Structures at Steward Community Woodland

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Introduction

1. This is a summary of structures at Steward Community Woodland (SCW). The aim of the document is to provide an account of the types of structure including reasons for design choices, a review of success and to provide information that will hopefully be of benefit to others who are considering ecological self build projects.

2. I have lived at SCW since the beginning of the project and have witnessed all of the structures built on the land since. When I moved to Steward Wood, I had a small amount of experience building with timber which was limited to simple timber frame structures and benders.

3. All those involved in the SCW project have had varying and initially mostly limited experience of self build. The experience we have now, has mostly been gained during the progress of the project. This document shares some of the experience gained. The fact that we have provided ourselves with comfortable housing with limited previous experience goes to show what is possible and will hopefully boost confidence in others who hope to achieve a similar goal.

4. There are currently eight houses, a communal kitchen and lounge, a bathhouse, a compost toilet, and a few other ancillary structures at Steward Wood. A full list can be seen in appendix 1.

Principles and design

5. Our project aims state:

> *"To build our own homes from timber from Steward Wood and re-used materials.".*

6. We also abide by the Fifteen Criteria for Sustainable Development which includes:

> *"New buildings and dwellings are not visually intrusive nor of a scale disproportionate to the site and the scale of the operation; and are constructed from materials with low embodied energy and environmental impact, and preferably from locally sourced materials, unless environmental considerations or the use of reclaimed materials determine otherwise. Reuse and conversion of existing buildings on the site is carried out as far as practicable in conformity with these criteria. "*

   and

> *"The project is reversible, insofar as new buildings can be easily dismantled and the land easily restored to its former condition. "*

7. We consider the structures here to be temporary and a number have been taken down and rebuilt over the years. For example, most early structures were built by placing untreated timber directly in the ground. This means that their lifespan is limited to the decay rate of the timber in the ground unless regular maintenance is performed. This maintenance requires occasionally propping the structure up with a car jack or acrow-prop, removing the old upright stilt from between the house and the ground and replacing it with a new timber. The other method which has been done is simply to add another support next to the old one. This type of maintenance has been observed on medieval structure remains.

8. More recent structures have been designed so that timbers are not in contact with moisture to avoid this maintenance. This has been achieved by placing the timber footings for the structures onto stone blocks resting on the subsoil of the ground. No conventional concrete foundations have been, or are intended to be used on site due to the environmental impacts of large amounts of concrete and thus removal of structures is easier should the need arise.

9. We are also concentrating on improving energy efficiency in our homes in order to reduce fuel use and therefore the amount of land required for a sustainable wood-fuel supply.

Round-wood and sawn timber from the land

10. Round wood has a lower embodied energy and is readily available by harvesting timber from the land with little further processing. On the other-hand it is less easy and convenient to built with. For example, in order to lay flooring, round timber will need to be cleaved or planed in order to give a flat surface to lay boards on. Making joints in round timber is also more involved. Once built however, a round wood structure has good aesthetic appeal. Many of the structures at SCW are built using round wood timber frames and round wood supports for raised platforms.

Illustration 1: Round wood timber joint

11. As well as being easier to work with, sawing timber enables us to make use of the larger mature softwoods at Steward Wood which we are extracting as part of our woodland management operations. Sawn timber has been used for beams, flooring, cladding and roofing on many of the structures.

Living with the hill

12. As we live on a hillside, we have two options regarding our structure design if we wish to have flat floors.

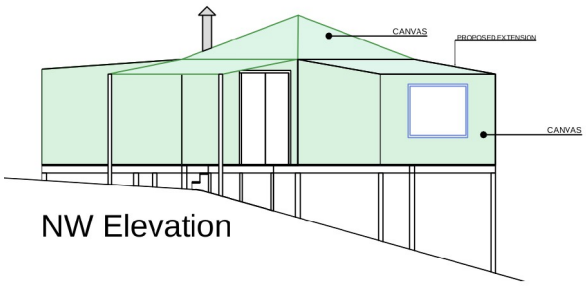

Illustration 2: Fern and Sharif's dwelling

13. Most structures are built on platforms raised off the ground. This minimises damp problems and also the impact on the landscape. It also has the benefit of added storage space under the structure. No digging or terracing is required and in the event of them being removed, the landscape remains unchanged.

14. Some structures, particularly the kitchen, long house and bathhouse, are built on the ground and needed some levelling. This has the advantages of higher stability and lower visual impact as they are generally lower, along with more internal space, enabling sleeping platforms and storage above. Building on the ground also has the advantage that internal weight is not an issue which enables the potential for

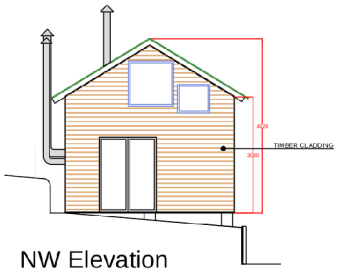

Illustration 3: The Communal Kitchen

larger thermal heat storage. My new home mentioned in paragraph 61 is being built on terraced ground for these reasons.

15. Prior to any ground-works taking place a survey of the flora and fauna is undertaken to ensure that no precious species are threatened by the work. Such ground works are also undertaken at appropriate times of the year to be sensitive to wildlife, for example, outside of dormouse breeding (Jun-Aug) and hibernation (Nov-Mar) seasons.

16. All works are carried out in accordance with the Council Directive 92/43/EEC on the the Conservation of natural habitats and of wild fauna and flora.

Treatment of effluent/grey-water

17. Our company policy states:

> *"Composting toilets will not be sited within 10 metres of a natural watercourse. There is to be no release of grey water within 10 metres of a natural watercourse unless adequately treated by a sand/gravel/charcoal or reed bed system. Biodegradable soaps, toiletries and similar products are only to be used."*

Four Stage Grey Water System using Effective Micro-organisms at SCW

18. The system has been constructed mainly out of reused materials including pipe work and water tanks. It is designed to purify the water before returning it harmlessly back to the environment.

    Stage 1. Food particulates are passed through a sieve which is emptied regularly and added to the compost.
    Stage 2. Oils are picked up through a tight weave 5 micron mesh bag.
    Stage 3. Grey water passes through the first gravel filled holding tank then into another tank and percolates up through layers of gravel and sand.
    Stage 4. Finally it passes into the third chamber and percolates up through gravel, charcoal and sand before emptying into a sink hole surrounded by established willow trees and nettles which make use of the nutrient rich water.

19. The system is checked and maintained throughout the year with little or no need for filtrate renewal due to the effective micro-organism digestion process.

20. EM- Effective micro-organisms is a combination of useful regenerative micro-organisms that exist freely in nature and are not manipulated in any way. They are cultured according to a specific method. Some of them are known to produce bio-active substances such as vitamins, hormones, enzymes, antioxidants and antibiotics that can directly, or indirectly enhance plant growth and protection. EM consists of 80 different kinds of effective, disease-suppressing micro-organisms. Each of these effective micro-organisms has a specific task. In addition, these micro-organisms enhance each other's working, and thus synergy occurs.

21. EM liquid is poured directly into the kitchen and bathroom drains. It helps prevent algae build-up, controls odour, digests oils, fats, food particles and deals with pathogens.

22. The micro-organisms in EM have been used medicinally and in food processing for many years,

which gives an indication as to how safe they are.

23. We use EM in a number of ways:

- In horticulture, fruit and flower cultivation
- For use in the home in daily life as anti bacterial surface cleaner
- The recycling of kitchen waste and turning it into valuable organic material
- In the garden to improve soil structure, increase productivity and to suppress both disease and weeds
- In animal husbandry

24. In using EM in our grey water systems we are actively repopulating the land with beneficial bacteria which naturally compete with harmful bacteria and pathogens, protecting the flora and fauna against disease.

25. We have a policy in place to use only biodegradable cleaning and personal hygiene products which are harmless to the environment

Organic building

26. Although a plan and drawings made before the build starts is important for both the builder and for observers it should be noted that low impact builds such as those at SCW are organic to some degree because we are building with natural and reclaimed materials. For this reason we included allowance for slight variation to design specifications in our 2015 planning application (page 16 para 56).

Structures and planning permission

27. Temporary planning permission has on two occasions been granted to SCW on appeal following refusal by the local planning authority (LPA). In both cases planning permission granted included permission for structures existing on the land when the decision was made. The initial appeal decision in 2002 set the precedent that the structures were considered operational development. For more information about planning permission and SCW please refer to our website (http://www.stewardwood.org/woodland/planning.ghtml).

28. Because we were given permission for the structures and because we were exhausted by the planning process, there has been little enthusiasm to apply for further permission to change our structures during periods of temporary planning permission. This was not helped by the fact that the LPA have shown no interest in working with us and were unlikely to approve any applications we made, meaning further appeals which we had neither the time, money or energy to undertake.

29. This has meant that we have been limited in the experimentation and development we have done in terms of improving our structures during these times.

30. It would be ideal for us and for others interested in research and development of low impact structures, if we where able to make modifications to them within certain parameters agreeable with the planning authorities without the need to submit further planning applications.

31. The 2015 planning application (DNPA ref 0054/15) included plans for some new dwellings and

an improved communal long-house demonstrating more innovative ecological building techniques and improved energy efficiency. This was refused by the LPA, but we hope to take our plans forward following a successful appeal.

The old and the new

32. Early structures built on the land were very simple benders or timber frame structures built on platforms with canvas coverings. Reclaimed materials such as boarding, doors and windows have also been used.

33. These types of structure are quick to build and quick to remove. Below is an account of the removal of such a structure:

34. On 11th September 2008 we dismantled one of the structures in the woodland. It was a bender construction made from coppice wood and reclaimed timber, pallets and windows, clad with ex-army tarpaulin and insulated with second hand blankets. This structure was built in 2005 as a short term residence. Five people where involved in the deconstruction task. Below is an account of the process.

Illustration 4: 14:57 – The inside of the structure has already been emptied of stuff. We are about to begin the deconstruction process.

Illustration 5: 15:07 – The side wall comes off. This consisted of tarpaulin and blanket insulation

Illustration 6: 15:17 – Here we have removed the roof cover. Two tarpaulins, one waterproof insulating and one green army canvas. You can see the bender construction well in this shot.

Illustration 7: 15:36 – The remaining walls were built from reclaimed pallets collected locally

Illustration 8: 16:08 – Here just the floorboards and more pallets remain. This structure was sat straight on a flat piece of land.

Illustration 9: 16:27 – All gone! There was still some work to do removing some of the materials. Most of these were reused or burned as firewood.

From beginning to end the deconstruction took just one and a half hours with five people.

Previous structures

Below are some photographs of areas which have previously had structures on them.

Illustration 10: Kat's bender built in 2000. This bender was dismantled in Autumn 2001.

Illustration 11: The same site in Autumn 2008

35. Kat's bender above was built on a platform with stilts into the ground. We can see from these photographs that little or no impact is left on the land after the structure was removed and time was allowed for regeneration.

An account of the dismantling of Seth and Mel's old house (Y)

36. Seth and Mel moved into their new house in May 2015. Below is an account of the deconstruction of their old structure which was built in 2007.

37. The process was started at the beginning of January 2016 and completed on 16th March 2016. Over this time, approximately 14 days were spent with about 3 people working to dismantle the structure and remove materials. Most of the time involved was taken with the transportation of materials, by hand, down the hill for reuse or disposal. It is estimated that deconstruction alone would have taken one person about 5 days.

Illustration 12: 5th January – The porch on the right hand side has been de-constructed and removed.

Illustration 13: 25th January: The balcony and kitchen have been dismantled and removed

Illustration 14: 3rd February: The front top story has now been removed

Illustration 15: 10th February: Living room removed and starting deconstruction of the back, top story

Illustration 16: 16th February: With the top floor removed all that remains is the lower back room

Illustration 17: 16th March: The site after completion, ready for flora and fauna to re-establish

Existing structures

38. Below is a description of some of the existing structures. Details of all the structures can be found in appendix 1. Plans of the structures are also available.

Sharif and Fern's home (R)

39. This dwelling is a hexagonal house of round wood construction, built on stilts into the ground to provide a flat floorspace. First built in 2004, the Hogan Whirling log roof was constructed as a week long educational course. The main structure is made from round wood timber and clad with ex-army green tarpaulin, reclaimed boards and windows. As a recent addition, a cob oven was built alongside the structure. A raised bed platform was made inside in 2012.

Son and John's home (L)

40. John and Son's home began construction in 2004. Is built on a platform on Larch stilts originally going into the ground. As posts have rotted over the years, they have been replaced with posts sat above the ground on plinths to add to the life span of the posts.

41. The internal space is approximately 16x20ft, rectangular, covered with reclaimed insulation and army tarpaulins to reduce visual impact.

42. There is a small balcony running around east to west of the structure and underneath has been dug out somewhat to make additional workshop and storage space.

43. There is a 12x9ft bedroom down stairs. The upper floor has two small sleeping spaces. All windows and doors are salvaged as is the majority of the structures materials.

Daniels home (X)

44. Daniel's current house is a simple canvas covered 12x12' structure with a porch. It's a timber frame structure with an apex roof and reused windows. The uprights go into the ground which has meant additional uprights being put in over the years as well as diagonal supports being replaced.

45. Whilst this type of structure worked, they were inefficient due to lack of insulation and required regular maintenance due to their design. Looking forward, it now seems important to improve our structures' longevity and energy efficiency.

Kitchen renovation (J)

46. The communal kitchen was renovated in 2011-2012 using sawn timber from the land. This included replacing the timber frame which now stands on rammed earth tyres to keep it off the ground, and re-cladding the structure with timber.

New Structures

47. The new structures, the plans for which were submitted with the 2015 planning application, are designed with energy efficiency and lower maintenance considerations.

48. Because of the temporary nature of our previous structures it is essential that we rebuild structures in order to continue living safely and comfortably on the land. Older structures with decaying timber, especially those built on stilts into the ground, will become unstable and unsafe. The newer structures also offer a much better example of ecological building methods which can

be experienced by our many visitors who are interested in this subject.

49. Although our newer structures are built with more longevity in mind and some (particularly Merlin and Rebecca's home mentioned below) have required terracing of the ground, as the foundations are simple blocks resting on subsoil, it is still possible to remove them and leave the woodland mostly unchanged should the need arise (although this would take longer than our previous more simple structures). In the case where the ground has been terraced, the shape of the land may be a little different after removal but this is of little consequence on a plot of land which has been sculpted by farming, forestry (including the terracing for woodland access tracks) and the terracing for a house and gardens which existed at the turn of the 20th century. None of the changes we make will affect the woodlands ability to regenerate back into a natural state.

Illustration 18: Granite block used as post footing

Communal Longhouse rebuild (J)

50. The current communal longhouse has been built on a platform made from upright wooden posts into the ground supporting beams and boards. The main structure is built from round wood from the woodland and clad with canvas and reclaimed boards such as plywood and sterling board. The south face of the structure contains multiple reclaimed windows (mostly double glazed). There is minimal insulation consisting of blankets and ex-army insulative tarpaulin. Although the structure has served us well, it is not energy efficient because of heat loss due to the poor insulation. It also has a limited lifespan due to the wooden posts holding it up which are buried in damp ground.

51. The plan for the rebuild of this structure is to level the ground - not a lot of earth movement is needed because the gradient is not high. We will mill timber from the land and build a timber frame, timber clad structure. This will be supported on either rammed earth tyres or stone blocks placed directly on the subsoil exposed by the terracing. The roof will have an apex and will be high enough to accommodate a second floor to be used for visitor accommodation. The inside of the structure will be clad also leaving space for a good layer of insulation between the external and internal cladding. Like the old structure the south facing wall will have plenty of windows (reclaimed) in order to allow for daytime lighting and passive solar heating.

52. As well as having much greater thermal efficiency, the new build will be more visually appealing especially once the new timber has had the opportunity to age a little. The build will make the space far more functional for recreation, running courses, visitor accommodation and as a demonstration of ecological building. It will be of a similar shape and size to the current structure.

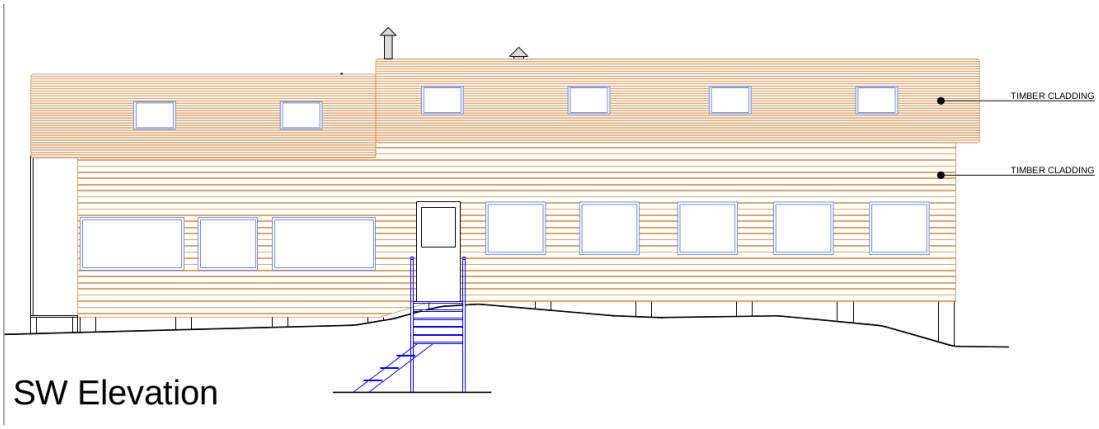

Illustration 19: Communal longhouse plan

Seth and Mel's home (E)

53. The need for this dwelling is to house a family of five. This house which had plans submitted to the LPA in 2015 has now been completed. It has been built on stilts with no earth works other than digging holes to reach the subsoil onto which blocks were placed in order to support the upright stilts. Timber for the structure was harvested from Steward Wood and milled in the winter of 2013-2014. A platform was constructed using this sawn timber (6”x2” joists and 1.25” floorboard with 4”x2” bracing) on upright polewood. The timber frame structure has been clad on the outside wall with timber milled on site. Internal cladding has been done with plasterboard for its insulative, rodent and fire resistant properties. Between internal and external cladding straw has been used for insulation. The upper floor boards are also made from the milled timber. The planned roofing is larch shingles from our timber.

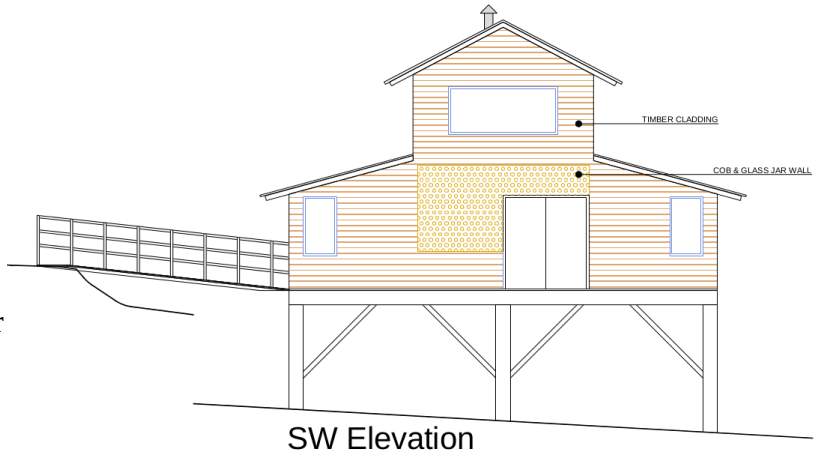

Illustration 20: Seth and Mels house plan

54. In late spring 2015, Seth & Mel finished building their new home with the idea of having a cosy underfloor heated house with running hot water for showers and washing up. So they looked at buying a stove that would be capable of underfloor heating, heating water, cooking on, with a two foot log box, a large thermal mass and also one where you could see the fire inside as they had not had the pleasure of this in 15 years of living with wood as a fuel.

55. With shock, they discovered that nothing with that specification was available second hand, and a new one would be about £6000 and even then would not meet all of the requirements listed above.

56. Therefore, Seth, who has an engineering background, designed a stove and learnt how to weld in order to be able to make it. He wanted it to be totally made out of recycled parts, apart from the fire glass which would have to be bought.

57. So he built one using a 47kg gas bottle as the main body, fitting it with a back boiler from a Rayburn, a hotplate, and a smoke stack made out of an old bit of pipe. The welding was done in a friend's garden as we don't have the power to do that in the woods. Finally, once completed, it was plumbed in with the water tank and the underfloor heating pipes.

Illustration 21: Wood burning stove construction

Illustration 22: Wood burning stove plumbed in, alight and making hot water

58. The plan is to cover it in a thick layer of cob soon to give it a large thermal mass.

Daniel and Lorna's homes (T & V)

59. Daniel and Lorna's homes are of the same design. They will be built on round wood stilts supported on blocks rested on the subsoil exposed by digging a small hole. These uprights will support a platform made of beams and boards which serve as the floor. A timber frame and cladding will be sawn timber most likely milled from wood from the land or other reclaimed or locally sourced timber. Reclaimed windows will be used and situated as per the plans. Straw and reclaimed insulation will be used in the space between internal and external cladding and in the roof. This type of dwelling is similar to the older styles used within the woodland but with much improved insulative properties and built to last longer and require less maintenance. They demonstrate a simple design which is easy to construct whilst still using ecological principles.

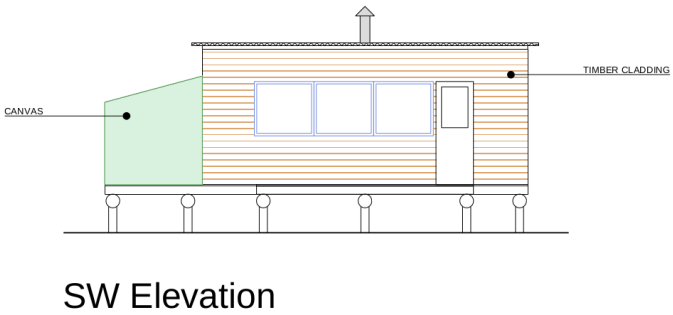

Illustration 23: Daniels house plan

60. Currently, Daniel has built his platform and sourced local timber for the next part of the build from Mike Gardner (a forester based at Haldon Forest near Exeter) along with materials from Seth and Mel's old house.

Merlin and Rebecca's home (D)

61. The house we are currently living in was designed to last about five years. We are still living in it thirteen years later. Maintenance cannot hold it up much longer and because it is raised off the ground, safety is a concern especially with the strong winds we are sometimes subjected to.

62. The aim for our new build is to construct a home which is low impact, beautiful, energy efficient and practical. Previously I have always built on a platform, but with this build I decided to do some ground works and terrace so I can built directly on the ground. This has the advantage of higher stability and lower visual impact because the structure is of an overall lower height. I also decided to have a turf roof, and due to the lay of the land this will meet the ground in places giving the structure an adorable hobbit hole like appeal!

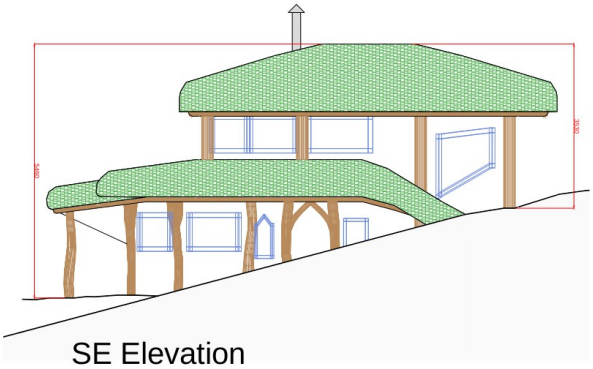

Illustration 24: Merlin and Rebeccas house plan

63. At this stage I have completed most of the ground works and started building the round wood timber frame.

64. For the initial ground works I decided to hire a mini digger for terracing. This is the highest impact element of the build using machinery powered from non-renewable sources. On doing this, I discovered many large granite boulders. In order to remove these, I bought an SDS drill and made some metal feathers and tares' to break the rocks into small enough pieces to move. This is an ancient method of breaking granite, used commonly on Dartmoor in the past (however being before SDS power tools, they drilled by hand). All electricity for the power tools I have used (including chainsaw) has been provided from renewable sources by PV solar and micro hydro electricity generated on site.

65. Although removing the granite boulders was a monumental task, it has had the advantage of supplying plenty of stone to use as a base for structural posts and walls. The structure will contain no concrete foundations, just granite from the site bedded back into the subsoil of the ground.

66. I decided to build using round wood. This is mostly because I like round wood construction but also because milling timber was not a ready option. Most of the timber used for the construction is from Steward Wood and felled and moved to the build site using human power alone.

67. The main structure will be a round house with reciprocal frame roof. From this the lower floor will extend two meters outwards in a semicircle around the south west side.

68. Some reclaimed timber will be used in the construction, mainly the floor boards for the upper floor. These have been made from used scaffolding planks bought locally, which I am sanding and treating with linseed oil.

Illustration 25: Computer model of Merlin and Rebecca's house design

69. Once the timber frame is complete a turf roof will be added to both stories. This will consist of a canvas layer, straw insulation, a waterproof rubber pond-liner, biodegradable carpet and topped with soil for the turf. Walls will consist of straw bales rendered externally and internally with a lime render. Timber framing will be visible protruding through parts of the render. Windows from reclaimed sources will be added for

internal lighting and passive solar heating. These will merge with the render or wooden frames.

70. The turf roof will mean visual impact will be minimal. From some angles the structure will appear like a small hill!

71. My idea is to have this structure, once complete, as a demonstration of completely zero carbon running. All heating will be from passive solar or local timber offset by its regrowth. A thermal heat store will increase the efficiency of the wood burning stove. Cooking will be from local timber or biogas produced by anaerobic decomposition of organic waste. All electricity will be from photo-voltaic solar or micro hydro systems on the land.

Dwelling houses and residential units

72. For the purposes of planning, the LPA decided that three of the existing or proposed live-in structures are classified as “dwelling houses” and the remaining as “residential units”. These are labelled as such under the “Purpose” column in Appendix 1.

Conclusions

73. Building at Steward Wood has been a fantastic journey for all those living here and for the returning visitors who have passed through over the years. Our structures are always of great interest to our many hundreds of visitors. These include mainly people interested in alternative ways of living but also students, the media, artists and photographers.

74. They provide examples of a range of ecological building methods and inspire people to consider making changes to the way they live, whether to make small changes to the structures they currently inhabit for environmental benefit or even to consider ecological self build themselves.

75. They are built in a way which means that should the project come to an end, they can be dismantled and the land returned to a natural non-human-inhabited woodland.

76. They provide the housing needs for 5 families, 1 couple and 3 individuals. They also provide infrastructure for running educational courses and accommodation for volunteers, course attendees and visitors. All these reasons make them essential for the successful running of the SCW project.

Glossary

77. **Bender**: A simple structure made from bent wooden poles (usually coppiced hazel or ash). The frame is made by arching the poles to form a dome or tunnel and weaving or tying them together. A canvas tarpaulin (and optionally insulation) is then used to cover the structure.

78. **Feathers and tares:** A three-piece tool set used to split stone.

79. **SDS:** A type of drill bit shank used in hammer drills

80. **PV solar:** Photo-Voltaic solar panels are panels used to produce electricity from the sun's light energy.

81. **Micro Hydro:** A small (in our case, very small – 200-300 watts) system consisting of a penstock (an enclosed pipe that delivers water to hydro turbines), turbine and generator to harvest electrical energy from the potential energy in water as it moves down the penstock.

82. **Organic architecture:** A philosophy of architecture which promotes harmony between human habitation and the natural world through design which is sympathetic and well integrated with its site. Thus buildings, furnishings, and surroundings become part of a unified, interrelated composition.

83. **Self build**: In this document, by 'self build' I mean designing and building one's house hands-on and not involving outside contractors such as architects or builders.

Appendix 1 – Table of existing and proposed structures

Ref	Type	Name	Purpose	Date built	Dimensions LxWxH (mm)	Stories	Structure type *	Foundation type	Floor type	Cladding type *	Roof type	Other notes
A	Existing	Bike shed	Storage	2001	5200 x 2850 x 2450	1	Reclaimed timber frame	Wood in ground	On ground	Canvas tarpaulin, half wall	Canvas tarpaulin	
B	Existing	Growing Area Shed	Storage, Potting	2007	5200 x 4700 x 2590	1	Reclaimed timber frame	Wood in ground	On ground	None, open	Corrugated iron	
C	Existing	Half bender in Glade	Course venue, shelter	2007	5500 x 3350 x 2750	1	Bender	Wood in ground	On ground	Canvas tarpaulin, open one side	Canvas tarpaulin	
D	Proposed – build in progress	Merlin and Beccys House	Dwelling house	In progress	8030 x 6860 x 5460	2	Round-wood timber frame round house	Poles resting on granite blocks on subsoil	On terraced ground	Straw bale with lime render	Living turf roof	See para's 61 – 71
E	Existing (new)	Seth and Mels House	Dwelling house	Spring 2015	9000 x 6700 x 5660	2	Sawn timber frame	Poles on concrete buckets on subsoil	Platform on stilts	Sawn timber	Roofing felt Planned Shingles	See para's 53 – 58
F	Existing	Female urinal	Toilet	2007	1150 x 1150 x 2000	1	Sawn timber frame	Wood in ground	On ground	Sawn timber	Polycarbonate	
G	Existing	Compost toilet	Toilet	2000	3630 x 2930 x 5050	1	Sawn timber frame	Wood in ground	On ground	Sawn Timber	Corrugated iron	
H	Existing	Field Kitchen	Storage, course venue, shelter	2009	5010 x 3620 x 3620	1	Sawn timber frame	Frame on bricks resting on ground	On ground	Canvas tarpaulin with open ends	Canvas tarpaulin	
I	Existing	Fire Pit Covering	Shelter	2007	4780 x 2870 x 2150	1	Bender	Wood in ground	On ground	Canvas tarpaulin with open ends	Canvas tarpaulin	
J	Proposed over Existing	Communal Kitchen and Living Space (Longhouse)	Kitchen, dining, accommodation , courses	2000	16700 x 4500 x 4620	2	Sawn timber frame	Rammed earth tyres on subsoil	Platform	Current canvas tarpaulin Proposed sawn timber	Current canvas tarpaulin Proposed sawn timber	Existing structure similar size round-wood frame. Para 50 – 52
K	Existing	Tool Shed & Wood Store	Tool Shed & Wood Store	2010	5140 x 640 x 2100	1	Sawn timber frame	Wood in ground	On ground	Sawn timber, open front	Reclaimed timber	
L	Existing	Son and Johns House	Residential unit	Spring 2004	8830 x 6200 x 4070	1 ½ **	Round-wood timber frame	Wood in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	Balcony extends 1-3m on 2 sides
M	Existing	Marley's Bender	Residential unit	2001	5080 x 3260 x 2570	1	Reclaimed timber frame	Wood in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	Was Nickys and previously Bens house
N	Existing	Bath House	Bathing and washing	2001	4840 x 3930 x 2440	1	Reclaimed timber frame	Wood in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	Has solar panels on roof
O	Existing	Power Tower	Power control equipment	2005	1650 x 1630 x 1200	1	Reclaimed timber frame	On existing granite rock	N/A	Canvas tarpaulin and wooden door	Plastic tarpaulin	Has an IBC water container on top
P	Existing	Ollies House	Residential unit	Winter 2013/2014	4770 x 4470 x 2500	1	Reclaimed timber frame		Platform	Canvas tarpaulin	Canvas tarpaulin	Built on the site of the original kitchen and later workshop Proposed decking 1300mm SW side
Q	Existing	Chris and Owens House	Dwelling house	2008	9150 x 4200 x 4030	2	Sawn timber frame		Platform	Sawn timber	Shingles	11700 x 4800 including decking
R	Existing, proposed extension	Sharif and Ferns House	Residential unit	2004	8310 x 9490 x 3080	1	Round-wood timber roundhouse	Wood in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	Dimensions include proposed extension

S	Existing, proposed extension	Jamies House	Residential unit	2001	9320 x 4600 x 2900	1	Round-wood timber	Wood in ground	Platform	Sawn timber	Canvas tarpaulin	On site of Peters old house Dimensions include proposed extension
T	Proposed – build in progress	Daniels House	Residential unit	In progress	7800 x 4200 x 2600	1	Sawn timber frame from local wood	Poles on blocks on subsoil	Platform	Sawn timber from local wood	Corrugated iron	Decking extends 1500 on SW side. Para's 59 – 60
U	Proposed	Sharif's Workshop and Teaching Space	Workshop and Teaching Space	In progress	5000 x 3600 x 2460	1	Sawn timber from local wood		On ground	Sawn timber from local wood	Polycarbonate	No wall along front
V	Proposed	Dwelling for a potential new member	Residential unit	Not started	7800 x 4200 x 2600	1	Sawn timber frame from local wood	Poles on blocks on subsoil	Platform	Sawn timber from local wood	Corrugated iron	Decking extends 1500 on SW side. Para's 59 – 60
W ***	Existing – due for removal	Merlin and Rebacca's old house	Residential unit	Autumn 2000	9144 x 4877 x 3500 (approx)	1 ½ **	Roundwood timber frame	Timber poles in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	This structure will be removed on completion of structure D (estimated summer 2017)
X ***	Existing – due for removal	Daniel's old house	Residential unit	Winter 2000/2001	4877 x 4877 x 3000 (approx)	1	Roundwood timber frame	Timber poles in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	This structure will be removed on completion of structure T (estimated summer 2017)
Y ***	Removed	Seth and Mels old house	Residential unit	2005	4572 x 7315 x 4500 (approx)	1 ½ **	Roundwood timber frame	Timber poles in ground	Platform	Canvas tarpaulin	Canvas tarpaulin	On site of Clares old house built 2000 Removed winter 2015/6 Decking extended 2500 on SW side.

* All timber is timber from the woodland unless stated otherwise (ie reclaimed timber)
** Second story is not full height
*** These structures did not form part of the recent planning application and so do not appear on the block plan below. They where however included in the DNPA enforcement notices with the given references.

Appendix 2 – Block Plan

0 50 m

Scale: 1:500

SCWBLPL2014_1:500