

ST MARY'S, WHORLTON

ARCHAEOLOGICAL MONITORING DURING DRAINAGE WORKS

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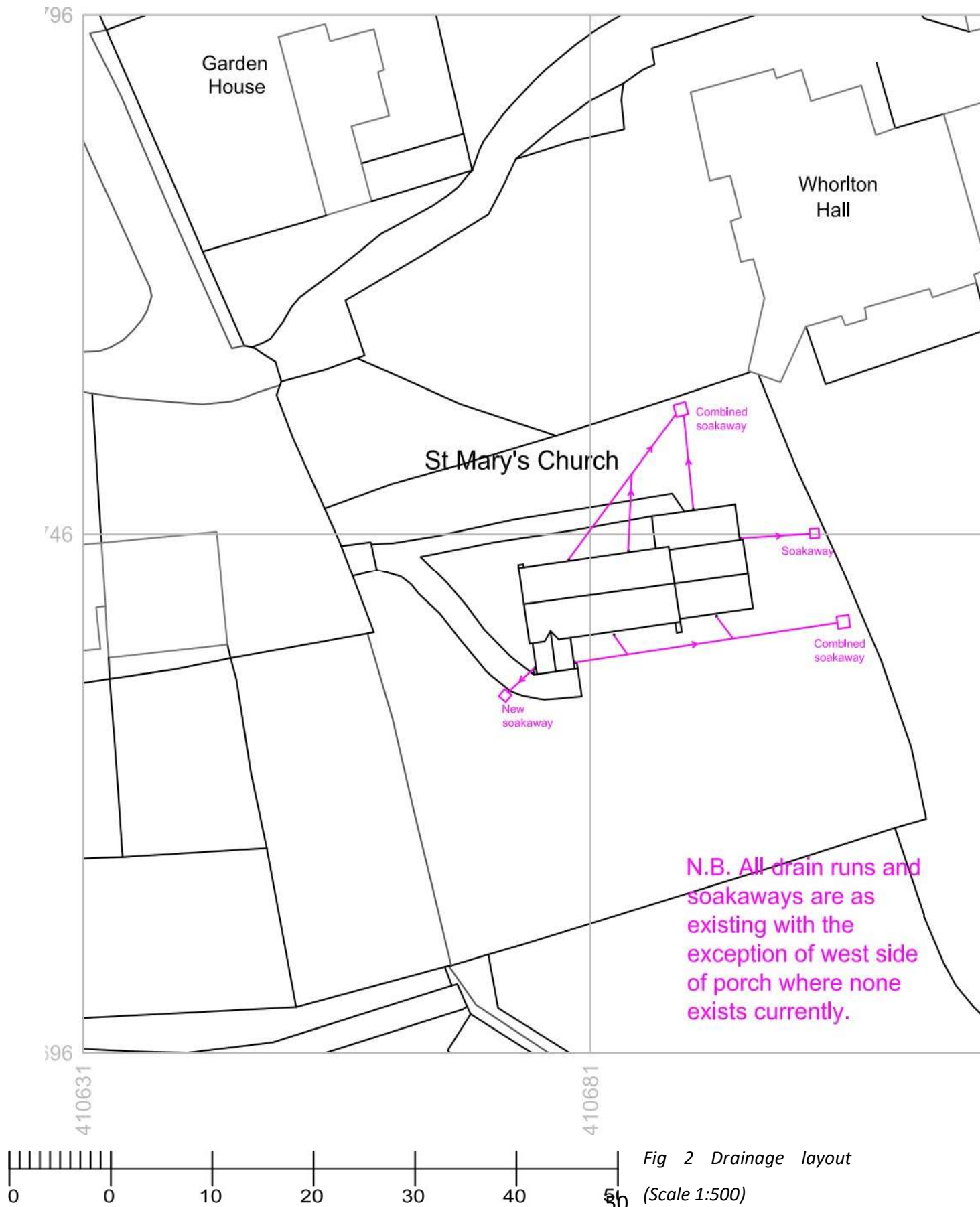
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Fig 1 St Mary's, Whorlton from the south west (Whorlton Feb 25-11)

- 1.1 Drainage works were carried out at St Mary's Church, Whorlton (Fig 1) over two days, 12 and 13 May 2025. The work was monitored for any archaeological deposits and human remains by the author. This report details the findings against the historical background for the site.
- 1.2 The Church is located at The Green, Whorlton, DL12 8XG (NGR: NZ 10685 14744).
- 1.3 Prior to the work being carried out, a Faculty (Ref: 2024-107828, dated 18/2/2025) was granted, as required by the Diocese for work in Church grounds. All work was carried out in line with the Faculty and agreed Diocesan guidelines for such work.

- 1.4 As the current Church stands on the site of an historic chapel, demolished in the mid-Victorian period, monitoring was required for any remains of the earlier building, as well as for burials in an historic churchyard.
- 1.5 The appointed contractors were Tullys, under Mark Tully's supervision. The architect responsible for designing the drainage works was John Barnes. Robin Taylor provided archaeological overview and was present on site during the works.
- 1.6 The scope of the works was the replacement of the existing rainwater drainage and soakaways on a like-for-like basis, and the installation of a new drain and soakaway for water discharged from the porch roof. The details are as per the drainage layout drawing (Fig 2)
- 1.7 The architects' proposal for the works:
- Regarding excavations, these are expected to be less than 600mm deep for pipework and for soakaways if plastic drainage crates are installed, such as Polydrain Hydrocell, (1No. to west and 4No. to north and southeast), are wrapped in geotex fabric and backfilled with pea gravel and covered with 200mm of soil. No access would be required except by the use of the gullies which will be roddable.



2.0 BACKGROUND INFORMATION

Designations

- 2.1 The font by the porch is Listed, Grade II (Historic England, 2020, list entry no: 1121093). It is described in the entry as: "Font. Probably late-c15, Single sandstone block. Octagonal-plan bowl and stem. Base also octagonal in plan but with alternating long and shorter sides. This font came from the medieval church at Whorlton which was demolished c.1848."
- 2.2 According to the 2021 Quinquennial Inspection Report, the church is not listed but lies in the Whorlton Conservation Area.

3.0 ARCHAEOLOGICAL AND HISTORICAL CONTEXT

- 3.1 "The church is of small size, stone built, 20x8 meters approx., consisting of nave, chancel, vestry, organ chamber, bell turret and porch. Traditional orientation with altar to the east. Built in 1853 in a Victorian gothic style in local sandstone under green slate roof. Church yard mainly to the S." (Quinquennial Inspection Report, GS/1154/21, 2021)
- 3.2 "1853 by W & J Hay of Liverpool. Geometrical, with an octagonal SW spirelet. An attractive composition, well modelled, with low walls and steep roofs. (At the E end, fine mosaic and *opus sectile* work by James Powell & Sons, c. 1900. Stained glass, mostly by William Warrington.) In the churchyard a good lychgate and octagonal C15 font from the medieval church." (Roberts, Pevsner and Williamson, 2021, 787)

4.0 AIMS AND OBJECTIVES

- 4.1 The aim of the archaeological mitigation was to identify, map, record and sample any features of archaeological interest revealed or damaged during groundworks.
- 4.2 The objectives of the monitoring were to:
- establish the presence, nature, extent, preservation and significance of any archaeological remains, including human remains;
 - provide a detailed record of any such remains;
 - recover and assess any associated structural, artefactual and environmental evidence (including any re-used worked stone);

- undertake a programme of investigation that meets with national and regional standards (Historic England 2015; ClfA 2020a–d); and
- prepare an illustrated report on the results of the archaeological monitoring to be sent to the DDAC and deposited with the Durham County Council Historic Environment Record (HER).

5.0 METHODOLOGY

5.1 Any works resulting in ground disturbance or the dismantling of stonework require archaeological monitoring. A continuous watching brief was maintained. The two mechanical excavators utilised were fitted with toothless buckets. Where structures, features, deposits or finds of archaeological interest were exposed, mechanical excavation ceased to allow the investigating archaeologist to clean, assess, and excavate by hand as appropriate. The archaeologist was allowed time to complete these works appropriately. Once archaeological observations were complete, mechanical operations continued.

5.2 A couple of shaped stones and broken crockery were recovered from the disturbed overburden, recorded photographically and kept to one side in the church.

Human remains

5.3 As the excavations were undertaken within an historic churchyard, there was a high potential that groundworks could disturb human remains from earlier burials. Where known burials were recorded, every effort was made to avoid these. The overriding presumption was to prevent the disturbance of human remains unless unavoidable. The remains would then be dealt with in accordance with the guidelines produced by the Church of England and Historic England (2017) and the Advisory Panel on the Archaeology of Burials in England (2013). There would be no excavation of remains beyond the limit of the ground works (Church of England and Historic England 2017, 32, Annex E5).

5.4 All remains would be hand-excavated. Where disarticulated human remains are encountered, their location must be recorded and an *in situ* photographic record made before removal from the ground. The remains should be briefly assessed on site, to record the anatomical elements present, and then reverently reburied as close as possible to the point of discovery.

6.0 RESULTS

- 6.1 The weather was fine, sunny and warm; the ground was dry, as there had not been significant rain for some time.
- 6.2 Work started with two mechanical diggers operating, cutting trenches for drain pipes along the projected lines of earlier drains to the North and South of the church. Large pits were also dug at the end of the pipe trenches for the drainage cages. The soil was loose and sandy, with little turning up but rubble, scrap building materials, slate fragments, and remains of clay drain pipes. The soil was obviously much disturbed and turned over through past operations. Some animal bones from meat joints, showing saw or chopper cuts in one case, were turned up. A couple of pieces of chamfered stone were recovered: these could be from architectural details or perhaps demolished grave kerbing; the detailing was well worn and not sharply cut. No human bone was recovered from the North and South two trenches, which were carefully cut to avoid any of the adjacent marked graves (Figs 3—5).



Fig 3 Drainage trench on South side from soakaway (Whorlton May 25-1)



Fig 4 S side soakaway, and depth of soil and rubble infill of disturbed ground (Whorlton May 25-2)

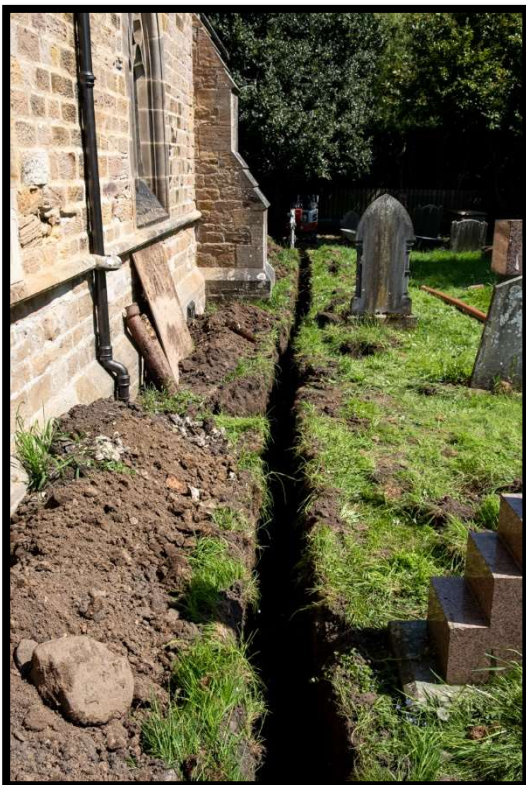


Fig 5 Drain cut S side, avoiding grave slabs (Whorlton May 25-3)

- 6.3 Where the drains met the church walls, there was little sign of any foundation stones or significant built elements at or below ground level. Nor was there any apparent trace of the earlier building, apart from chunks of rubble in the loose soil (which was 1m deep at least). Surplus soil from the digging had to be spread at the edges of the churchyard under the bushes around the perimeter, as it could not be removed from the grounds – some was used to backfill the trenches. General photographs were taken of the works and some scaled shots of the chamfered pieces of stone.
- 6.4 Getting the pipes in and down to the drainage cages was rapid and efficient. Soon the trenches to N and S were filled in and the cages filled over (Fig 6). Work was done carefully, avoiding above ground monuments and closely following the apparent lines of the earlier clay pipework. It was puzzling that the earlier pipes did not seem to lead to clearly defined soakaways in themselves and seemingly just ended in the soil. As the soil was deep and full of disturbed rubble, perhaps this was deemed enough at the time to provide drainage.



Fig 6 S side drain and soakaway cuts backfilled (Whorlton May 25-18)

6.5 The porch seemingly did not have anywhere to take the downpipe on its West side, ending just above the ground. The plan was to cut across the tarmac path and lead a pipe to a soakaway on the other side of the path. Digging down near the porch wall showed more of a foundation, than was seen elsewhere round the main church walls. There were also some traces of clay piping which may have lead around the porch to meet up with the drain run on the other side. The trench away from the porch, under the path level and into a blank area of ground between graves, produced little other than dry, sandy soil and rubble. Again, the depth of soil and rubble went down at least 1m with no perceptible layers or feature cuts (Figs 7 and 8).



Fig 7 W side of porch drain cut, showing foundations (Whorlton May 25-21)



Fig 8 Drain cut from porch, through path, to soakaway (Whorlton May 25-9)

- 6.6 As the machine cut a rectangle for the soakaway cages in this area, fragments of bone appeared towards the base of the trench. The first pieces to come out strongly suggested skull fragments, and there was a small void in the corner of the trench, where a skull had given way. The angle was odd and the skull seemed very narrow, but digging into the side and the creation of any further disturbance were avoided. In the loose soil from the end of the trench, there was a collection of small fragments, some skull, some small vertebrae and the rounded tops of leg joints (where they meet the pelvis). All were very fragmentary and apparently broken in the past. The pieces seemed to be from several individuals. This was all disarticulated material, not laid down in any direction or in any feature that could be seen (Figs 9—11).



Fig 9 Skull fragment in corner of porch soakaway (cm scale; Whorlton May 25-23)



Fig 10 Bone fragments from porch soakaway, showing leg joint articulations and vertebrae (Whorlton May 25-10)



Fig 11 Skull and other disarticulated fragments from porch soakaway (Whorlton May 25-11)

- 6.7 The general principle was to avoid further disturbance if possible, and the loose remains to be reinterred near to where they were found. The pieces were so fragmentary that detailed study would be unlikely to show much more about them, certainly little about any individuals. It was hard to tell whether the fragments were all human, as they were so broken up (and not by recent breakage either). But the skull fragments and the tops of leg bones certainly looked human and from someone of adult age. The fragmentary vertebrae, if human, could only be from a child due to their small size.
- 6.8 At the close of the first days' work, there was finally a suggestion of a leg bone in the base of the trench. A couple of record shots were taken of the skull elements in position and of the general shape of the trench.
- 6.9 The following day, record photographs were taken of the bone fragments and chamfered pieces of stone (Figs 12 and 13), plus general shots of the filled-in trenches.



Fig 12 and 13 Chamfered stones (Whorlton May 25-12)



Fig 13 (Whorlton May 25-13)

- 6.10 The bone fragments in the trench were adjacent to a gravestone (numbered P9 on the plot of graves done in 2004), which was a slab laid flat on the ground (and hard to read with moss on it). The fragments were 1m down in the corner of the trench, and the trench was about

1m 10cm deep. The skull was about 10cm across the oval-shaped opening. The possible leg bone in the base of the trench was also exposed, again in a fragmentary state. This was photographed in situ; it was about 20cm long and 2.5cm across. This would possibly be from a young adult. The bone appeared to be pressed into the clay subsoil at the base of the trench. Everything above this was loose soil and bits of rubble, and very disturbed. There was no apparent grave cut or other features; this bone was left in place, undisturbed (Fig 14).



Fig 14 Leg bone and fragments, base of porch soakaway (Whorlton May 25-25)

- 6.11 After discussion with the Vicar, it was agreed that the disarticulated remains should go back in the hole with the drainage works, as per the rules and specification. This was duly done and subsequently backfilled on top; photographs were taken (Fig 15).



Fig 15 Skull and disarticulated fragments reburied alongside the drainage cage, porch soakaway (Whorlton May 25-27)

- 6.12 A couple of further trenches were put in at the back of the graveyard to provide overflows from the already placed drainage cages. Basically, these take more drainage pipes from the two cages at N and S into gravel soakaways at their end. These trenches were quickly cut through, without finding anything, then the pipes put in and backfilled. Photographs were taken (Fig 16). These trenches are not shown on the architect's drawing, but were deemed necessary to avoid back flooding; Mark Tully took measurements to confirm positions and of the works overall (Table 1).

Table 1 Dimensions and positions of the drainage cuts (as measured by Mark Tully)

<i>North of the Church</i>	<i>South of the Church</i>	<i>Porch drain</i>
0.85m from NW corner of vestry to pipe run	2m from SE corner of Church to pipe run	1.7m from porch to W edge of path for drain run
4m from the NE corner of the vestry to pipe run and edge of drainage cage	2.7m from SE corner of the Church to edge of the drainage cage	1m from edge of path to drainage cage
1m x 3m area of drainage cage	1m x 3m area of drainage cage	1m x 2.5m area of drainage cage
3m run for overflow pipe from E end of drainage cage	6m run for overflow pipe leaves 1.7m from SE corner of drainage cage	



Fig 16 S side overflow pipe in place (Whorlton May 25-35)

6.13 Work was also done on the drain sump at the East end of the Church. This simply replaced a plastic chamber with a ceramic one on the end of the pipe. This drain had been previously dug in by hand some time ago, running down to a cage near the churchyard wall.

6.14 All the work was done and tidied up (Fig 17) in 1.5 days on site.



Fig 17 Porch soakaway area backfilled and tidied (Whorlton May 25-47)

- 6.15 Working notes and record photographs were tidied up after the site work to create an archive.

7.0 CONCLUSION

- 7.1 The works were carried out in much disturbed ground and uncovered no significant remains that could be related to the earlier chapel.
- 7.2 There were traces of building rubble and other fragments, plus broken crockery and animal bone, as could be expected in any area of disturbed ground.
- 7.3 Ground disturbance was kept to a minimum, avoiding marked graves. The only human remains found were disarticulated, from several individuals, and recovered from disturbed ground. These remains were reburied close to where they were uncovered.

REFERENCES

- Advisory Panel on the Archaeology of Burials in England (2013) *Science and the Dead: A guideline for the destructive sampling of archaeological human remains for scientific analysis*. English Heritage. [Online] Available at https://archaeologyuk.org/apabe/pdf/Science_and_the_Dead.pdf
- Chartered Institute for Archaeologists (CIfA) (2020a) *Standard and guidance for an archaeological watching brief*. Reading: Chartered Institute for Archaeologists.
- Chartered Institute for Archaeologists (CIfA) (2020b) *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*. Reading: Chartered Institute for Archaeologists.
- Chartered Institute for Archaeologists (CIfA) (2020c) *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*. Reading: Chartered Institute for Archaeologists.
- Chartered Institute for Archaeologists (CIfA) (2020d) *Code of Conduct*. Reading: Chartered Institute for Archaeologists.
- Church of England and Historic England (2017) *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England*. [Online] Available at http://www.archaeologyuk.org/apabe/pdf/APABE_ToHREfCBG_FINAL_WEB.pdf
- Historic England (2015) *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*. Swindon: Historic England.
- Historic England (2020) *The National Heritage List for England*. [Online] Available at <https://historicengland.org.uk/listing/the-list>
- Roberts, M, Pevsner, N and Williamson, E (2021) *County Durham Buildings of England*, London: Yale University Press