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**SOUTH**

**Canal Bridge, Drove Lane,  
Yapton, West Sussex**

**An Archaeological Watching Brief**

**by Sean Wallis**

**Site Code: DLY17/68**

**(SU 9738 0338)**

# **Canal Bridge, Drove Lane, Yapton, West Sussex**

**An Archaeological Watching Brief  
For BDW Southern Counties**

by Sean Wallis  
TVAS South

Site Code: DLY 17/68

**December 2022**

## Summary

**Site name:** Canal Bridge, Drove Lane, Yapton, West Sussex

**Grid reference:** SU 9738 0338

**Site activity:** Watching Brief

**Date and duration of project:** 20th - 27th October 2022

**Project manager:** Steve Ford

**Site supervisors:** Odile Rouard and Sean Wallis

**Site code:** DLY 17/68

**Summary of results:** The watching brief recorded the remains of the early 19th-century canal bridge. Although the bridge had been partially demolished or collapsed, elements of both the northern and southern walls had survived. Whilst a greater length of the southern wall was recorded during the watching brief, a section of the northern wall had survived up to 13 brick courses high. Parts of the northern canal bridge wall were preserved *in situ*.

**Location and reference of archive:** The archive is presently held at TVAS South, Brighton, and will be deposited with the Archaeology Data Service in due course.

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Report edited/checked by:	Steve Ford ✓ 19.01.23
	Steve Preston ✓ 19.01.23

# **Canal Bridge, Drove Lane, Yapton, West Sussex An Archaeological Watching Brief**

by Sean Wallis

**Report 17/68b**

## **Introduction**

This report documents the results of an archaeological watching brief carried out at Drove Lane, Yapton (SU 9738 0338) (Fig. 1). The work was commissioned by Mr Andy Rose of BDW Southern Counties, Compton House, The Guildway, Old Portsmouth Road, Guildford, GU3 1LR.

Planning permission had been gained from Arun District Council for the construction of new housing on an area of arable farmland to the east of Drove Lane, Yapton. During the groundworks associated with a new access road in the northern part of the site, a small section of the former canal bridge was exposed. Following discussions between the client and the Council's archaeological adviser (Mr James Kenny), it was agreed to carry out an archaeological watching brief during the rest of the work on the access that would affect the bridge. The watching brief was carried out in accordance with a written scheme of investigation approved by the local planning authority's archaeological adviser.

The fieldwork was undertaken by Odile Rouard and Sean Wallis between 20th and 27th October 2022, and the site code is DLY 17/68. The archive is currently held at TVAS South, Brighton, and will be deposited with the Archaeology Data Service in due course.

## **Location, topography and geology**

The site is located to the south of Main Road (B2233), about 500m west of the historic core of Yapton, West Sussex (Figs 1 and 2). The remains of the canal bridge were discovered in a narrow copse of trees which extended along an embankment between Drove Lane and a farm track. The derelict canal itself is visible as a feature in the landscape to the north-west and south-east of the area which was investigated during the project. Excluding the embankment and disused canal, the surrounding area is relatively flat, and lies at a height of approximately 4m above Ordnance Datum, the embankment rising about 2m above this level. According to the British Geological Survey the underlying geology consists of Aeolian Deposits (Brickearth) (BGS 2006), and this was confirmed during the watching brief.

## **Archaeological background**

The archaeological potential of the wider site was initially highlighted in a desk-based assessment (McNamara 2017), and was subsequently investigated by evaluation and follow-up fieldwork by others (James Kenny pers. comm.). It was originally thought that elements of the former Portsmouth and Arundel Canal would be little affected by the proposed housing development (on land immediately to the south of the area covered here), but the decision to construct a new access road from Drove Lane towards the farmland to the north-west inadvertently exposed the remains of one of the canal bridges.

A canal linking the River Wey and River Arun had been opened in 1816, providing a link from London to Littlehampton via the Wey and Arun Navigations. There were proposals to extend the inland waterway from Ford on the River Arun to Portsmouth, and the bill for its construction was passed by Parliament in July 1817. Work on the new canal took almost five years, with the final section from Ford to Hunston being opened in May 1823. Unfortunately the canal company suffered from financial difficulties from the start, and did not have enough money to repair faults to the canal infrastructure. The Portsea canal was disused by 1838 due to the fact that its saltwater was contaminating the local water supply, and the section from Ford to Hunston closed by 1855 due to a lack of traffic (FOFHC 2022).

The bridge which was uncovered during the watching brief had been built to carry Drove Lane over the canal (Fig. 5). Although this section of the canal went out of use in the mid 19th century, historic maps and photographs suggest that the bridge was still standing in the early 1950s (Fig. 6), despite the fact that Drove Lane had been moved slightly to the south-east and a new farm track built immediately to the north-west. The section of canal in the vicinity of the bridge had been backfilled, presumably to enable construction of the new Drove Lane and farm track. It is not clear when the upper sections of the bridge were demolished and the area filled with soil, but the former line of the old Drove Lane became overgrown with trees and eventually no traces of the old bridge were visible.

## **Objectives and methodology**

The primary aim of the watching brief was to excavate and record any archaeological deposits affected by the groundworks in respect of the new access road. Where archaeological deposits which may warrant preservation *in-situ* were encountered, their treatment was to be discussed in consultation with the client and Arun District Council's archaeological adviser. Where it was not possible or practicable to preserve archaeological remains *in-situ* the features were to be excavated by hand and fully recorded, to ensure their preservation by record.

All significant ground reduction was to be carried out by hand, or by using a machine fitted with a toothless ditching bucket, under constant archaeological supervision.

## Results

The brickwork of the former canal bridge was initially revealed during the groundworks in connection with the new access road. Work then stopped whilst TVAS were appointed to carry out the watching brief, and the necessary paperwork agreed with the archaeological adviser to Arun District Council.

Further ground reduction was carried out under archaeological supervision, with overburden being removed down to the formation level for the new access road (Pls 1 and 2). The material removed consisted of soil and underlying dump deposits which had been used to backfill the canal after it went out of use. The latter contained lots of Victorian rubbish, including glass bottles and ceramics, all of which was retained on site. Two large stones removed from the dump layers are "coping stones" which would have capped the bankside edge of the towpath (Pl. 1). These stones have a notch at either end that would have enabled them to be joined together by a vertical tie. These two large stones were set aside, so that they could be used in any subsequent display related to the bridge. The stones were found close to the southern wall of the bridge, which is where the towpath is likely to have been according to the 1841 Tithe Map (Fig. 5).

The watching brief successfully uncovered the surviving elements of the north (51) and south (52) walls of the canal bridge within the area where the new access road was to be constructed. Both walls were seen to curve at their ends, which would have originally enabled barges to safely pass under the bridge from either end (Fig. 3).

Just over 10m of the northern wall (51) was uncovered, with the south-eastern section consisting of a base layer of bricks which corresponded with the formation level of the new road. The central section of the wall, measuring about 4.80m in length, was the best preserved part of the bridge as up to 13 or 14 courses of bricks had survived. The wall appeared to have been constructed with alternating courses of headers and footers, although the brickwork was not particularly consistent, and half bricks had clearly been used in places (Fig. 4; Pls 6–8).

Although a greater length (*c.* 15.50m) of the southern wall (52) was exposed during the watching brief (Pls 2–5), it had not survived as well as the northern wall in terms of height. Indeed, the best preserved section of this wall was only five brick courses high. Part of the wall had been badly damaged in the past, and it was from this area that the two large coping stones were recovered. The remains of a buttress were recorded at the northern end of the wall, on its southern (external) side (Fig. 3; Pl. 5) at a point where the wall's thickness markedly changed,

and beyond this feature the wall had a distinctive slant, presumably to prevent barges passing under the bridge from being damaged on the brickwork.

## **Finds**

No finds were retained from the backfilled canal, apart from the two large "coping stones" which were set aside for later use when an interpretation board is set up close to the site of the bridge. Two brick samples, one from each section of wall, were recorded.

### *Ceramic Building Material* by Luke Barber

Two near-complete brick samples were recovered during the archaeological work, both of which are in good fresh condition.

From northern wall 51 is a brick of 18th- or mid 19th -century date, weighing 2871g. It measures 220mm (at least) x 105mm x 72mm and is 90% complete, well formed, and medium/well fired. The fabric contains moderate fine sugary quartz, rare small iron oxides to 1mm and occasional grits to 2mm, set in a pale dull yellow fine sandy mortar.

The complete brick from wall 52 is of the same broad date, and weighs 2841g. Its dimensions are 222mm x 108mm x 65mm. It is neatly formed, and well fired. Similar fabric to the above but dissimilar finish and dimensions. Extensive traces of dull yellow fine sandy mortar but some grey sandy mortar with occasional coal flecks overlays it.

The two bricks are of a similar period and, although both are in typical Wealden fabrics, they are not of the same type. It is possible that different brickyards supplied them for the same building phase, however, the fact the example from southern wall 52 has traces of a later overlaying mortar shows this example at least was re-set or extensively re-pointed.

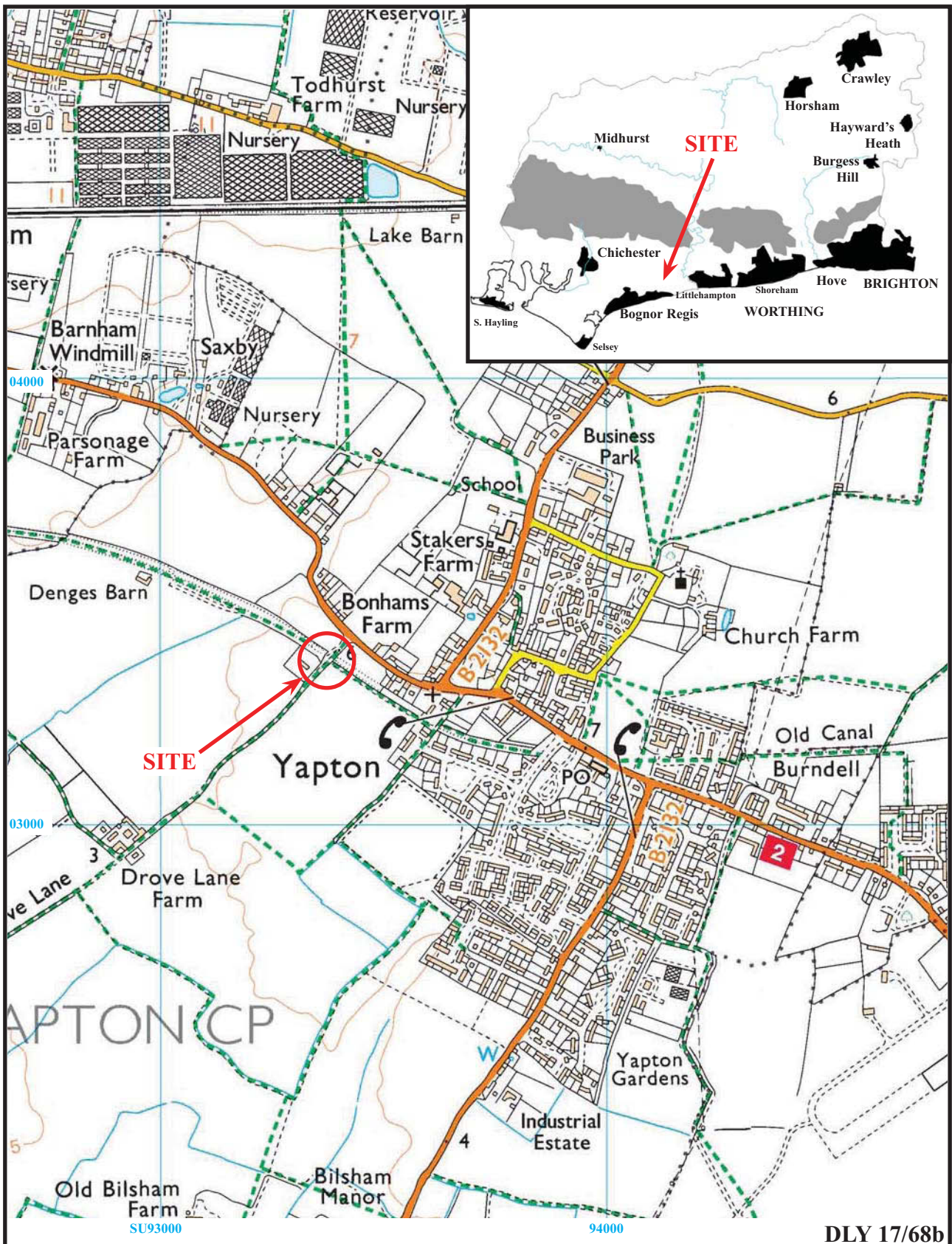
## **Conclusion**

The watching brief at Drove Lane, Yapton, successfully recorded the remains of the early 19th-century canal bridge, which had been uncovered during the groundworks for a new access road. Although the bridge had been partially demolished, probably in the mid 20th century, elements of both the northern and southern walls had survived. Whilst a greater length of the southern wall was recorded during the watching brief, a section of the northern wall had survived up to 13 brick courses high. Due to the results of the project, it was decided to move the new access road southwards slightly, to enable parts of the northern canal bridge wall to be preserved *in situ*.

## References

- BGS, 2006, *British Geological Survey*, 1:50,000, Sheet **317**, Solid and Drift Deposits Edition, Keyworth
- FOFHC, 2022, *Ford to Hunston - walking along the route of the Portsmouth and Arundel Canal*, pamphlet produced by the Friends of the Old Ford to Hunston Canal
- MacNamara, M, 2017, 'Drove Lane, Yapton, West Sussex: an archaeological desk-based assessment', TVAS South unpubl rep 17/68, Brighton



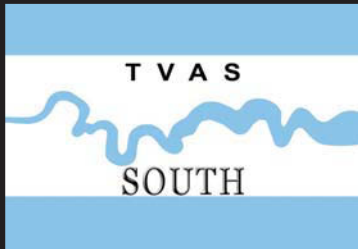


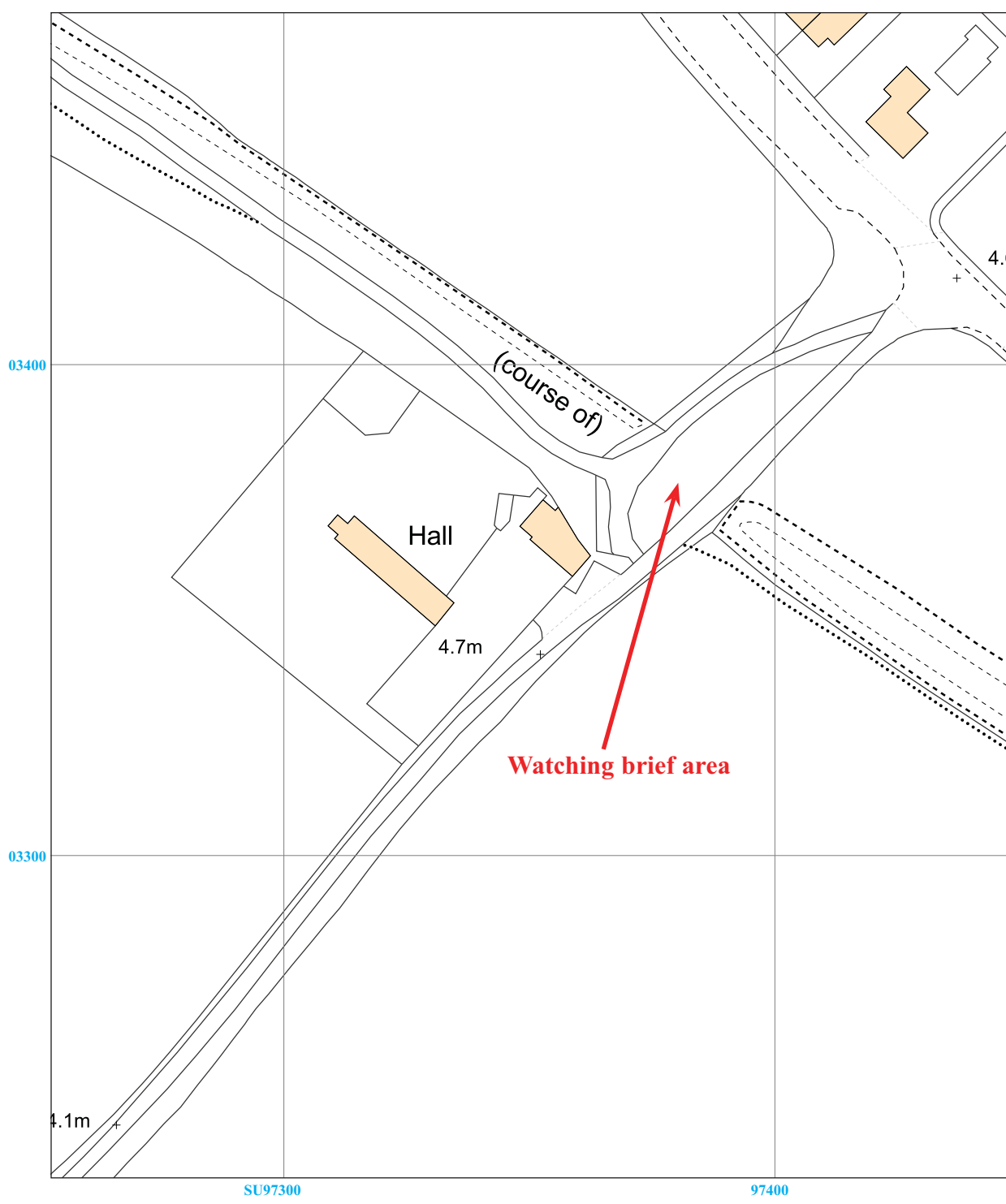
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Figure 1. Location of site within Yapton and West Sussex.

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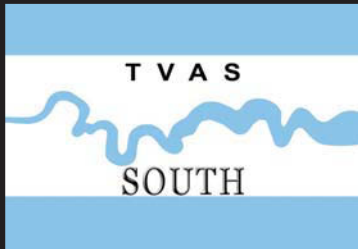


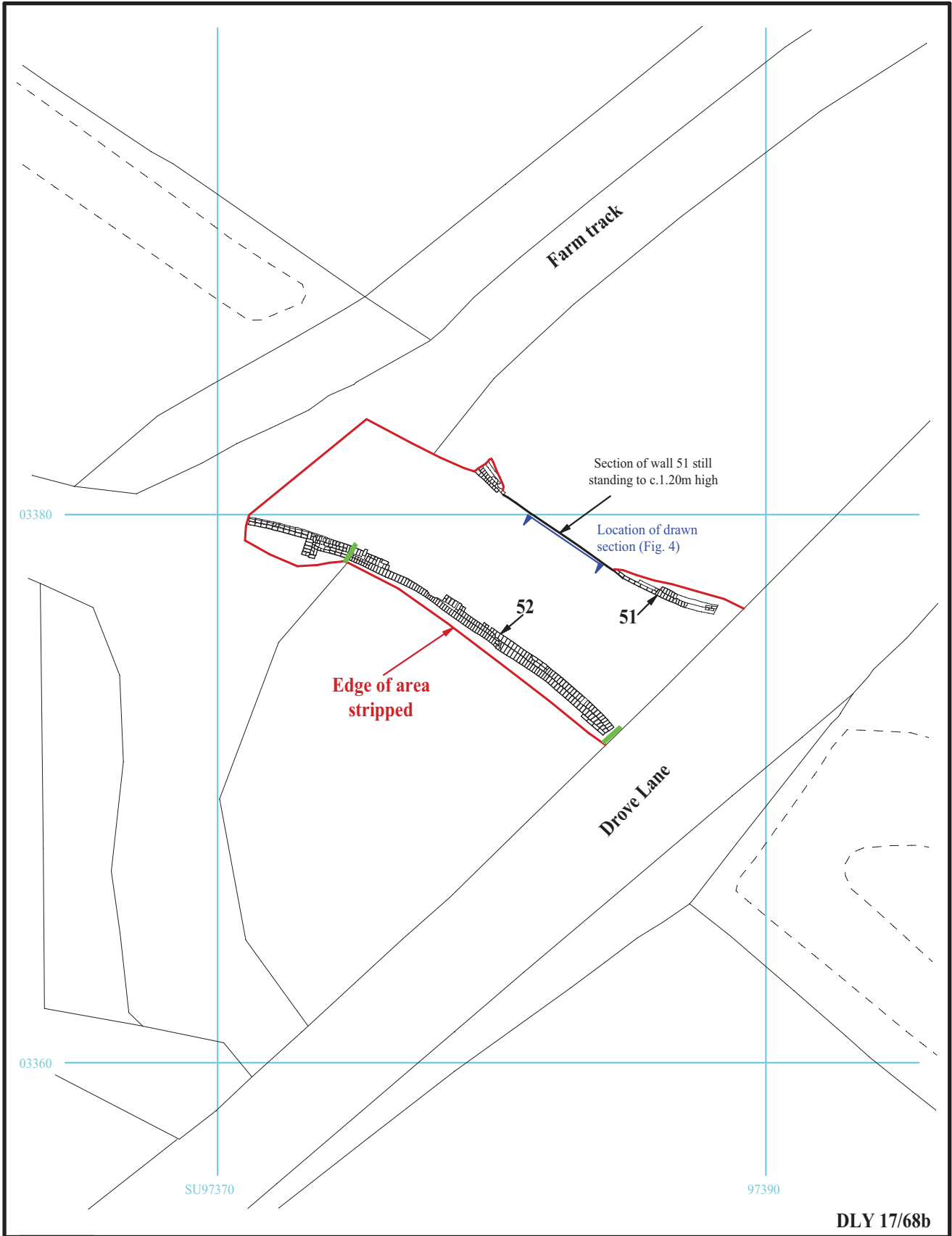
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**Archaeological Watching Brief**  
Figure 2. Detailed site location.

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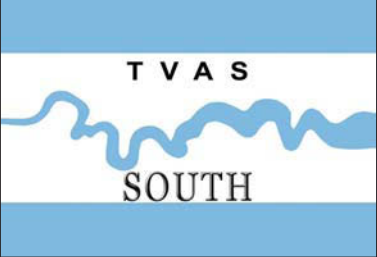


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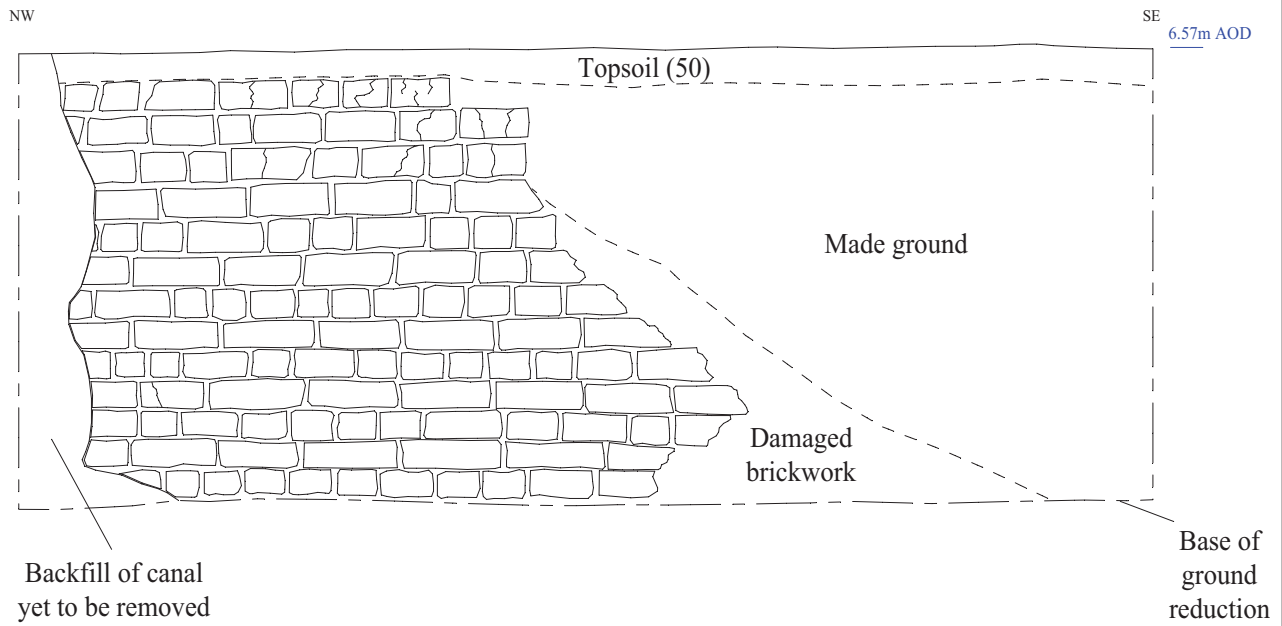


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West Sussex, 2022  
Archaeological Watching Brief**

Figure 3. Plan showing the remains of the canal bridge recorded during the watching brief. Modern services in green.



Northern wall (51) of canal bridge



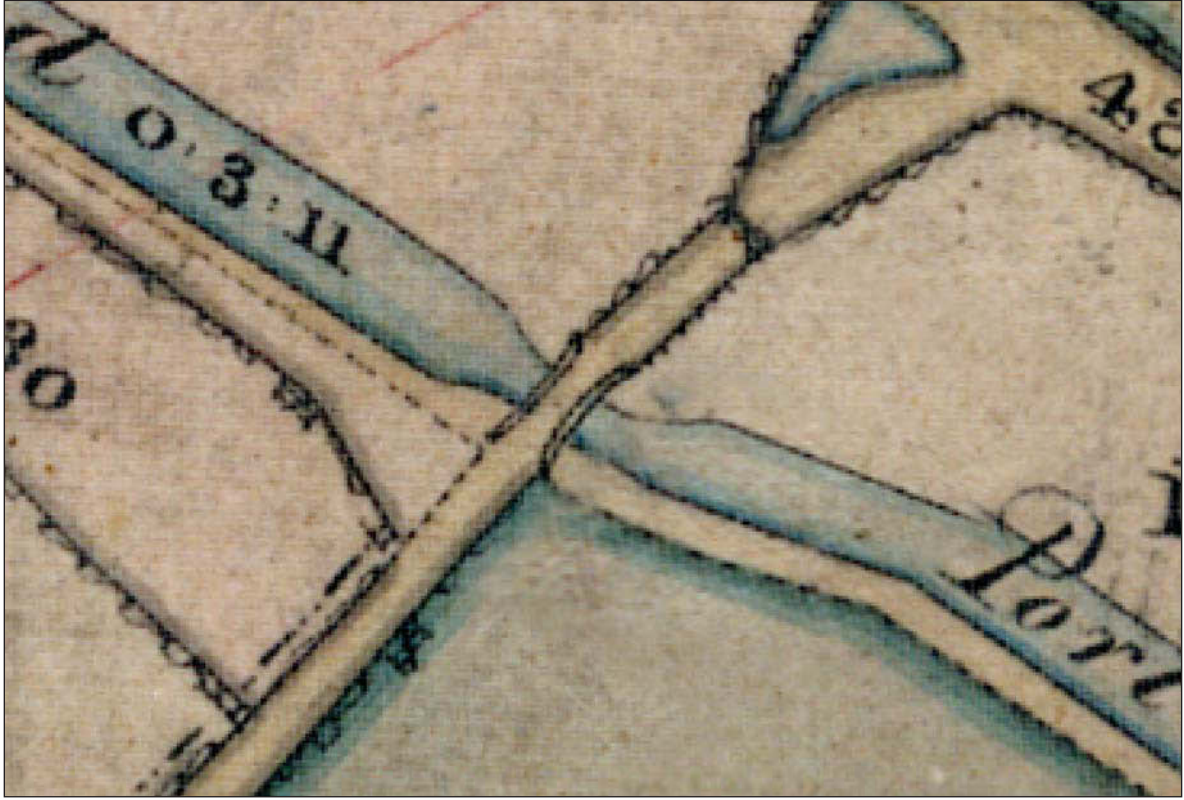
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West Sussex, 2022  
Archaeological Watching Brief

Figure 4. Elevation.





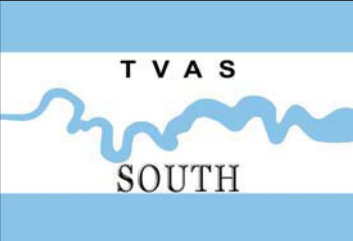


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West Sussex, 2022  
Archaeological Watching Brief**

Figure 5. Detail from the Yapton Parish Tithe Map of 1841, showing the canal and Drove Lane Bridge.





DLY 17/68b



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West Sussex, 2022  
Archaeological Watching Brief**

Figure 6. Photograph of Drove Lane Bridge from 1952  
(sourced from FOFHC 2022).







Plate 1. General view of the site, looking North-west, with large "coping stones" in middle distance.  
Scales: 1m x 2.



Plate 2. General view of the site, looking South-east.  
Scales: 1m and 0.20m.



Plate 3. General view of southern wall (52), looking West.  
Scales: 1m x 2.



Plate 4. Northern section of southern wall (52), looking South-west.  
Scales: 1m and 0.20m.



Plate 5. Northern section of southern wall (52), showing probable buttress.  
Scales: 1m and 0.20m.



Plate 6. General view of northern wall (51), looking North.  
Scales: 1m x 2.

DLY 17/68b

**Canal Bridge, Drove Lane, Yapton,  
West Sussex, 2022  
Archaeological Watching Brief  
Plates 1 to 6.**

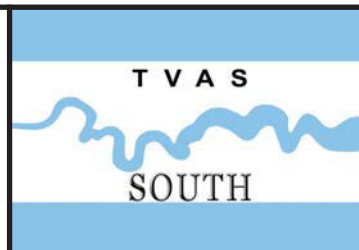






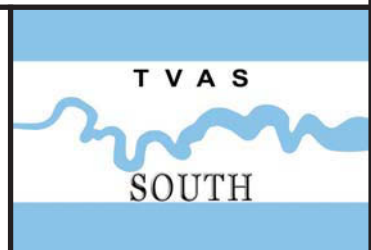
Plate 7. Close-up of central section of northern wall (51), looking North-east.  
Scales: 2m and 1m.



Plate 8. Northern and central sections of northern wall (51), looking North-east, with large "coping stones" in bottom left hand corner.  
Scales: 1m x 2.

DLY 17/68b

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Plates 7 to 8.

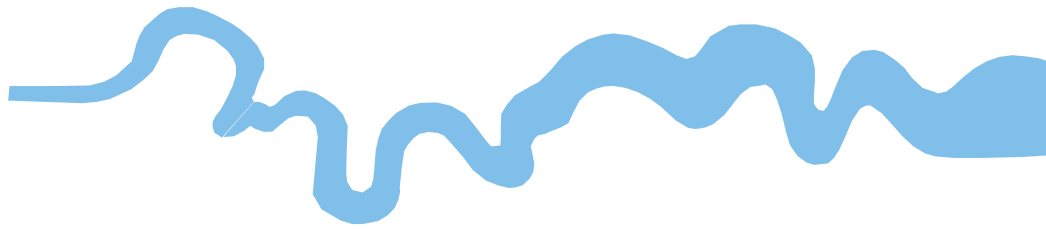




## TIME CHART

	Calendar Years
Modern _____	AD 1901
Victorian _____	AD 1837
Post Medieval _____	AD 1500
Medieval _____	AD 1066
Saxon _____	AD 410
Roman _____	AD 43 AD 0 BC
Iron Age _____	750 BC
Bronze Age: Late _____	1300 BC
Bronze Age: Middle _____	1700 BC
Bronze Age: Early _____	2100 BC
Neolithic: Late .....	3300 BC
Neolithic: Early .....	4300 BC
Mesolithic: Late .....	6000 BC
Mesolithic: Early .....	10000 BC
Palaeolithic: Upper .....	30000 BC
Palaeolithic: Middle .....	70000 BC
Palaeolithic: Lower .....	2,000,000 BC





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