A Record of Repairs to the Leechwell, Totnes

Repairs complete: the water flows and new offerings appear...

As undertaken by the Leechwell Garden Association and Totnes Town Council

May 2015

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Contents

1. Background

In May 2015, after a gap of almost 20 years, work began to repair the historic Leechwell, scheduled as an Ancient Monument in 2002. The Leechwell Garden Association has co-ordinated the project, working with Totnes Town Council, English Heritage and the owner of the inner well, with funding from the council, the Totnes Trust and the Totnes and District Society.

Given the paucity of information about the well and in the interests of any future restorers of it, this short report describes the application to English Heritage for scheduled monument consent (SMC) the repair process and what was discovered during the work. The application for SMC is attached, where details of materials and methods used and the wording of the new sign can be found. Throughout, we have used the following terms for the three parts of the well: 'the cobbled basin' (sunken area containing the three granite troughs), 'the outer chamber' (lying behind the grill, visible and just accessible) and 'the inner chamber' (source of the water, lying behind a low entry in the back wall of the outer chamber, both invisible and inaccessible)

A much-visited and much-loved site in Totnes the well has nevertheless suffered years of neglect. The well was last repaired in 1996 when it was said that a layer of tarmac had been removed from the outer chamber and the base re-puddled with clay. By 2013, water was seeping away through the floor of the outer chamber so that the water supply to the granite troughs was almost non-existent, the cobbled basin was clogged with sludge, grass and stagnant water, ivy, buddleia and other foliage was growing in the outer walls and the stonework and wall capping was badly cracked. The information board had been lost many years ago.

Fig.1 View from Leechwell Lane. The Lane divides here, leading to Maudlin Road on the left and to the Kingsbridge Inn on the right. The garden of Westhill House lies above the back wall of the well. The pebble spiral was created during earlier May celebrations here.

Although scheduled as a 'holy well', a term used by English Heritage to cover ancient wells which have a history of spiritual, healing or magical use, the process of putting in the application for SMC revealed just how little is known about it.

The well was first recorded in deeds from the 13th Century and named wardens were appointed to care for it in the 15th Century, as they were for other wells in Totnes (Watkin, 1914) Small items of information about the well surface over time, but there is no real evidence as to how it evolved over many hundreds of years, from a water source percolating out of the rock strata (probably from Windmill Down on the other side of the Kingsbridge bypass) to the large and elaborate structure with three granite troughs that we see today. While ownership of the two chambers behind the grill can be identified, ownership of the cobbled basin cannot be traced much before or beyond the 1890s although historically the Town Council have taken responsibility for its upkeep.

The earliest maps/drawings showing the well date from the 19th Century. The Tithe Map of 1840 does not show the well at all. Edward Windeatt (1880) appears to be the first to record the names Totnesians gave to the three troughs (Snake, Long Crippler and Toad) and, reputedly, the use of the water to cure eye diseases, a tradition which may have reached much further back in time. Since

then – clearly an ongoing and evolving story - others have re-written and embellished Windeatt's account but essentially added nothing new to what is already known (Mann, 2009)

2. Making the application for Scheduled Monument Consent (SMC)

The Leechwell Garden Association was asked by English Heritage to include the well in their application for consent to repair the immersion pool (which is fed by water from the well) in the nearby Leechwell Garden. In the event knotweed in the Garden has delayed work on the pool, but in collaboration with the Town Council, the LGA decided to go ahead with an application to repair the well as a separate project. *A small committee began work on the application in late 2013.*

The objective was to use the lightest possible touch and focus on the minimum repairs necessary to return the flow of water to the well and make it safe and clean again. A new information board would replace the one lost many years before. Other than that, nothing new would be added and nothing old removed from the area. Clearly the choice of materials to be used inside and outside of the well structure, the stonework repairs and the task of working with clay, lime and water required specialist knowledge and expertise. *The project was fortunate in having the input of Oliver Bosence, historic buildings conservation consultant who surveyed the well and wrote the Schedule of Works for its repair, and the services of Bruce Kirby of Acanthus, an expert in the restoration and conservation of stonework and historic buildings, who did the work.*

The brief covered the following:

- To clean, repair and re-puddle the outer well chamber
- To remove foliage and repair cracked outer walls and wall capping
- To clear, clean and repair if necessary, the cobbled basin, troughs, pipes and drains
- To put up a new sign

We received SMC consent from English Heritage in December 2014. By the time the work had gone out to tender the earliest possible start date was May 2015 - two days after the May celebrations held at the well.

3. A diary of the repair process

Day 1. Tuesday May 5th Bruce Kirby and William Webb of Acanthus started work on the well, with sunshine, showers and strong wind all day. They took down the wooden panel between the Nursery Car Park and Leechwell Lane (to enable Bruce to park near to the site- access to the well is a major problem) and put safety barriers around the well and the lane entry. There was graffiti on the back wall of the well and on the wall of the lane.

The flower and other offerings in the well were carefully moved to the lane, where there is also a spiral of white stones left from the celebrations which took place here on Sunday. We put up information notices to tell people what is being done and why.

Fig.2 The well overgrown and neglected. Bruce and Will remove the old red clay base.

Bruce and Will cleared the lower foliage away and found that polystyrene foam had been squirted into some of the leaking holes in the cobbled basin. They started on the major work of re-puddling the outer chamber and took out the metal grill (broken bolts will be replaced). The good news is that there are *no bats* in the area inside the grill. However*, a newt, a toad, some toad-poles and three leeches are found!*

There are two chambers behind the grill. All the re-puddling will be done in the outer chamber. (The deeper, inner chamber area is hidden and inaccessible, the opening is only about 2ft high, too low to enter or to see inside of)

Water was running through from the inner chamber and along the floor into the outer chamber. Because there had been heavy rain, all three outlet spouts were flowing a little, although the centre one was partially blocked. The pump diverts water outside to the main drain outlet. The water was red with clay but this is harmless and should settle quickly.

Bruce and Will removed the old clay puddling and found that it is very shallow, not what we expected, only about 5" deep. The big surprise is that beneath the clay layer is a concrete floor- covering the whole interior area (no idea how thick this is) So, the well is not puddled as everyone thought- it merely has a thin layer of clay laid over the concrete. There is a hole in the concrete, about 2ft square. This is not a constructed hole, but a jagged-edged one, clearly drilled or smashed out after the concrete had set. Two areas of little bubbles are welling up nearby.

The brief of this project is to remove the clay only, so for the time being the concrete is left where it is. Bruce and Will repair in the hole in the concrete and press new white clay on top of it.

First impressions are that some water was still bubbling up through the outer cobbles as it did before. Water was flowing out the spouts on the evening of Day 1. Very heavy rain by 4pm. Lots of clearing up to do in order to leave the site clean and safe. Bruce has found many rocks, the remains of rotting plants, straw, wood and ribbons, flower pots, broken glass, a table knife and some coins (returned to the well) in the chamber and the troughs, but nothing of special interest.

Day 2. Wednesday May 6th. This morning the flow was almost gone from the spouts and there was little water in the outer chamber. After consulting with Oliver, Bruce decided to remove the stone and clay with which he had blocked the hole yesterday and the water began to flow back again. *It appears then, that the hole in the concrete is necessary for the well to function.*

This suggests that the original concrete floor was a failure in that it directed water down behind the back of the concrete forcing it to reappear from under the outer cobbles. This was modified - maybe at the time, maybe later- by making a hole in the concrete which allowed some of the water to rise back up through the hole and exit through the three spouts as it should. Pruw remembers seeing the same bubbling effect of rising water when the well was repaired in 1996 so maybe the concrete and the hole were already in place at this time.

It was hard to know how to proceed at this point and we were lucky in that Oliver Bosence was able to come out at short notice. With his help, more debris was scraped away (the colour of the water turned red again at this point, perhaps because the back chamber was filled with red soil?) and the new clay pushed to the edges of the chamber to seal the side walls and to raise the water level behind the spouts. Water then flowed quite well through the two lower spouts, but only a little out of the left hand spout.

Oliver and Bruce think that despite the hole, much of the water supply is being diverted, still running away behind the concrete raft. This cannot be rectified, and the only permanent solution would be to remove the concrete and puddle the well properly as it must have been in the distant past. By 5pm the water ran clear and the granite basins were clean and full of water again.

Fig.3 Meeting at the well. Left to right: James Bellchambers, Shirley Prendergast, David Martin, Pruw Boswell, Bruce Kirby. Dave Mitchell is taking the photograph. (The hessian protecting the new lime mortar is still in place)

After discussion it is decided that Bruce will complete the job as agreed- ie fill cracked stonework and capping, clear silt and debris, clean the cobbles and put up the new notice board. If the water continues to flow through the spouts (two fairly strongly) that is a great improvement. The whole area will function better, look better and be more secure. *Short of removing the concrete little more can be done for now.*

The next stage would be to get estimates for removing the concrete and doing a proper re-puddle, raising the money to do this and organising to get the work done.

Day 3 Thursday May 7th. Today Bruce began repairing the stonework - some large cracks and a very unsteady capping to the left hand wall- rather dangerous looking. He also cleared most of the soil and rocks from the far left hand corner of the cobbled area. Dave has mounted the information board for the well on black marine ply and it will be put up at the end of the job. The re-furbished direction sign (organised by Helen) has now been put back on the gate post of Westhill House. Both signs look appropriate in black with gold lettering.

Fig.4 The new information board mounted on marine ply. Thanks to the Mitchells, Bruce was able to link up a power line and store some of his equipment in the garden of Leechwell Cottage, opposite the well.

Oliver (by email) thinks that the best long term option is to remove the concrete base and then properly puddle the well. We agree that while this is the only long term sustainable solution (in that a clay base can easily be repaired or replaced) it is possibly a risky process, both for the contractor and in terms of further possible damage to the fabric of the well. The pros and cons need careful weighing up. Pruw is looking into how this might be funded and who might do it (if EH are agreeable)

Day 4 Friday May 8th. Rain on and off all day. Three spouts running, two quite strongly and steadily, the third on the left hand side not very strongly, but no amount of adjustment of the clay can produce a greater flow in this one.

The bottom edge of the left hand spout is very eroded so that at least half of the water runs away down the wall before it can emerge. Bruce is looking into fitting a small piece of curved metal - slipped inside the existing metal pipe - to direct a stronger flow further out into the trough. He has also experimented with blocking three main leaks in the cobbles with clay. This looks quite effective and on Monday he will make this more permanent with a mixture of clay, stone and lime mortar.

Today was about repairs to the stonework using the Cornish lime, Chard sand and Sussex brickdust mix as specified by Oliver. This looked very bright when it went on the wall but will mellow to a sand colour quite quickly. It will be protected by hessian over the weekend. Bruce has removed the graffiti inside the well but there is still some on the nearby wall of the lane.

Fig.5 Caught just in time? Substantial repairs were needed to the left hand wall, probably the most recently built element of the well.

A lot of work was needed on this wall. A chunky piece of root (buddleia?) was embedded in the capping, which looked very unstable once the foliage was removed. Bruce plans one more day of work to complete on Monday.

Day 5 Monday May 11th. We met at the well to decide the position of the new board - above head height on the right hand wall where it can be easily read.

Fig.6 The board is unobtrusive but legible from below, the text can be found in Section 6. Hopefully, the board will be out of reach of graffiti artists. Some large cracks in the wall have been repaired. A depressed channel drains water along the base of the wall from the trough called 'Toad'.

The water was still running and the stonework repairs have mellowed in colour today. Everyone was very happy with the work. Two small jobs remain – fitting a drip pipe to the left hand spout and finding a suitable water resistant substance to block the three leaks. Bruce will return to do this. Overall nothing more can be done to increase the water flow unless the concrete is removed- something that is beyond the brief of this current project.

The well now looks rather bare and no doubt some people will be disappointed with this. But in time the ivy and other foliage will grow back and soften the look of the stone structure. The water is flowing through all three spouts - strongly through two - and the sound of splashing is very

welcome, it can be heard some distance away and makes the whole area come alive. Rather than silt, grass and stagnant slime, the troughs are clean and full of fresh running water.

Fig.7 This is a glimpse of the well as the living place it must once have been: a cared-for and highly valued resource with a powerful atmosphere of spirit of place, reflecting the well's uniqueness and antiquity as one of the most significant in Devon (according to Faull, 2005).

Members of the committee were:

Pruw Boswell (Totnes Town Council)

Jim Carfrae (Leechwell Garden Association LGA)

David Martin (LGA)

Dave Mitchell (LGA)

Helen Nathanson (Totnes Town Council)

Shirley Prendergast (LGA)

Acknowledgements

The report was compiled by Shirley Prendergast shirley.prendergast@gmail.com and Section 4 by Bruce Kirby bruce@acanthus.org.uk

Photos in main section were taken by Dave Mitchell zenoshrdlu@gmail.com

Other photos taken by Bruce Kirby (with input from Jim Carfrae for the two diagrams)

With thanks to Keith Miller, Inspector of Ancient Monuments, Historic England, to Oliver Bosence and to James Bellchambers for helpful advice and feedback.

References

Terry Faull (2005) *Secrets of the Hidden Source. In search of Devon's Ancient and Holy Wells.* Halsgrove Discover Series.

Bob Mann (2009) The unfolding Folklore of the Leechwell. *Totnes Review, Number 4, 13-15*

H.R. Watkin (1914-17) *The History of Totnes Priory and Mediaeval Town,* Vol 1. Torquay

Edward Windeatt (1880) An historical sketch of Totnes. *Transactions of the Devonshire Association 12, 159-78*

Fig.8 Day1: Will manages to squeeze inside the outer chamber.

4. Bruce Kirby's detailed notes on re-puddling the outer chamber of the well
(With thanks to William Webb for his help with the work)

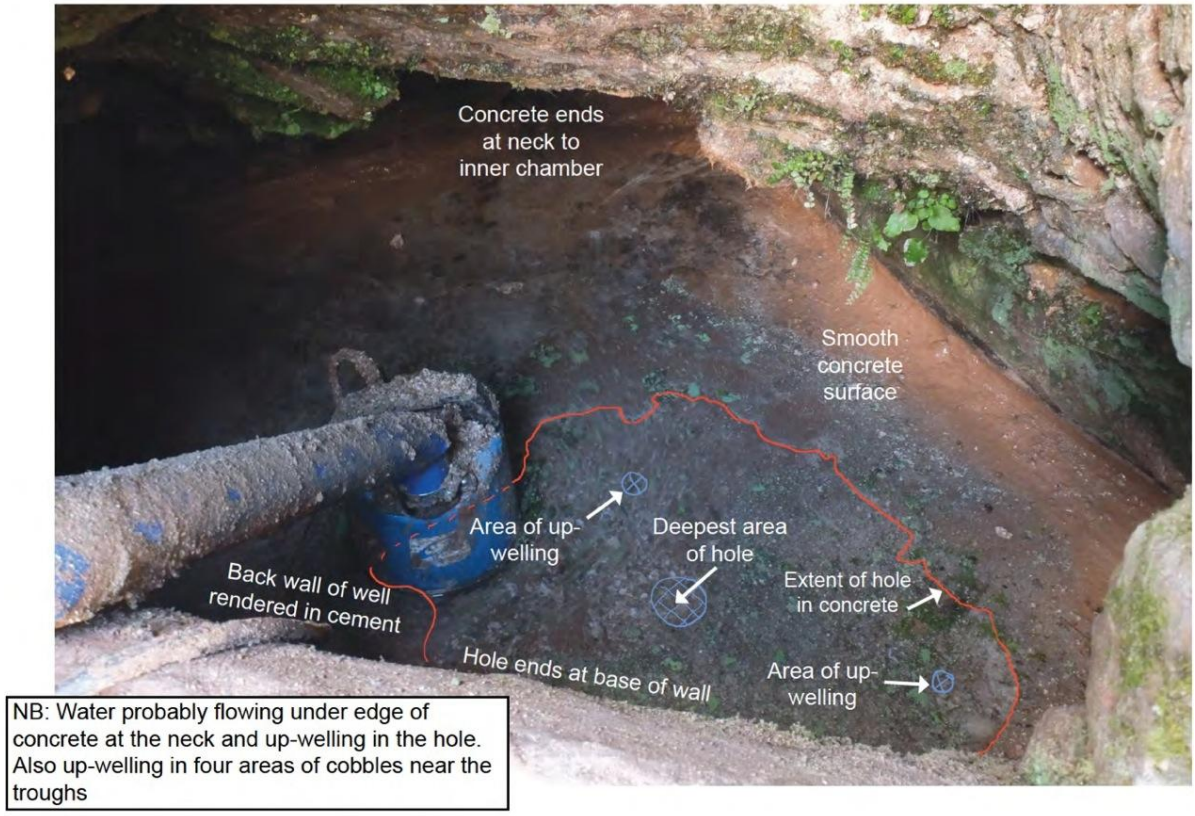

Fig.9 What was revealed when the clay, silt and debris were removed from the outer chamber

This revealed a smooth cement floor with an irregular hole in it, 18" to 2ft square. The hole is off centre towards the right and closer to the front wall. There is a deeper area in the centre of the hole, up to 18" deep. There are two areas of up-welling, these were noticed in 1996 when the well was last repaired. It was said at the time that the well was lined with tarmac.

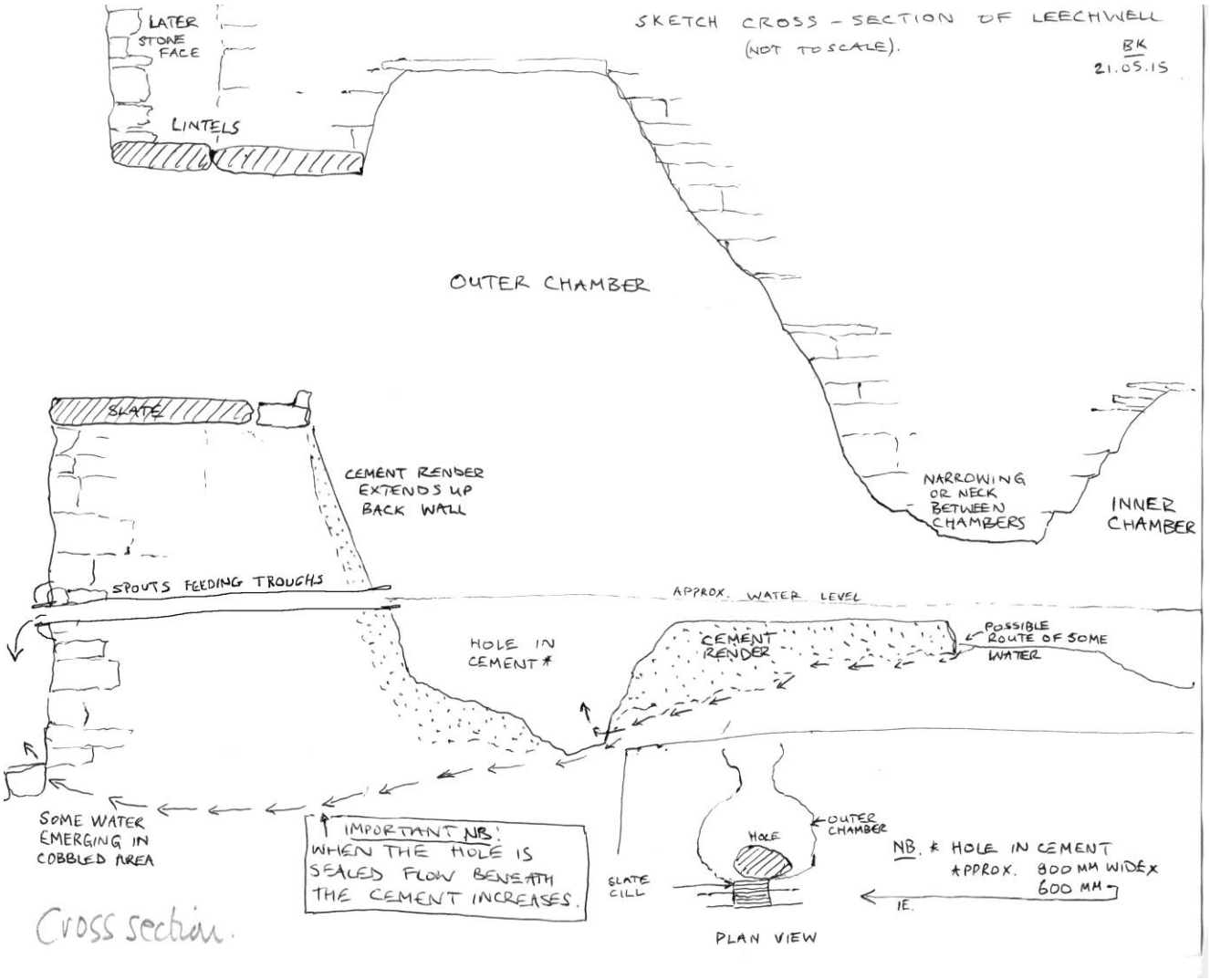

Fig.10 Cross-section and plan view of the interior of the inner chamber showing cement lining, hole, water level and position of spouts.

The cement may be at least 5” thick and extends up to sides of chamber and the back wall beneath the spouts. The centre of the hole may be 18”- 2ft deep and has areas of upwelling water. The water level in relation to the spouts is crucial- the clay helps to raise the water level above the concrete, but there is little leeway as the concrete is set just above the level of the floor of the inner chamber, the source of the water. When the hole is sealed the water ceases to flow.

Fig.11 A dam was formed and a pump was used to remove as much water as possible.

Fig. 11 shows how the clay dam holds back the water so that repairs can take place. Two areas of upwelling were located. Hole sealed with stone, hydraulic lime NHL3 and Chard sand (ratio 1:2:5)

Fig.12 The Webb technique!

Once the hole was sealed, grey ball clay from Ringslade Quarry (soaked and worked to make pliable) was used to puddle the base and repairs, to seal leaks and to raise the water level behind the spouts.

Fig.13 Working backwards towards the neck and channel with the clay. The shallow opening to the inner chamber can be clearly seen. The interior is in good condition, only a few small repairs were needed.

Fig.14 The channel beyond the dam is the last to be re-puddled.

The water flow through the left hand spout (which is fractionally higher than the other two) initially increased due to pressure of the dam but was lost as the dam was removed. However, the following day the water flow through all three spouts had almost gone and the flow through the cobbles increased. As a result, Oliver and Bruce decided to reinstate the hole in the concrete and make channels in the clay to bring water to each spout, at which point the flow through the spouts quickly increased.

Fig.15 Newly re-puddled interior complete.

This shows the clay smoothed out and water flowing in from the back entry to the inner chamber. The stonework dividing the two chambers is generally in good condition. Bruce wonders if the inner chamber is possibly not as natural as originally thought... one more mystery to ponder over?

5. Notes

a. The key to the padlock on the lower grill has been lodged with the Town Council offices.

b. **The two aluminium grills to the well:** Bruce makes an interesting suggestion: that it might be possible to have two new iron grills made by a blacksmith to replace the utilitarian aluminium ones that are there at the moment- perhaps holding a design competition? The Leechwell Garden gates were commissioned this way (made by John Churchill) If acceptable, it might be relatively easy to raise special funds to do this.

c. **The volume of water currently flowing through well spouts**. As of 11.5.15, a day with no rainfall, *the combined volume of water exiting from the 3 spouts* was *about 5 gallons per minute.* On 15.1.12 we did a similar exercise with the water flow as it ran into the immersion pool in the Leechwell Garden, about 100yrds below the well. *On a similar non-rainy day the flow into the pool was about 12 gallons per minute*. This confirms what we all suspect- that quite a lot of the well water must still be sidestepping the spouts and exiting beneath the cobbles in the well basin. If most of this water could be re-routed back through the spouts the effect would be quite dramatic.

6. The full application to English Heritage for Scheduled Monument Consent (including the Schedule of Works) and a copy of this report can be found on the following websites:

http://www.totnestowncouncil.gov.uk/Core/Totnes-TC/Pages/The_Leechwell_1.aspx

http://www.leechwellgarden.org.uk/wellwork.shtml

A paper copy of the report and the application be available in the Study Centre at the Totnes Museum.