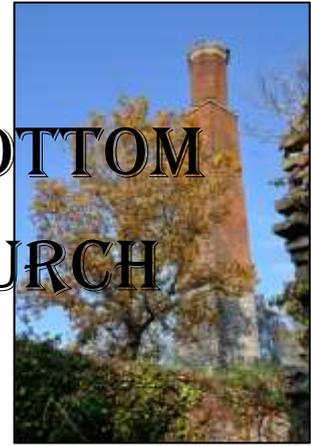


# FRIENDS OF BRANDY BOTTOM COLLIERY, PUCKLECHURCH

Newsletter N° 13, November 2016

(Photos 1-28 will be found on page 4 onwards)



A very busy year is coming to an end. There have been 47 work parties in so far in 2016, with one more still to come on the schedule, compared to a total of 29 in 2015. Planning for 2017 is well under way, as the schedule of work has been drawn up and the list of dates for work parties is being finalised. These dates will be published on the website when ready.

During August to November 2016, work was concentrated on the Vertical Engine House, where the spoil has been removed down to the working surfaces of the remaining three sub-divisions. (This level was reached in the fourth, the winding drum pit, some time ago.) Hidden among the spoil were a number of metal artefacts, some of which are shown in the photos. A new structure was found outside the south-east wall of the Cornish Engine House, and a general tidy-up of the site is in progress.

Brandy Bottom featured on the front cover of the South-west section of Historic England's 2016 *Register of Heritage at Risk*. It has been used as an example of a successful partnership between Historic England and other organisations, which could lead to the site being removed from the register in the future. Its inclusion is recognition of the conservation work we are doing. The photo, seen on the right, was taken by a photographer from Historic England in July while the masons were working on the outside of the chimney and a work party was in progress. It is used here by permission of the photographer (Copyright Historic England Archive, James O. Davies).



A SGMRG member unearthed some photos he took of Brandy Bottom in 1985, and has allowed us to use them – Thank you. They show: the Horizontal Engine House from the top of the Old Pit heapstead (photo right, © T Rendall); the Old Pit heapstead from a position to the west of the present cycle track (photo 1); and the now-ruined platelayers hut to the north of the site (photo 2). What is evident is how much the vegetation has grown in the 30-odd years since they were taken. In photo on the right there is no sign of the willow that now stands near the northern corner of the Horizontal Engine



House, or of the trees around the edge of the pond on the right of the photo. Photo 1 shows that



the stone facing of the Old Pit heapstead had started to collapse before 1985, while photo 2 is of interest as it shows the chimneys of the Shortwood brickworks in the distance.

### Progress: August - November 2016

Continuing on the theme of what the site looked like in the past, photos 3 and 4 were taken in February 2012 and October 2016, and show the Vertical Engine House from the south-east. In the first the engine bed is hidden below a mass of spoil and rubble, as are the set of steps outside the entrance. The little that remained of the south-east wall is hidden by yet more spoil. In the second the wall to the right of the door opening has been raised during the rebuild earlier in the year. The opening is the flue for the rebuilt fireplace on the inside of the wall. The photo on the right was taken in November 2012 looking north-eastwards from the corner of the Cornish Engine House. It shows the mass of vegetation that has been slowly cleared since, and keeps on trying to return. The scaffolding on the right was used in the rebuilding of the north-east wall of the Cornish Engine House.



Work has concentrated on removing spoil from the Vertical Engine House down to the original working surface. Initially the spoil was mixed with good building stone that had come from the now-collapsed walls, but at the bottom there was a rich lode of many metal artefacts. It is probable that they have lain there since the scrap metal merchants were working to clear the place of salvageable materials in the late 50s/early 60s. The artefacts may be the fragments of the machinery that fell to the bottom of the pits when the machinery was dismantled, and which the workers did not consider worth retrieving. Photo 5 shows a collection of objects recovered from the pit below the engine bed before they were freed from the caked spoil that was sticking to them.

Spoil clearance in the pit below the engine bed uncovered the two platforms seen in the photo on the right. The pit is thought to have contained the condenser, which could have been supported on the platforms. Photo 6 shows an earlier stage of the excavation and photo 7 shows spoil removal in progress. In the bottom were the pieces of wood seen in photo 8, which may have come from the roof.



The piece of glass seen in photo 9 may have come from a manometer used to monitor the performance of the condenser. This supposition is based on a reference in a reprint of an 1824 book<sup>1</sup> on steam engines, which describes James Watt using a manometer for that purpose. Other artefacts found here include the latch hook (photo 10), a bracket with a reinforcing rib (photo 11), and a 4½" long coach bolt and 4¾" long coach screw (photo 12). The coach bolt has a pronounced flat cut into one side of the head, with a less pronounced flat on the opposite side. The bracket is very similar in design to the one supporting one of the long holding down bolts on the outside of the

<sup>1</sup> A descriptive history of the steam engine, Stuart R, Nonsuch Publishing, Stroud, 2007 reprint

south-west wall of the house, and may have performed a similar function for one of the bolts at the other end of the building. There have also been a number of nuts and bolts recovered. Some appear to have been handmade, for example the heads of some bolts are offset to the centre line of the bolt. Others, such as the hexagonal nuts, have been machine made.

Spoil removal in the adjacent engine bay pit uncovered the large spanner seen in photo 15, and a well that could have been the hot well for the condenser (photo right). This photo had been taken at the end of a work party, when the water had been stirred up by the removal of spoil and artefacts. The water was a clear blue by the start of the next work party (photo 14), which deceived a couple of idiot frogs. They must have seen the water and jumped in without working out how they were going to get out of both the well and the surrounding pit. The first task of the work party was to rescue them. Hidden in the depths of the well were the iron guide seen in photo 16 and the cast iron bracket seen in photo 17. The baseplate of the former has  $\frac{3}{4}$ " wide slots to allow for some adjustment of the alignment, and the hole in the latter is tapered from  $1\frac{1}{8}$ " to  $1\frac{3}{8}$ ".



Spoil has been removed along the length of the flywheel slot, which has had to be done by the more 'slimline' volunteers as it is a tight squeeze. Photo 18 was taken looking down at the cleared north-east end, and shows the securing plates at the bottom of the holding down bolts. Among the artefacts found in the spoil were the 40" long lifting chain seen in photo 19 and the broken casting seen in photo 20. This looks as if it was part of a pulley, and has a shallow groove cut into the circumference.

A chance decision in October to return to the outside of the south-eastern wall of the Cornish Engine House has uncovered a brick structure that may be associated with an egg-ended boiler (photo right, © K Kemp). Test pits were originally dug in November 2012 (photo 21), uncovering the traces of brickwork that can be seen in that photo, but these were covered up again as there were more important areas to work on. History is repeating itself here as it was decided at a steering committee meeting that further work in this area was a low priority.



A start has been made on levelling the surface of the Old Pit heapstead to remove the trip hazards. This uncovered two areas of brickwork that appeared to be wall panels that have fallen, or been pushed, over. They have been covered up as part of the levelling process, but not before their positions were recorded.

Another attempt was made to see what lay behind a hole in the internal north-west wall of the base of the chimney, as the re-examination of a photo taken in September 2015 showed there was a small cavity behind the wall of the chimney. Photo 22 is a view of the wall opposite the entry, and it shows that the duct behind the wall has been blocked off at some time after it had been built. The effects of the hot gases on the surface of the roof bricks can be seen in another photo, which has not been included. While it would be interesting to investigate further, it is another of those jobs that has been put into the 'can be done when the important stuff is finished' category. The photography is a slow process, as it involves putting a hand and a small camera through the single brick-sized hole and using the point-and-pray technique – is the camera looking at something of interest and has it focused on it? If so, where was it in relation to the entry hole. If not, return to square 1 ...

## Future Work Parties

At present access to the site is limited to days when there is a work party in progress. The date for the remaining work party in 2016 is Sat 10 December. Dates for 2017 have still to be decided, but will be published on the website when available. Please note that work parties may be altered at short notice, so newcomers are advised to first make contact via the AIBT's email address of [info@aibt.org](mailto:info@aibt.org).

There is now a location map on a dedicated page of the website, together with directions to the site.

## Photographs



Photo 1 – Old Pit heapstead, with Cornish Engine House on the right. (© T Rendall, 1985)



Photo 3 – The view of the Vertical Engine House from outside the south-east wall on 04 Feb 12 ...

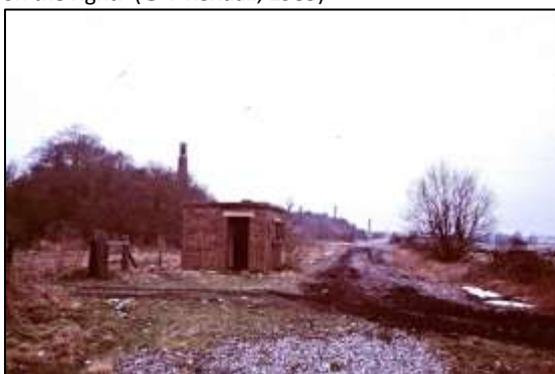


Photo 2 – View south along the line of the former railway, with the platelayers' hut in the foreground. The Brandy Bottom chimney can be seen to its left and in the distance the chimneys of the Shortwood brickworks are seen poking above the tree line. (© T Rendall, 1985)



Photo 4 – ... and on 01 Oct 16.



Photo 5 – A pile of metal artefacts covered in caked spoil, found in the pit below the engine bed in the Vertical Engine House.



Photo 8 – Pieces of wood found at the bottom of the pit below the engine bed, Vertical Engine House. (30 cm scales)



Photo 6 – Excavation of the pit below the engine bed in the Vertical Engine House has reached the level of the tops of the platforms. (30 cm scale)



Photo 9 – 4¾" long piece of glass tubing that may have come from a manometer, found in the pit below the engine bed, Vertical Engine House. (10 cm x 10 cm scale)



Photo 7 – Clearing spoil from the bottom of the pit below the engine bed, Vertical Engine House. (© M Taylor)



Photo 10 – 15½" long latch hook, found in pit below engine bed, Vertical Engine House. (30 cm scale)



Photo 11 – Bracket found in pit below engine bed, Vertical Engine House. (30 cm scale)



Photo 14 – Well in the engine bay pit, Vertical Engine House, at the start of a work party. (© K Kemp)



Photo 12 – A 4½” long coach bolt (left) and a 4¾” long coach screw found in the pit below the engine bed, Vertical Engine House. (30 cm scale)



Photo 15 – 15” long spanner, with 1½” wide jaws, found in engine bay pit, Vertical Engine House. (30 cm scale)



Photo 13 – Excavating spoil from the pit in the engine bay, Vertical Engine House.



Photo 16 – Iron guide found in engine bay well, Vertical Engine House. (30 cm scale)



Photo 17 – Cast iron bracket found in engine bay well, Vertical Engine House. (© M Taylor)



Photo 18 – North-east end of flywheel slot, Vertical Engine House, after the spoil had been cleared.



Photo 19 – 40' long lifting chain found in the flywheel slot, Vertical Engine House. (30 cm scale)



Photo 20 – Broken section of a casting, found in the flywheel slot, Vertical Engine House. (30 cm scale)



Photo 21 – One of the test pits dug outside the south-east wall of the Cornish Engine House in November 2012.



Photo 22 – View inside a cavity at the base of the north-west wall of the chimney.



Photo 23 – Repairs being made to the gate into the Vertical Engine House after a visit by vandals.



Photo 24 – Repairs being made to the fence by the Vertical Engine House after it was cut by vandals.



Photo 25 – Vegetation being cleared from the New Pit heapstead in October. (© M Taylor)



Photo 26 – A very smoky bonfire. (© M Taylor)



Photo 27 – Wildflowers, possibly Rosebay Willowherb, growing beside the ruined platelayers hut to the north of the site in September.



Photo 28 – Insects on bramble flower in August. The one on the left is thought to be a female Marmalade Hoverfly.

Unless otherwise stated all photos are by R H Whitworth (© R H Whitworth 2012, 2016)

The other photographers have retained the copyright of their photos.