needs a carefully designed ventilation system to comply with modern standards, and to cope well with summer temperature peaks.



Our re-drawn plan. This is a large and tricky area to heat and ventilate. The super-trusses are in red, spaced 2400mm (8') apart.

The good news is that, following an approach from Richard, Vent-Axia have offered to supply the equipment at half cost price. This will potentially save £000s!

This week we also received an affordable quote for an "MVHR" system which uses warm but stale air expelled from the building to heat up cold, fresh air coming in. This is the best system to use with the Underfloor Heating we plan.

The ventilation system is now our most urgent decision: it will affect our Energy Statement, which is needed as a condition of planning.

What Next?

- Kuba, our designer, is working up detailed drawings to satisfy every aspect of the Building Regulations.

- Helen, our structural engineer, is checking the exact level and position of the foundations needed. These will be trenches filled with compacted gravel. She is also designing the drainage system.

- The Diocese will soon recommend our plans for faculty. After the 30 days "consultation period", it will only need a final stamp by the Diocesan Registrar.

- Paul Bryan and a colleague are beginning to design our electrical and other systems.

- We have put our staircase build out to tender. We are looking at options for under-floor heating.

- We are trying to make contact with building contractors who will be able to tender for laying the foundations and drainage.