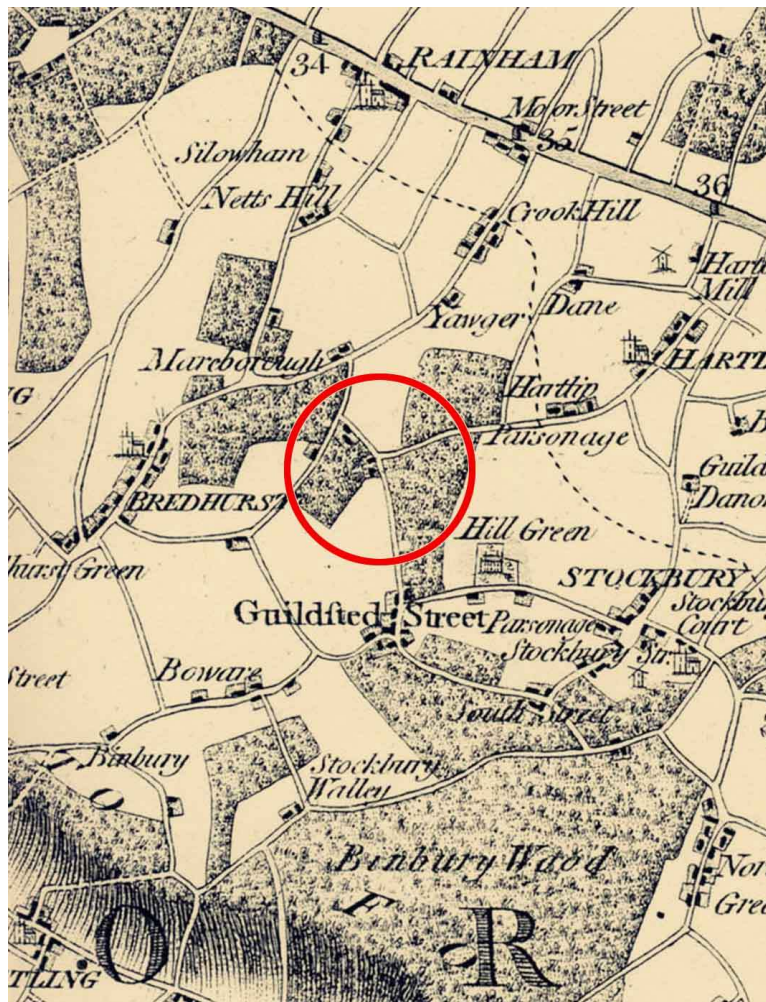


MATT'S HILL WATER SUPPLY WORKS

SOUTHERN WATER SERVICES

BOROUGHES OF MAIDSTONE AND SWALE
KENT

AN ARCHAEOLOGICAL WATCHING BRIEF



January 2011



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SOUTHERN WATER SERVICES

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KENT

AN ARCHAEOLOGICAL WATCHING BRIEF

BOUNDING POINTS

CENTRED NGR TQ 825 624
WEST NGR TQ 82044 62557
EAST NGR TQ 83348 63128

SITE CODE: MAT 10

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January 2011

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Abstract

This report details the results of an archaeological watching brief carried out during the excavation of a pipeline, soakaway and associated works at Matt's Hill Water Supply Works, Boroughs of Maidstone and Swale, Kent ME9. Archaeological monitoring was undertaken between 9th to 21st October 2010 and followed a desk based assessment of the site in June 2010. The site is centred at NGR TQ 825 624, bounded to the west at TQ 82044 62557 and to the east at TQ 83348 63128.

Some 1400m of pipeline were excavated between Matt's Hill Pumping Station and a large new soakaway structure, which formed a further 250m of deeper excavation in a field adjacent to Cradles Lane. Initial excavations between the Pumping Station and Yelsted Road (c. 520m) revealed a series of changing geological deposits and excavations from Yelsted Road to Cradles Lane and the adjacent soakaway also recorded the changing geology along the pipeline length.

No significant archaeological finds or features were recorded during the course of the watching brief. Plough furrows were recorded in Field 7, now meadow, indicating the field was put to agricultural use at some point in the past, although the features themselves are not closely datable, but apparently are of post-medieval date. Pottery fragments recovered from this and adjacent fields were all of post-medieval (18th century onward) date. A very small assemblage of worked and fire-cracked flints was recovered from topsoil stripping and a programme of metal-detecting produced twenty-six objects all of post-medieval date.

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1. Introduction

1.1 This report details the results of an archaeological watching brief carried out during the excavation of a pipeline, soakaway and associated works at Matt's Hill Water Supply Works, Boroughs of Maidstone and Swale, Kent ME9. The site extends into both Maidstone and Swale Boroughs and within the parishes of Stockbury (Maidstone) and Hartlip (Swale). Archaeological monitoring was undertaken between 9th and 21st October 2010. The site is centred at NGR TQ 825 624, bounded to the west at TQ 82044 62557 and to the east at TQ 83348 63128 (cf. Figure 1 below).

1.2 Some 1400m of pipeline were excavated between Matt's Hill Pumping Station and the soakaway, a further 250m of deeper excavation in a field adjacent to Cradles Lane. Initial excavations took place between the Pumping Station and Yelsted Road (c. 520m) and subsequent excavations from Yelsted Road to Cradles Lane.

1.3 Compass Archaeology are grateful to Southern Water for commissioning this work. The pipeline was managed on-site by Paul Parker and Grahame Jordan of Clancy Docwra Ltd. Archaeological monitoring was undertaken by Rosie Cummings of Compass Archaeology, and overall management of the project by Geoff Potter of Compass Archaeology. Compass Archaeology would also like to thank the subcontractors working on the soakaway excavations. Bill Yendall undertook the Metal Detecting Survey for Compass Archaeology.

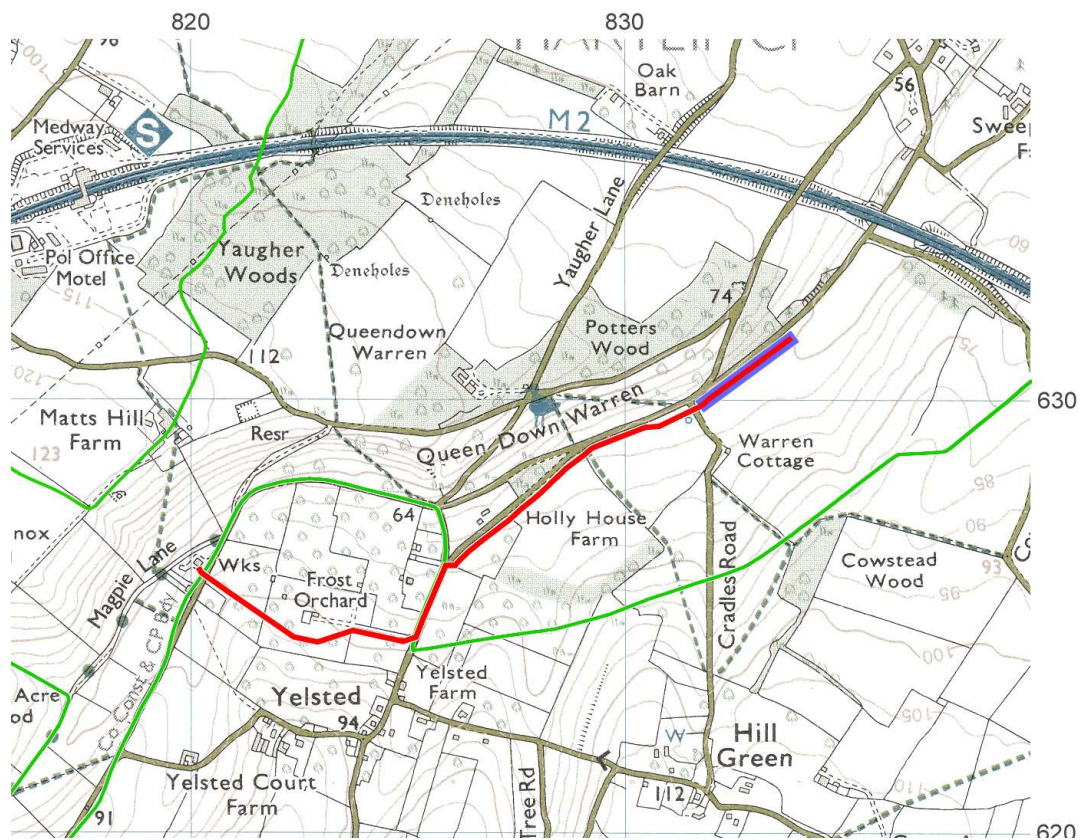


Figure 1: Site location based on the Ordnance Survey 1: 25000 map showing the route of the proposed pipeline (red) and soakaway (blue) with the boundaries of Maidstone and Swale Boroughs (green).

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2. Site Location and Geology

- 2.1** The route of the pipeline passes through open fields for approximately 520m from the Matt's Hill Pumping Station before turning due north along Yelsted Road for approximately 175m. The route then turns northeast and runs adjacent to the road alongside an existing hedgerow for approximately 700m. The final 250m of the route represents the soakaway, which formed a large excavation *c.* 13m across and 3m deep, with the central soakaway itself excavated to a depth of some 10m. The main pipe route had a 15m wide easement and topsoil strip (except in a few specific areas, for example crossing Cox Street and along the line of Yelsted Road). Within the easement an open cut trench approximately 700mm in width by 1.5m in depth was dug, to house a pipe of 560mm diameter. The initial route ran through open fields to the south of former farm buildings including a brick barn belonging to Frost Orchard (the main property of which is located some 180m north) and formerly Yelsted Court Farm. It crossed and ran adjacent to the lines of several historic hedgerows, and immediately south of a farm track and orchards onto Yelsted Road. The route ran past Homestead Farm and northeast past Holly House Farm where a Grade II Listed 16th century property is located (Listed as Queensdown Warren; Fig 7 No. 101). The pipe route used directional drilling to cross Cradles Road, a small road which leads south to the 17th century Grade II Listed Warren Cottage. Immediately north of the site, Queensdown Warren is a designated Area of Special Conservation and the whole area south of the M2 is within the Kent Downs Area of Outstanding Natural Beauty.
- 2.2** The western end of the pipe route lies in the upper part of a dry valley with a ground level of just below 70m OD. North of Yelsted the land rises steeply to a height of approximately 80m OD. The route runs fairly level towards the east before dropping gradually into the trough of the valley at a height of approximately 50m OD.
- 2.3** The Geological Survey of Britain (1957: Sheet 272) shows the route of the pipeline and soakaway overlying an area of 'Head' deposit. This term is used to describe deposits at the top of the geological stratigraphy that could not be classified more closely. Chalk is shown to the north and south of the site, while clay with flints is shown further north again.
- 2.4** A series of large ridges and valleys dissects Kent from east to west formed as a result of weathering of the Wealden Dome, geology created by Alpine movement some 10-20 million years ago. The increased weathering of softer clay deposits left exposed ridges and valleys of the harder chalk and sandstone – in Kent the most significant of these geological features is the North Downs, which is, as noted above, designated an Area of Outstanding Natural Beauty (*cf.* Figure 2 below).

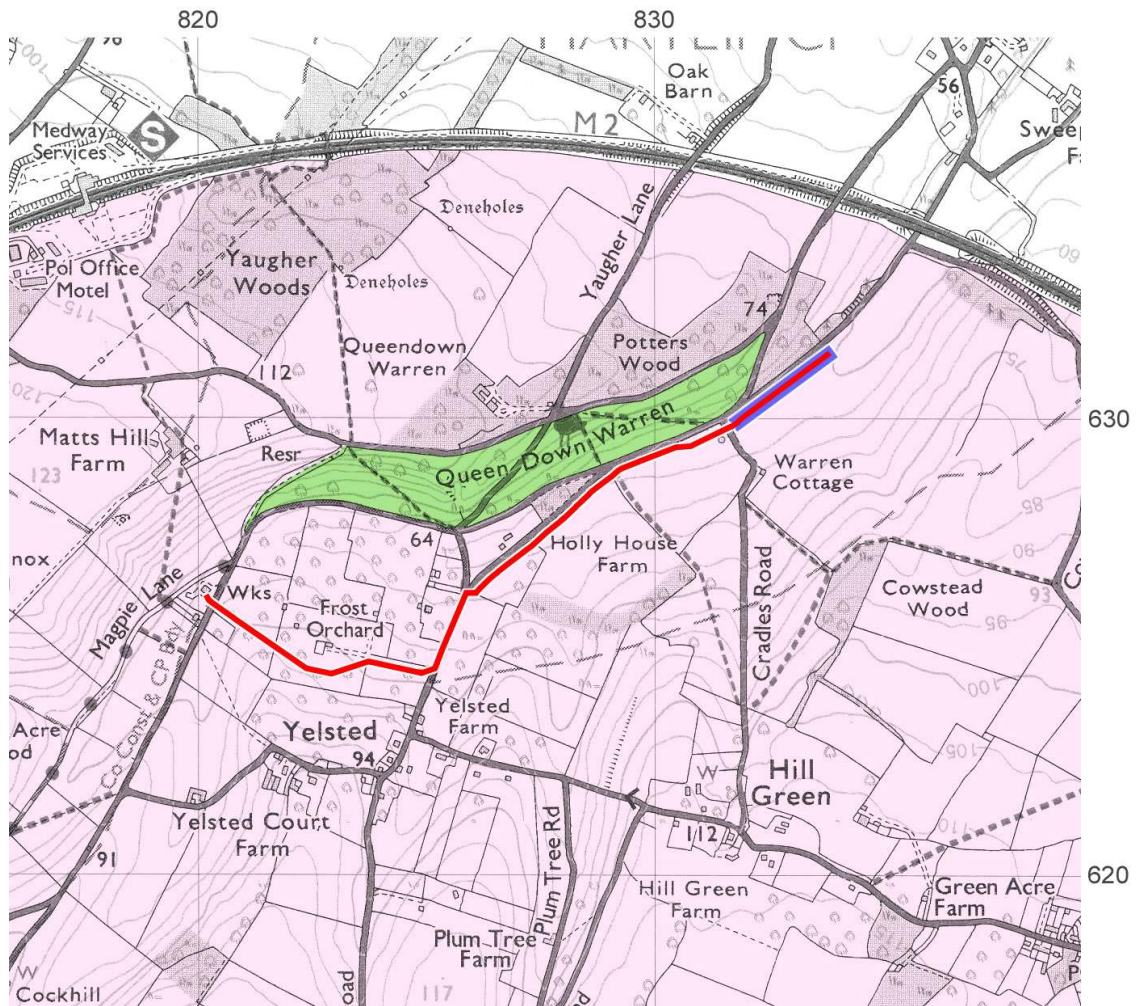


Figure 2: The site in relation to Queensdown Warren Area of Special Conservation (green) and Kent Down Area of Outstanding Natural Beauty (pink), based on the Ordnance Survey 1:25000 map.

Reproduced the Explorer map (Sheet 148) with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office, ©Crown Copyright (Compass Archaeology Ltd, licence no. AL 100031317).

3. Archaeological and Historical Background

3.1 Prehistoric

The desk based assessment contains detailed information on the archaeological and historical background, but a summary of this is provided here for ease of reference¹. The earliest evidence for prehistoric occupation of Kent was found in gravel quarries at Swanscombe in the 1930s and later in the 1960s, with fossil skull fragments dated to the Palaeolithic period (500,000-10,000 BC), along with large quantities of flint tools and flakes. Later deposits produced numerous handaxes and the remains of a range of species including rhinoceros and elephant. The period was characterised by nomadic hunter-gatherer groups and settlement evidence tends to consist of small seasonal camps near suitable water sources. In this part of Kent, however, archaeological evidence for this

¹ Cummings, R. June 2010 Matt's Hill Water Treatment Works...An Archaeological Desk Based Assessment' *Compass Archaeology in-house report.*

period is relatively scarce. The first agricultural communities began to appear in the later Mesolithic period (7000-4000BC), evidence from Brook (near Ashford) indicated substantial land clearance around this time. Within 5km of the pipeline only one recorded site of the Mesolithic period is known, at Lower Halstow some 5km northwest, where the Prehistoric Society of East Anglia recorded a Mesolithic hearth in 1928. Unfortunately little else is known of this site and no further evidence for the period is recorded in close proximity to the site. In proximity to the site the most significant remains are those of the Neolithic Megaliths of the Medway, specifically Kits Coty, and the prehistoric route of the Pilgrims Way. The later prehistoric periods are well represented in Kent, more significantly in the later Bronze Age and Iron Age. A settlement of Bronze Age and Iron Age date was recorded some 5km south at White Horse Wood; a number of stray finds of these periods are recorded to the north around Upchurch and south around Thurnham and Detling. In immediate proximity to the site there are no notable finds recorded, although this does not necessarily indicate a low potential for surviving remains of this period and may simply reflect the pattern of fieldwork and that few excavations have taken place in this area.

3.2 Roman

The most significant remains of the Roman period in proximity to the study is the line of Watling Street some 3km to the north (approximately in line with the modern A2). This route was one of the earliest established Roman roads, by which the invading forces of Claudius advanced through Kent towards London in 43AD. Kent is notable for its lack of military sites, reflecting the peaceful and 'Romanised' nature of the county. Sites of interest nearby are those of Hartlip Roman Villa and Boxted Roman Villa north of the site – both substantial rural estates excavated in the 19th century. Several stray finds and records of Roman cremations and burials are noted within 5km of the site, generally concentrated south around Detling and Thurnham, and north around Chatham, Gillingham and Upchurch. The lack of Roman finds in immediate proximity to the pipe route may again be a reflection of the limited archaeological investigation nearby, and not of the limited archaeological potential of the period. Due to the substantial amount of archaeological material and sites of the Roman period in the general area, the potential for Roman remains is considered to be moderate.

3.3 Saxon and Early Medieval

Local remains of Anglo-Saxon and early-medieval date are predominantly records of inhumations and associated grave goods. Various such sites are recorded at Gillingham, Boxley, Thurnham and Lower Halstow. In immediate proximity to the site Anglo-Saxon pottery was recorded at Hartlip, while the parishes of Hartlip and Stockbury are thought to be of early medieval origin.

3.4 Medieval

The pipeline runs through the parishes of Stockbury in the south and Hartlip in the north, both of which are mentioned in the Domesday Survey of 1086. Stockbury was held by Odo Bishop of Bayeux at the time of the survey and had its stronghold at the now Scheduled Ancient Monument of Stockbury Castle, just to the east of the site. Yelsted Manor was a manorial estate in the parish of Stockbury and it is possible that

the 15th century Guilstead Court house just to the south of the pipeline is the former manorial house. A number of Listed Buildings of medieval date are located in the vicinity of the study area. The potential for archaeology of the medieval period is probably limited to remains of agricultural activity and is considered to be moderate.

3.5 Post-Medieval

The post-medieval period in this part of Kent was characterised by increased farming to meet demand and the establishment of grand country houses set in impressive landscapes estates. The route of the pipeline passes through fields and orchards, which appear to have been relatively unchanged since the medieval period. Several field boundaries over which the route crosses are historic, dating from at least the 19th century if not earlier. There are no known structures or buildings of post-medieval date along the route of the pipe and archaeological evidence in the area is generally limited to Listed Buildings of the period. The archaeological potential for the post-medieval period is considered to be moderate although this is likely to be limited to remains of an agricultural nature.

3.6 Summary of Records Held by Kent Historic Environment Record

A search of the Kent Historic Environment Record was made within a 1km radius of the site centre during the production of an initial Desk-Based Assessment (Compass Archaeology: 2010) of the site, prior to contractors work commencing. A summary of these results is presented below:

| No. | Source and ID | Site Name/Location | Description | NGR |
|-----|------------------------------|---------------------------|--|-----------------|
| 1. | HER TQ86SW6 | Hartlip | Iron age fire-dogs (device for holding logs above a fire to increase air circulation). | TQ 8363 |
| 2. | HER TQ86SW19 HER TQ86SW20 | Hartlip | Fragments of antler hoe, one 19cm long with a single 13.5cm prong ending in shaped point, now in Maidstone Museum. | TQ 8363 |
| 3. | HER TQ86SW21 | Hartlip | Iron rake prong 11cm long now in Maidstone Museum. | TQ 8363 |
| 4. | HER TQ86SW5 | Deneholes | Series of deneholes (chambered chalk quarry pits). | TQ 8243 6320 |
| 5. | HER TQ86SW22 | Hartlip | Anglo-Saxon pot from Hartlip now in the Maidstone Museum. | TQ 8363 |
| 6. | HER TQ86SW35 | Hill Green Farm Cart Shed | 1700-1900, Grade II. | TQ 832 621 |
| 7. | HER TQ86SW85 | Hill Green Farm House | 1567-1683, Grade II. | TQ 8316 6207 |
| 8. | HER TQ86SW52 | Yelsted Court Farmhouse | 18 th century, Grade II. | TQ 821 622 |
| 9. | HER TQ86SW54 | Cherry Orchard Cottage | 17 th century, Grade II. | TQ 8239 6222 |
| 10. | HER TQ86SW55 | Penny Cottage, Stockbury | 17 th century, timber framed, Grade II. | TQ 8242 6224 |

| | | | | |
|-----|--------------|-------------------------------|-------------------------------------|--------------|
| 11. | HER TQ86SW95 | Barn east of Hill Green Farm. | 18 th century, Grade II. | TQ 8316 6203 |
| 12. | HER TQ86SW70 | Queensdown Warren | 16 th century, Grade II. | TQ 8266 6271 |
| 13. | HERTQ86SW111 | Warren Cottage | 17 th century, Grade II. | TQ 8323 6287 |

4. Archaeological Research Questions

The groundworks presented an opportunity to address several archaeological research questions:

- What is the nature of the geology in this area?
- Is there any evidence for remains of the prehistoric period?
- Is there any evidence for remains of the Roman period?
- Is there any evidence for remains of the Saxon, Early-Medieval and Medieval periods?
- Is there any evidence for remains of the post-Medieval period?

5. The Archaeological Programme

5.1 Objectives

The objectives of the archaeological watching brief are to contribute to knowledge of the area through the recording of any archaeological remains exposed as a result of excavations in connection with the groundworks. Particular attention will be made to the character, height below ground level, condition, date and significance of the deposits.

5.2 Methodology

An archaeologist monitored excavations associated with the pipeline groundworks. Where possible excavation was undertaken using a flat bladed bucket and in a single direction to enable archaeological remains to be recorded prior to disturbance from being driven over. Where possible archaeological remains were encountered, machine excavation ceased to allow the remains to be investigated further.

A metal detecting survey was carried out along the route of the pipeline, particularly during and after topsoil stripping.

5.3 Recording

All structures, deposits and finds were recorded according to accepted professional standards.

All recording points used were accurately tied into the National Grid, using the survey plans provided or if appropriate by theodolite, and located on to the 1:1250 map of the area.

Plans indicating the location of all archaeological features encountered were drawn at an appropriate scale, located on the site plan and levelled with respect to OD. An overall site plan was maintained at an appropriate scale.

Archaeological contexts were recorded individually on context record sheets. A further more general record of the work comprising a description and discussion of the archaeology was maintained as appropriate.

A full digital photographic record was taken. The photographic record is regarded as part of the site archive. Compass Archaeology will provide the County Archaeologist with a selection of photographic images that reflect the archaeological findings and investigations undertaken on this site.

All artefacts recovered during the excavations on the site are the property of the Landowner. They were suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, Conservation Guidelines nos. 2, and on completion of the archaeological post-excavation programme the landowner be encouraged to deposit them in a museum or similar repository agreed with Kent County Council.

The site archive, to include all project records and cultural material produced by the project, will to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*. On completion of the project the Client will arrange for the archive to be deposited in a suitable museum or similar repository to be agreed with Kent County Council.

6. Post-Excavation Work

6.1 Reporting

On completion of the archaeological watching brief the archaeological contractor agreed with the County Archaeologist a programme for the reporting of the results of the work. The reporting of the watching brief will be commensurate with the results but as a minimum must stand as a sufficiently detailed report on the archaeological monitoring to serve both future research and inform future planning decisions taken on the site. This report fulfils the criteria of Kent County Council for the reporting of archaeological watching briefs, as follows.

6.1.1 Report Circulation

Copies of this report will be provided to:

- the Client
- the County Archaeologist
- the Local Planning Authority
- the project archive.

When submitting the report to the County Archaeologist the archaeological contractor will provide written confirmation that the report has been submitted to the above parties.

6.1.2 Reporting of watching briefs with limited remains

In watching briefs such as this, where the project has resulted in limited archaeological remains, the archaeological contractor has completed the necessary post excavation works and produced a '**Watching Brief Report**' within approximately five weeks of the completion of the watching brief.

6.1.3 Contents of a 'Watching Brief Report'

Compass Archaeology have determined the general style and format of the Watching Brief Report but it has been completed in accordance with the Kent County Council specification. The report provides sufficient information and assessment to enable the County Archaeologist and the Local Planning Authority to stand as a detailed report on the archaeological fieldwork for future research and to inform on any future planning decisions for the site.

The report includes as a minimum:

An **Abstract** summarising the scope and results of the archaeological watching brief.

An **Introduction** including:

- the location of the site including National Grid Reference;
- an account of the background and circumstances of the work;
- a description of the development proposals and background;
- the scope and date of the fieldwork, personnel involved and who commissioned it;
- the nature of potential impacts arising from the proposals;

An account of the **Archaeological Background** of the development site including:

- geology, soils and topography;
- any known existing disturbances on the site;
- background archaeological potential of the site. This will include a summary of the known Sites and Monuments Record entries within a *c.*750m radius of the boundaries of the site. The SMR entries are quoted with their full KSMR identifier (e.g. TR36NW 12);
- summary of any previous phases of archaeological investigation at the site;
- any constraints on the archaeological monitoring.

The **Methodology** employed during the watching brief is detailed in the report. Aims and objectives specified in the specification are included as well as any further objectives identified during the course of the watching brief. The frequency of monitoring visits, ground works observed and any constraints experienced while carrying out the monitoring are detailed.

The report includes a quantification of the archive contents, their state and future location.

A description of the **Results** of the archaeological monitoring. This description includes for each area observed:

- the dimensions of the area observed;
- the nature and depth of overburden soils encountered;
- description of all archaeological features and finds encountered in each area observed, their dimensions, states of preservation and interpretation;
- a description of the geological subsoil encountered across the site;
- heights related to Ordnance Datum are provided, where relevant;
- for complex remains a Harris Matrix diagram would have been provided.

The **Finds** recovered during the course of the watching brief are described, quantified and assessed by artefact type within the report. The report provides an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report describes the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections are referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts are detailed.

The report includes an assessment of the **Environmental** potential of the site. Details are provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report details that no samples were collected in relation to this watching brief.

Any results from the watching brief involving the application of archaeological scientific techniques, e.g. specialist dating, would have been included in the watching brief report.

An **Interpretation** of the archaeology of the site, including its location, extent, date, condition, significance and importance is provided. This includes, even though no significant archaeology was identified as present on the site, a description of areas of disturbance, non-archaeological deposits and changes in geological subsoil where appropriate.

The report includes a **Conclusion** with a summary of the archaeological results and how any archaeology observed relates to the pipeline site. The effects of the pipe works on the archaeological remains are also described. Particular note is made of any variations in the depth of overburden covering any significant deposits revealed.

The report includes comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.

Figures / illustrations – The report includes sufficient illustrations to support descriptions and interpretations within the report text. Figures are fully cross-referenced within the document text. As a minimum the report includes the following figures:

- a site location plan tied into the Ordnance Survey at 1:1250 or in the case of larger sites at 1:2500. The plan will also include at least two National Grid points and show the site boundary;
- a plan showing the layout of the development groundworks clearly indicating the areas observed. This plan also includes National Grid points;

- plans of any the features revealed in each of the excavation areas at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections. The location of significant finds and samples taken is indicated;
- relevant section drawings and soil trench profiles as appropriate;
- illustrations and/or photographs of significant finds are included where appropriate.

All report illustrations are fully captioned and scale drawings include a bar scale. Standard archaeological drawing conventions are used. Plan and section illustrations include the numbers of all contexts illustrated. North is indicated on all plans by standard map conventions and is consistent.

Photographs are included where appropriate to illustrate the archaeology of the site, the development operations or the range of soil profiles encountered. All photographs are appropriately captioned.

The report will be submitted to the County Archaeologist in a bound hard copy and in digital format. The digital copy will be supplied in .pdf format. The medium will be on a PC-formatted CD-ROM (CD-R format only) and the digital files will be supplied in a PC readable format.

6.2 General

Compass Archaeology allows the site records to be inspected and examined at any reasonable time, during or after the watching brief, by the developer, the County Archaeologist or any designated representative of Maidstone and Swale District Councils.

In undertaking the work the archaeological contractor abides by:

- all statutory provisions and by-laws relating to the work in question, especially the Health and Safety at Work *etc.* Act 1974;
- the Institute for Archaeologist's *Code of Conduct*;
- the Institute for Archaeologist's *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

On completion of the watching brief Compass Archaeology have prepared a consideration of the methodology used, including a confidence rating.

Compass Archaeology includes with their report a completed copy of the Kent County Sites and Monuments Report Form.

Compass Archaeology will provide the County Archaeologist with a representative selection of transparencies illustrating the archaeology of the site and the operations of the investigation, to be deposited with the County SMR and used for presentations on aspects of the archaeology of Kent.

7. The Archaeological Watching Brief

For the purposes of discussion, the pipeline and associated excavations are divided into eight areas of observation; these areas consist of seven fields crossed by the pipeline and a section of Yelsted Road from c.160m north of the junction with Hill Green Road to the fork junction to the north. The archaeological monitoring was combined with a programme of metal detecting and the results are discussed below.

7.1 Field 1: Adjacent to Cox Street Road and the Pumping Station

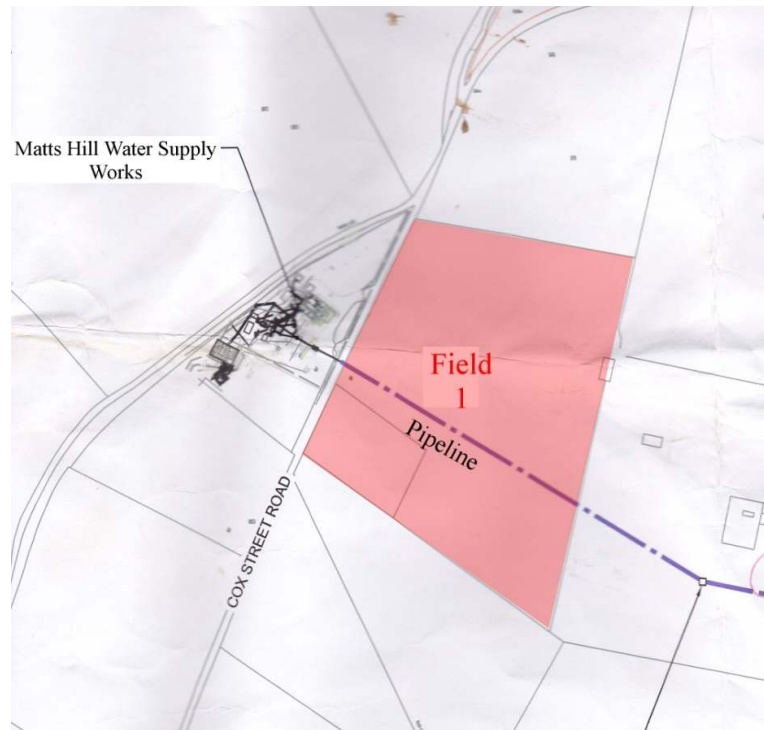


Figure 3: The pipeline route across Field 1 adjacent to Cox Street Road. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).

The pipeline excavation began on the east side of Cox Street Road and ran southeast across Field 1 for approximately 160m to the boundary with Field 2 to the east. The trench was excavated within a c.8m wide easement strip within which approximately 0.15m of topsoil was removed. The pipe trench was excavated to a depth of 2.1m below the existing ground surface in two stages, with an initial trench c.1.6m in width to a depth of c.0.5m and a secondary trench stepped in at a width of approximately 1m. Figures 4-6 show views of the pumping station and Field 1 at the commencement of archaeological monitoring.



Figure 4: Matt's Hill Pumping Station from the main entrance on Cox Street Road.



Figure 5: Field 1 from the gated entrance on Cox Street Road, looking southeast along the route of pipeline and easement corridor.



Figure 6: Field 1 looking northwest back towards Matt’s Hill Pumping Station from the boundary with Field 2.

Topsoil was removed along the easement at an average thickness of *c.*0.15m; the soil was mid-dark brown grey in colour, of friable consistency with frequent flint and chalk inclusions. The removed topsoil was piled along the south side of the easement strip, examination of this spoil did not produce any finds and no indication of archaeological remains was observed in the watching brief works in this area.

Metal detecting was undertaken in undisturbed ground on the internal edges of the easement corridor and across the easement generally, the available area was restricted by the metal-wire fencing which interfered with the detector equipment when used in immediate proximity. Two metal finds were recovered from detecting in Field 1:

| Small Find No. (SF) | Dimensions | Description |
|---------------------|----------------|---|
| 15 | 76mm by 50.5mm | Reproduction miniature Whitbread Inn Sign |
| 16 | 38mm by 33m | Copper Alloy Buckle Fragment |

SF15 (Figure 7 below) was a thin aluminium plate decorated on the principal face with a reproduction of a public house sign ‘*Whitbread, Walnut Tree, Brenchley*’ and on the reverse the words ‘*Whitbreads’ Inn Signs, Second Series of 50, No.23, The Walnut Tree, Brenchley, Matfield, Paddock Wood, Kent. Designed by Violet Rutter, Built at the Watringbury Brewery.*’ The plate is a reproduction inn sign that was given away to public house customers and issued *c.*1950. John Marchant, manager of the Watringbury Brewery originated the idea and many of the actual signs were made at the brewery, mainly by ex-draymen (assessment by Hilary Major and Geoff Potter *cf.* Appendix III).



Figure 7: Reproduction Inn Sign c. 1950.
Thin aluminium plate, 76mm x 50.5mm x <1mm thick

SF16 (Figure 8 below) was a copper alloy buckle fragment, D-shaped with a rectangular projection on one side. It is likely to be part of a horse harness, post-medieval in date and probably from the 19th century.



Figure 8: Copper alloy buckle fragment c. 19th century. L. 38mm x W. 33mm

7.2 Field 2

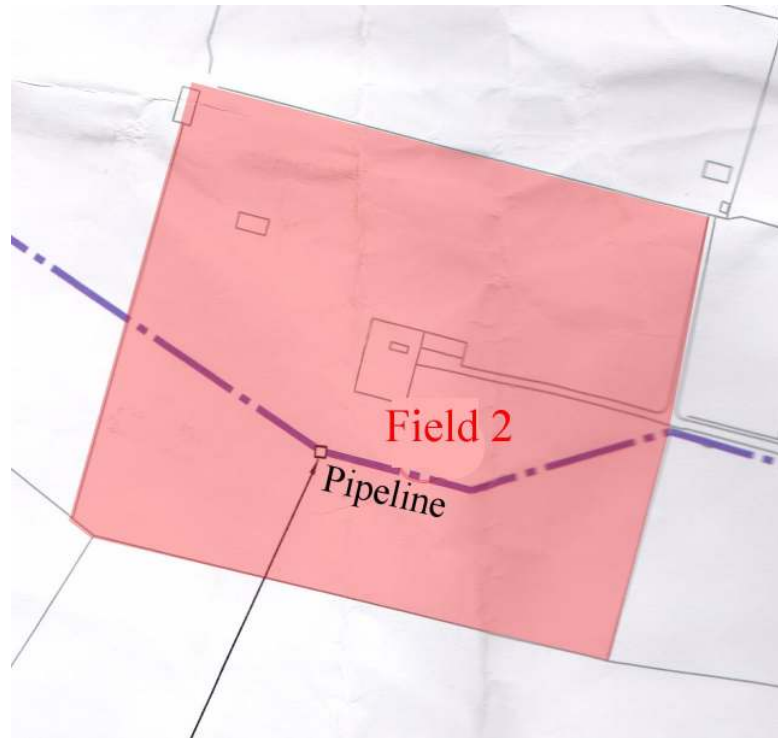


Figure 9: The pipeline route across Field 2. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).

The pipeline route across Field 2 ran for approximately 225m, cresting a hill at the western boundary and sloping gradually downhill towards the boundary with Field 3. The pipe trench was excavated within a *c.*8m wide easement strip that removed approximately 0.2m of mid-grey brown topsoil within weathered frequent chalk and flint inclusions. The pipe trench was excavated at an initial width of 1.6m to a depth of *c.*0.5m with a narrower *c.*0.6m trench stepped in to a depth of 2.1m.

The open pipe trench was excavated from the level stripped topsoil, *c.*0.2m below the existing turfed ground surface. Approximately 0.3m of mid brown/orange subsoil with frequent flint and chalk rubble inclusions was exposed overlying natural drift deposits of clay with flints. The drift deposits consisted of mid-dark brown/orange clay with flint and chalk rubble, with lenses of dense flint rubble and siltier soils. These deposits are likely to comprise hill wash and glacial deposits laid down by river action represented by the now dry river valleys. At the western end of the exposed trench the mixed clay and flints extended to the full depth of excavations (*c.*2.1m), but to the east they overlay rising chalk deposits. The increasing depth of drift deposits corresponds to the downhill slopes, suggesting deposits are deeper towards the base of the dry river valleys. At the eastern end of the trench, along the crest of the hill and high edge of the valley, the chalk deposits were recorded *c.*0.8m below the existing ground surface and appeared soft and degraded with veins of flint and pockets of silt. Figure 10 below shows an illustrative section of the recorded deposits, this drawing is not to scale and is based on observations of the exposed sections from the excavation edge, as accurate recording was not possible, owing to Health and Safety restrictions.

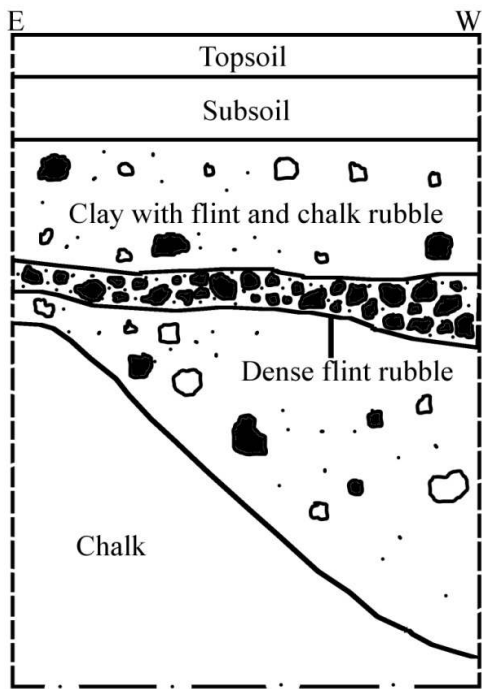


Figure 10: Indicative sketch section of deposits in Field 2. Maximum depth of excavation is 2.1m.



Figure 11: Field 2 looking east from the boundary with Field 1 along the easement strip.



Figure 12: West end of open pipe trench in Field 2 showing clay and flint drift deposits, as can be seen it was difficult to enter the trenches at all locations owing to Health and Safety constraints.



Figure 13: East end of open pipe trench in Field 2 showing rising chalk deposits.

Excavations for an inspection chamber were undertaken in this area, expanding the open trench *c.* 1m to the north and south a further 5m+ into the exposed chalk deposits. The excavations recorded continuing chalk deposits with veins of flint and pockets of silt.

No archaeological finds or features were recorded in the open pipe trench or subsequent chamber excavations. Metal detecting was undertaken on the easement corridor. Three small finds (five artefacts) were recovered during detecting:

| Small Find No. (SF) | Dimensions | Description |
|---------------------|-----------------|------------------------------------|
| 17 | 22mm | Three 12-bore shotgun cartridges. |
| 18 | 101mm by 24.5mm | Copper alloy plate, in two pieces. |
| 19 | 12mm | Misc. Small lead piece. |

SF18 (Figure 14 below) was a copper alloy plate in two pieces, broken at each end but with a probable original length of *c.*225mm. The plate was perforated by a series of rectangular cutouts. At one end was an empty 3mm diameter hole and a series of small holes with broken iron pins or rivets, suggesting the ‘grille’ was originally covered by fabric (assessment by Hilary Major and Geoff Potter *cf.* Appendix III).



Figure 14: SF18 Copper alloy plate in two pieces. L. 101mm x 24.5mm x \leq 1mm thick

7.3 Field 3

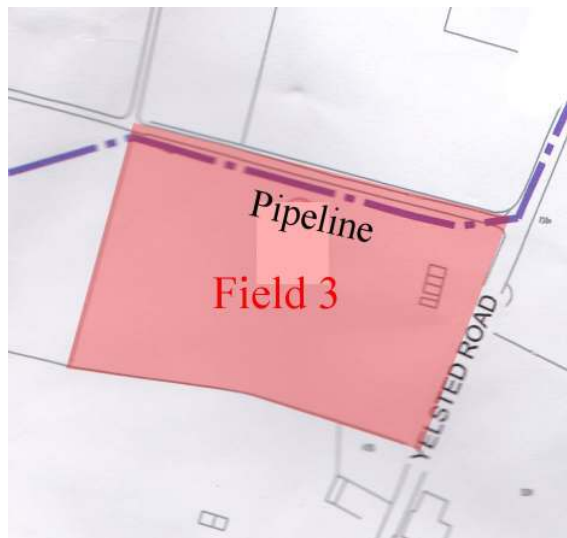


Figure 15: The pipeline route across Field 3. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).

In Field 3 the pipeline ran adjacent on the south side to a farm track and driveway, entering Yelsted Road at its entrance for a length of *c.*150m. The excavations in this area were problematic because of the extremely adverse weather conditions at this time and the high clay content of the soil, which made the monitoring area extremely wet and muddy, and it was quite difficult to monitor the works in certain areas of Field 3. Figures 16 and 17 below show the conditions of Field 3 at the time of the initial site visit.



Figure 16: Field 3 looking east towards Yelsted Road.



Figure 17: Field 3 at the entrance to Yelsted Road.

Metal detecting was undertaken on the available areas, primarily at the west end of Field 3, the majority of the easement in Field 3 was churned over by the very wet

weather and essential machine movement along the easement and thus not ideal for detecting, however four finds were recovered from metal detecting here:

| Small Find No. (SF) | Dimensions | Description |
|---------------------|-----------------|-------------------------------|
| 20 | 135mm long | Iron ploughshare or shoe |
| 21 | 116mm by 39mm | Part of an iron bar |
| 22 | 40mm by 33mm | Rectangular iron buckle frame |
| 23 | 12.5mm diameter | Copper alloy knob |

SF20 (Figure 18) was an iron ploughshare or shoe with a triangular cross-section measuring 50x85x98mm and tapering to a point. The upper part of the body was hollow *c.* 8-11mm thick, the two larger sides were pierced by an aligned hole 8-10mm in diameter for securing the ploughshare to the main body of the plough. It is presumed that the fixing bolt worked loose and the item was lost during ploughing (assessment by Hilary Major and Geoff Potter).



Figure 18: SF20, Iron ploughshare or shoe. Approx. 135mm long with a triangular cross-section, the sides at the top measuring *c.* 50 x 85 x 98mm and tapering down to the point.

SF21 (Figure 19) was part of an iron bar that tapered towards one end and may have formed part of a hinge. The bar was broken at both ends, with the thicker end showing one side of a 8mm diameter hole.



Figure 19: SF21, Iron bar, up to 116mm x 38-39mm x 3 to 6mm thick

SF22 (Figure 20) was a rectangular iron buckle frame with the tongue missing, probably of post-medieval date.



Figure 20: SF22, Rectangular iron buckle frame, tongue missing, circular section. 40x33mm.

SF23 (Figure 21) was a small knob for a bureau draw or similar, made of copper alloy with remnant of iron screw thread to the rear.



Figure 21: SF23, Copper alloy bureau knob, up to 12.5mm diam. x 14mm long.

7.4 Yelsted Road

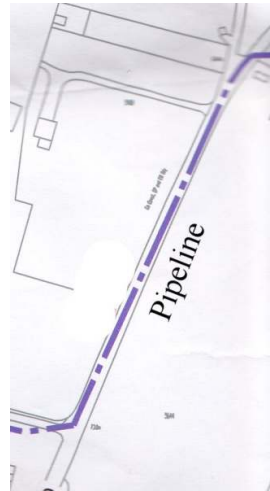


Figure 22: Yelsted Road. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).

Approximately 185m of pipe trench was excavated along Yelsted Road, between the farm driveway of Field 3 to the fork-junction where the pipe enters Field 4 to the east. The trench was excavated to a width of *c.*0.8m and to a depth of *c.*1.5m. The trench exposed the existing tarmac road surface over concrete hardcore with underlying road makeup deposits, no archaeological finds or features were observed. No area adjacent to the trench was suitable for metal detecting.



Figure 23: Trenching on Yelsted Road, after backfilling looking north.

7.5 Field 4: from Yelsted Road to the boundary with Field 5.

The pipe trench entered Field 4 from Yelsted Road and ran for approximately 185m to the boundary with Field 5. A narrower *c.*4m easement corridor was stripped of topsoil adjacent to the northwest hedgerow to a depth of *c.*0.3m. The topsoil consisted of mid grey/brown silty sandy soil with flint inclusions, occasional chalk flecking and very occasional modern brick, although generally very sterile. At the commencement of monitoring a small area of trenching had already been excavated, the pipe laid and the trench partially backfilled with imported shingle, but the remaining trench was excavated under archaeological supervision using a mechanical mini-digger. The trench was excavated at an initial width of 1.6m and stepped in at *c.*0.5m depth to *c.*1m width, with an overall depth of 2.1m below the existing ground surface. Below the topsoil a shallow *c.*0.3m layer of flinty mid brown/orange silty clay subsoil was observed. The subsoil overlay light orange/brown flint and sand gravels with clay and pockets of darker sandy silt. The observed deposits are Head deposits infilling the now dry river beds and are very mixed comprising gravels and brickearth with mixed hillwash. The deposits varied in colour and composition from north to south. A large service cut was observed approximately halfway along Field 4, presumably associated with a property on the opposite side of Yelsted Road. No archaeological finds or features were observed during the archaeological monitoring.

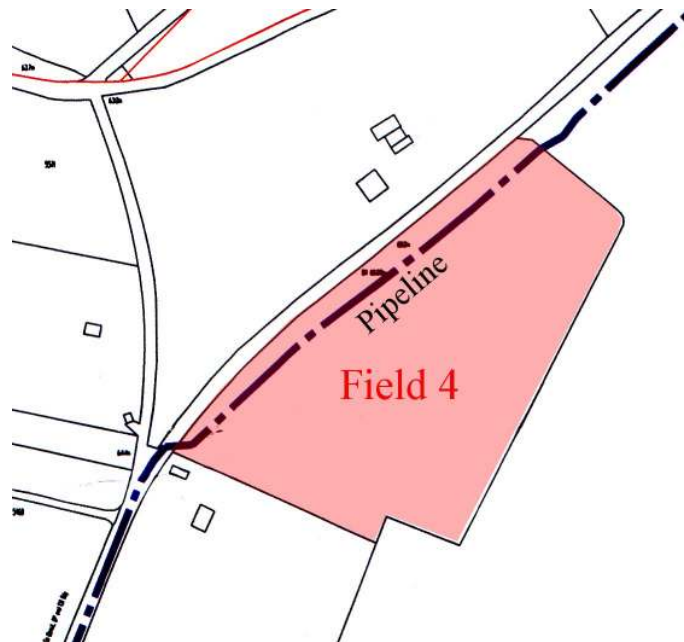


Figure 24: The pipeline route across Field 4. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).



Figure 25: Trenching in Field 4 looking southeast towards the entrance onto Yelsted Road.



Figure 26: East facing section of pipe trenching in Field 4.

Metal detecting was undertaken in the area of undisturbed ground to the east of the pipeline, although the available area was reduced by the proximity of a metal-wire fence. Three finds were recovered during detecting:

| Small Find No. (SF) | Dimensions | Description |
|---------------------|---------------|------------------------------|
| 24 | - | Victorian silver sixpence. |
| 25 | 16mm diameter | Copper alloy button. |
| 26 | 43mm length | Copper alloy handle fragment |

SF24 (Figure 27) was a heavily worn Victorian silver sixpence. The obverse has the left-facing 'Young Head' of the Queen, which was used on lower denomination silver coinage between 1837-87; this example is thought to be Type 1 in use until 1866. The date on the reverse is not decipherable (assessment by Hilary Major and Geoff Potter).



Figure 27: SF24, Victorian silver sixpence.

SF25 (Figure 28) was a copper alloy button with a recessed centre with two holes. The surrounding external face was inscribed 'H. WOODRUFF. SITTINGBOURNE'. The reverse was inscribed 'J. N. & Co. BIRMINGHAM'. These are thought to represent the retailer and manufacturer respectively (assessment by Hilary Major and Geoff Potter *cf.* appendix III).



Figure 28: SF25, Copper alloy button, c 16mm diam.

SF26 (Figure 29) was a copper alloy handle fragment, probably from a vessel although of uncertain form, probably post-medieval.



Figure 29: SF26, Copper alloy handle fragment; L. 43mm.

7.6 Field 5

At the commencement of archaeological monitoring a *c.*4m wide easement corridor had been stripped of topsoil along the length of the pipeline in Field 5, *c.*240m. Owing to wet weather and machine movement the exposed soil of the easement was in places submerged in water and mud and observation was restricted here. In order to correct this a sample of approximately 50m was re-stripped prior to excavation of the pipe trench in order to monitor this area. A small area of burning was exposed immediately below the stripped topsoil but this is was modern in origin. The pipe trench was then excavated in Field 5 to a general depth of *c.*2.1m and exposed sterile mid orange/brown subsoil with sand, gravels and clay to 0.3m (below 0.22m of topsoil). Natural Head deposits were exposed for the remaining depth, consisting of varying flint and sand gravels with mixed hill wash. No archaeological finds or features were exposed during either stripping or pipe trench excavations.

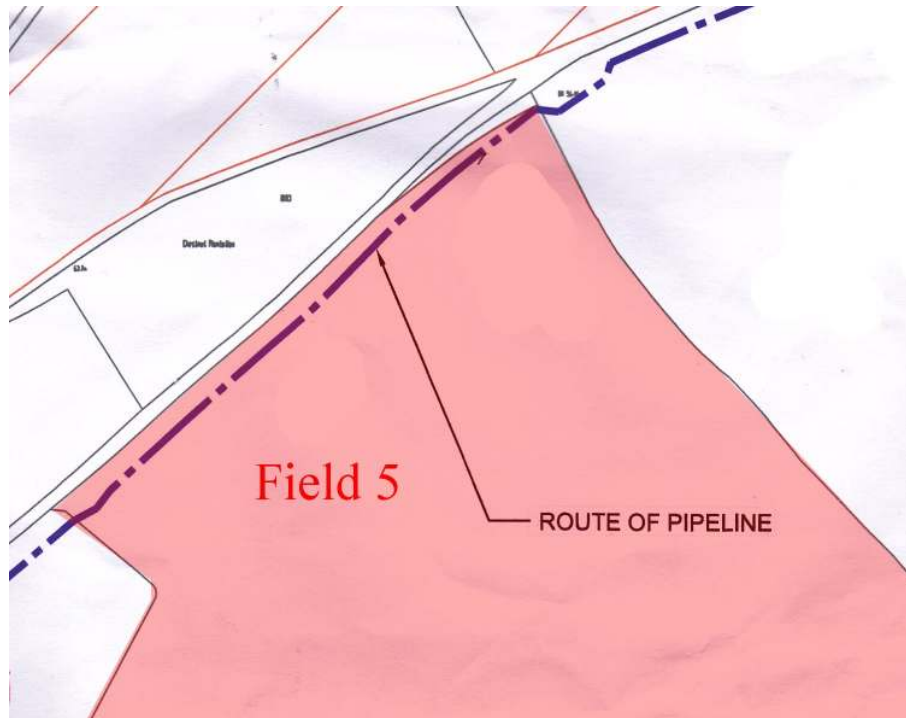


Figure 30: Route of the pipeline across Field 5. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).



Figure 31: Re-stripping of topsoil, to remove the waterlogged and disturbed overlying deposits (1m scale), looking northeast towards Field 6.



Figure 32: Trenching in Field 5 showing mixed Head deposits.

Examination of the removed topsoil deposits produced three pieces of burnt flint ranging in size from 7mm to 32mm. Metal detecting was undertaken in the area to the southeast of the pipe trench but the available space was limited in places by the metal-wire fence, cabin and stacked pipes and equipment, no finds were recovered during metal detecting in this area.

7.7 Field 6

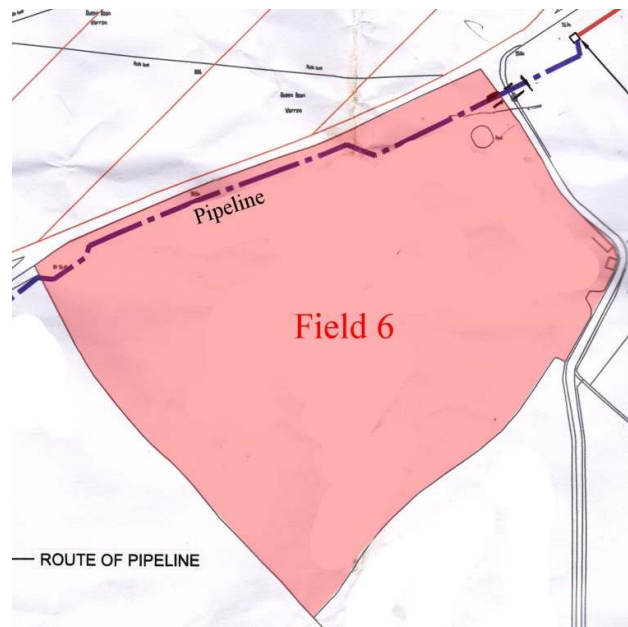


Figure 33: Route of the pipeline across Field 6. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).

Approximately 275m of pipeline were excavated across Field 6 between the boundary with Field 5 and the southwest side of Cradles Road. As with previous excavations, the trench was excavated at an initial width of 1.6m, stepped in at a depth of 0.6m and excavated at 1m width to a depth of 2.1m. The initial easement strip removed *c.*0.3m of turf and mid-light grey/brown topsoil with flint pebbles, chalk flecking and occasional modern brick and ceramic. A shallow layer *c.*0.15m in thickness of light orange/brown silty/sandy clay with flints was exposed in section below – this was recorded as subsoil and lies at the interface with the underlying natural deposits. Natural Head deposits of mixed gravels and sand with hill wash were observed from *c.*0.45m below the existing ground surface – these were generally mid brown/orange sand, clay, large flint nodules ranging from 10-200mm. At the southwest end of the trench Head deposits extended to the full depth of excavation, *c.*2.1m below the existing ground surface. As the trench continued northeast rising chalk deposits were exposed in section, generally soft and degraded with flint and sand pockets. Occasional modern services were observed in section but no archaeological finds or features were recorded during trenching.



Figure 34: Head deposits in trenching in the southwest half of Field 6 (southeast facing section).



Figure 35: Rising chalk deposits to the northeast of Field 6 (southeast facing section).

In the area adjacent and to the southeast of the pipe trench in Field 6, a large 160m by 20m area was stripped for the construction of a chalk bund (or raised embankment) for environmental purposes. An average of 0.3m of turf and topsoil, with an additional *c.*0.15m of subsoil were stripped across the entire area exposing the underlying natural Head deposits. In plan these deposits varied considerably across the exposed area, varying particularly in the density of flint nodules. No archaeological features were exposed in plan but a small assemblage of finds was recovered from the topsoil. The finds included four pieces of burnt flint, a possible Neolithic core fragment, a small assemblage of pottery and a single fragment of modern glass bottle. The pottery comprised two sherds of miscellaneous 19th century wares and a single sherd of Bone China (1770-1925).



Figure 36: Topsoil stripping for the chalk bund in Field 6.



Figure 37: Topsoil stripping for the chalk bund in Field 6.

Metal detecting was undertaken during topsoil stripping and in the undisturbed areas between the pipe trench and chalk bund. Four small finds were recovered during metal detecting in Field 6:

| Small Find No. (SF) | Dimensions | Description |
|---------------------|-------------|--------------------------|
| 1 | 26mm length | Copper alloy shoe buckle |
| 2 | - | Shrapnel |
| 3 | - | Shrapnel |
| 4 | - | Shrapnel |

SF1 (Figure 38) was a copper alloy shoe buckle with traces of white metal coating. The fragment was from a rectangular shoe buckle with moulded decoration consisting of a double row of square studs separated by beaded lines, of probable 18th century date.



Figure 38: SF1, probable 18th century shoe buckle fragment, surviving L. 26mm.

SF2-4 (Figure 39) were three pieces of shrapnel, probably from the nose cone of a shell. The shrapnel was made of finely threaded copper alloy found a few metres apart and almost certainly from the same source.



Figure 39: SF2-4, shrapnel fragments. The pieces are 21.5mm wide by ≤ 1.8 mm thick; one 67mm long and the other two fitting together to form a strip 54mm long.

7.8 Field 7: Soakaway

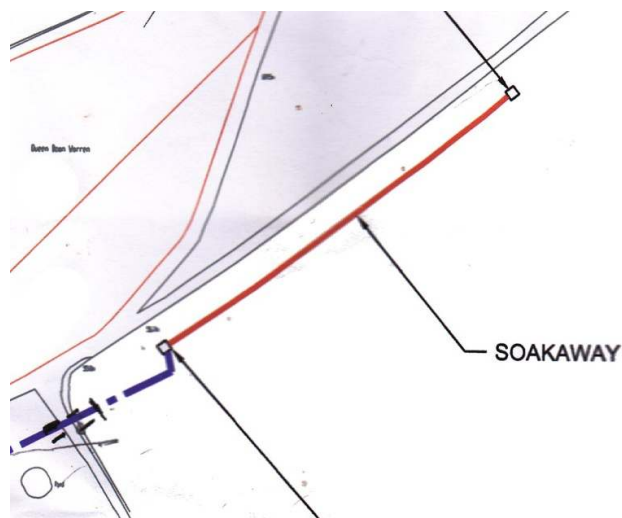


Figure 40: The soakaway excavation in Field 7. Based on an original drawing by Southern Water (Pipeline Route to Soakaway AB.41517309.1C0011).

The pipeline was passed under Cradles Road using directional drilling and entered Field 7 on the northeast side. Excavations in Field 7 were undertaken for the construction of a large soakaway. The soakaway was excavated in three stages, an initial topsoil strip to a depth of *c.*0.4m, followed by an excavation to 3m created graded or sloped sides and finally a 7m deep central trench which was backfilled with shingle to create the soakaway. The stripped area was *c.*15m (northwest to southeast) by 205m (southwest to northeast), and ran parallel to the road line to the northeast. Turf and topsoil were recorded at an average thickness of 0.10m, consisting of dark grey/brown silty and sandy clay with frequent chalk and flint inclusions and occasional modern brick and ceramic, occasional worked and burnt flint were also recovered. The topsoil overlay a subsoil layer of lighter grey/brown silty clay with chalk and flint, which varied in thickness from 0.2m to 0.4m becoming thicker at the base of the existing slope (natural hill wash). The underlying natural deposits were Head or drift deposits of clay with flint and chalk inclusions generally mid-light brown/orange with darker areas with higher flint concentrations. Areas of degraded chalk with flint were exposed higher up the slope along the northeast edges of the excavations.

A test-pit excavated by contractors prior to the commencement of groundworks was exposed in the southwest half of the stripped area. Plough furrows were exposed in plan across the majority of the stripped area, with varying degrees of preservation. No datable material was recovered from these features but all were aligned northeast to southwest and indicate that the field (currently meadow) was farmed at some point in the past. The furrows may represent historic land use from the early post-medieval period, but as no datable material was recovered they may well be more recent – the field has certainly not been ploughed in recent years.



Figure 41: Stripped area for the soakaway excavations, looking southwest towards Cradles Road.



Figure 42: Plough furrows exposed during topsoil stripping in Field 7.

Four pieces of worked flint were recovered from the removed topsoil deposit, including three waste flakes and one shatter fragment (assessment by Jon Cotton, Senior Curator Museum of London Early Department). Four fragments of burnt or fire-cracked flint were also recovered from this context, along with a small pottery assemblage comprising post-medieval sherds. Metal detecting was undertaken in the area adjacent to the fence along the southeast side of the soakaway strip, this produced ten small finds:

| Small Find No. (SF) | Dimensions | Description |
|---------------------|----------------------|-----------------------------------|
| 5 | 25mm diameter | Copper alloy button with gilding. |
| 6 | 160mm front to back. | Half an iron horse shoe. |
| 7 | - | George VI penny, 1946. |
| 8 | 66mm by 8mm. | Copper alloy edge binding. |
| 9 | 68mm by 18mm. | Copper alloy bracket. |
| 10 | 49mm by 18mm. | Shrapnel. |
| 11 | 16mm diameter. | Copper alloy button. |
| 12 | 18mm diameter. | Copper alloy button. |
| 13 | 45mm diameter | Copper alloy screw top. |
| 14 | - | Fragments melted lead waste |

SF5 (Figure 43) was a flat disc button with a small back loop and traces of gilding. The surface was mostly missing apart from a band of machine stamped decoration along the edge comprising a running wave of small dots. The button is thought to be of late 18th to 19th century date (assessment by Hilary Major and Geoff Potter).



Figure 43: SF5, copper alloy button late 18th to 19th century. Diam. 25mm

SF6 (Figure 44) was one half of an iron horseshoe, heavily worn and broken at the front, suggesting it might have broken while in use (assessment by Hilary Major and Geoff Potter *cf.* Appendix III).



Figure 44: SF6, half an iron horseshoe. Front to back measurement c 160mm

SF7 (Figure 45) was mildly corroded George VI penny of 1946 (assessment by Hilary Major and Geoff Potter).



Figure 45: George VI penny, 1946.

SF11 and 12 (Figure 46) were copper alloy buttons, both recessed with four-holes surrounding inscribed external faces. SF11 was inscribed 'NE PLUS ULTRA' and SF12, only partly legible, with 'B S WOOLF.....POULTRY. B. C' (assessment by Hilary Major and Geoff Potter).



Figure 46: Two copper alloy buttons, SF11 and 12. , c.16mm and 18mm diam. respectively.

The pottery recovered during topsoil stripping in Field 7 comprised 6 sherds of various post-medieval wares. A single sherd of post-medieval red earthenware (1550-1700), a sherd of English tin-glazed earthenware (1575-1775), a sherd of London stoneware (1675-1825) and three sherds of miscellaneous 19th century wares were recovered. The recovered pottery indicates some presence in the area from the mid-post medieval period onwards.

8. Summary and Conclusions

- 8.1** No significant archaeological finds or features were recorded during the course of watching brief works on the Matt's Hill pipeline. Finds recovered during topsoil stripping and from the inspection of the spoil heaps included post-medieval pottery sherds, worked and fire-cracked flints and fragments of modern ceramic building material. Metal detecting produced several finds including coins, buttons, shrapnel and agricultural metal, all of post-medieval date. *In-situ* remains were limited to plough furrows recorded during topsoil stripping in Field 7, although these are undatable they do indicate that the field has been ploughed in the past and has not been perpetually used as meadow as it currently is.
- 8.2** The report concludes that no finds or features of archaeological significance were recorded at Matt's Hill, and consequently no further work is required.

9. Bibliography

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National Monument Record
Centre for Kentish Studies, Maidstone

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Appendix I: Kent County Council SMR Form

| | |
|--|------------------------------------|
| Site Name: Matt's Hill Water Supply Works | |
| Site Address: Matt's Hill Water Supply Works, Borough of Maidstone and Swale, Kent, ME9 | |
| Summary: Over 2km of pipeline were excavated in the Yelsted area of the Boroughs of Maidstone and Swale by Southern Water. | |
| District/Unitary: Maidstone & Swale | Parish: Stockbury & Hartlip |
| Period(s): Post-medieval | |
| NGR (centre of site : 8 figures): Centre: TQ 8250 6240 East: TQ 8204 6255 West: 8334 6312 | |
| Type of archaeological work Watching Brief | |
| Date of Recording: 9th to 21 st October 2010 | |
| Unit undertaking recording: Compass Archaeology Ltd | |
| Geology: Chalk and mixed Head Deposits | |
| Title and author of accompanying report: Matt's Hill Water Supply Works, Boroughs of Maidstone and Swale, Kent ME9: An Archaeological Watching Brief. Cummings, R. | |
| Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate) An archaeological watching carried out on available areas recorded plough furrows but no significant archaeological finds or features. A small post-medieval pottery assemblage, worked and fire-cracked flints and twenty-six small finds recovered during metal detecting were recorded. | |
| Location of archive/finds: Compass Archaeology Ltd | |
| Contact at Unit: Geoff Potter | Date: 8th January 2011 |

Appendix II: Pottery Report

Pottery from Matt's Hill, Maidstone, Kent (site MAT10)

Paul Blinkhorn

The pottery assemblage comprised ten sherds with a total weight of 165g. It was all post-medieval and unstratified.

Where appropriate, it was recorded using the codes and chronologies of the Canterbury Archaeological Trust Fabric series for the county of Kent, with the following types noted:

| | |
|--------|--|
| PM1: | Post-medieval Red Earthenware, 1550 – 1700. 2 sherds, 17g. |
| PM9: | English Tin-glazed Earthenware, 1575 – 1775. 1 sherd, 3g |
| PM25: | London Stoneware, 1675-1825. 1 sherd, 49g. |
| PM100: | Miscellaneous 19 th century wares. 5 sherds, 89g. |
| LPM7B: | Bone China, 1770-1925. 1 sherd, 7g. |

Appendix III: The Finds

All the finds were recovered during and after topsoil stripping, but were otherwise unstratified.

There were no intrinsically significant finds, and no further work is required on the assemblage.

1. Struck flint

Jon Cotton, Museum of London Early Dept.

Three waste flakes, marginally patinated.
One possible core fragment (possibly Neolithic).
One shatter fragment.

2. Burnt flint

11 pieces (1268 gms.). Size range *c* 7 x 20mm up to 32 x 55mm.

3. Glass

One fragment of fairly modern bottle glass, 32 x 18mm x *c* 3mm thick.

4. Metalwork

Hilary Major & Geoff Potter

A total of 30 items were recovered by metal detection from the topsoil or the exposed subsoil surface after stripping. The items were otherwise unstratified

All the material is likely to be post-medieval, 18th century or later and in a number of cases of quite recent (mid 20th century) date. The older finds included an 18th century shoe buckle, two other buckles which were probably from horse harnesses of 19th century date, an 18th or 19th century button, and a probable vessel handle.

/1\ Shoe buckle.

Copper alloy with traces of white metal coating. Fragment from a rectangular shoe buckle, with moulded decoration consisting of a double row of square studs separated by beaded lines. 18th century. The original width would have been at least 46mm, surviving L. 26mm.

/2\ /3\ & /4\ Shrapnel, probably from the nose cone of a shell.

Three pieces of finely threaded cu. alloy (?brass), found a few metres apart and almost certainly from the same source. The pieces are 21.5mm wide by \leq 1.8mm thick; one piece 67mm long and the other two fitting together to form a strip 54mm long.

/5\ Copper alloy button with traces of gilding.

Flat disc button with a small back loop. The surface is mostly missing, apart from a band of machine stamped decoration along the edge, comprising a running wave of small dots. Late 18th-19th century. Diam. 25mm.

/6\ One half of an iron horseshoe, very heavily worn and broken at the front.

Front to back measurement *c* 160mm; thickness reduces from 12mm at the back to 2 to 4mm across the break at the front. May well have fractured whilst in use.

/7\ George VI penny, 1946. Some corrosion but relatively unworn.

/8\ Fragment from a copper alloy moulded edge binding, with an incised line down each edge. Probably post-medieval. L. 66mm, W. 8mm.

/9\ Cu. alloy right-angled bracket. L. 68mm long by sides 18 & 11mm; 1.5 to 2mm thick.

The larger face has three empty countersunk holes in line, plus another offset and containing *in situ* Fe. The smaller face has a hole near one end, also blocked by Fe.

/10\ Cu. alloy fragment with five grooves on one side, *c* 49mm x 18mm x 2 to 3mm thick.

Probably shrapnel; ?part of the driving band.

/11\ Cu. alloy button, *c* 16mm diam.

Recessed centre with four holes; surrounding external face inscribed NE PLUS ULTRA.

/12\ Cu. alloy button, 18mm diam.

Recessed centre with four holes. Surrounding external face inscribed; partly illegible but main part appears to be: .B S WOOLF...??...POULTRY. B C.

/13\ Cu. alloy (brass?) screw top. Broad and shallow – 45mm diam. by 7mm deep, ≤ 0.7 mm thick.

The item is quite finely made: the top is decorated by two sets of concentric rings, at the perimeter and inside this *c* 18.5mm diam, and there are two further sets of lines around the external edge. On the inside are traces of a paper or card lining, plus 6 rows of threading on the flange.

/14\ & /19\ Four fragments of melted lead waste, total wt. 92 gms. The largest piece *c* 37 x 26 x 7mm, the smallest *c* 14 x 13 x 5mm.

/15\ Thin aluminium plate, 76mm x 50.5mm x <1mm thick, decorated on both sides.

On the principal face a miniature reproduction of a public house sign:

WHITBREAD
WALNUT TREE
Brenchley

And on the reverse:

WHITBREADS' INN SIGNS
Second Series of 50
NO. 23
THE WALNUT TREE
Brenchley, Matfield
Paddock Wood, Kent
Designed by Violet Rutter
Built at the Watringbury Brewery

These reproductions were apparently given away to public house customers. The idea was originated by John Marchant, manager of the Watringbury Brewery – where many of the actual signs were built, mainly by ex-draymen.

The second series of 50 miniatures was issued in 1950, about a year after the first issue (also made of aluminium).

/16\ Copper alloy buckle fragment. In good condition; D-shaped with a rectangular projection on one side. Probably from a horse harness. Post-medieval, probably 19th cent. L. 38mm, W. 33mm.

/17\ Three 12-bore shotgun cartridge ends, maximum diam. 22mm.

Stamped ELEY – KYNOCH 12; one also has a small ICI trademark. Remains of card lining and packing on the inside.

/18\ Cu. alloy plate, 101mm long by 24.5mm x \leq 1mm thick. Broken at each end, but surviving features suggest that original length may have been at least 225mm.

Perforated by a series of rectangular cut-outs which get progressively longer in groups of four (10, 11 & 12mm, plus the start of a further 13mm group). At one end of the plate is an empty 3mm dia. hole, and then a series of small holes (*c* 0.5mm) containing broken Fe. pins or rivets – one on either side of the plate then a series at alternate ends of the cutouts. This suggests that the ‘grille’ was originally covered, perhaps by fabric or similar.

/20\ An iron ploughshare or shoe. Approx. 135mm long with a triangular cross-section, the sides at the top measuring *c* 50 x 85 x 98mm and tapering down to the point.

The upper part of the body is hollow, *c* 8-11mm thick. The two larger sides are pierced by an aligned hole 8-10mm in diameter, evidently for securing the ploughshare onto the main body of the plough – the hole being centred 19-23mm below the top. Presumably the fixing bolt worked loose and the item was lost during ploughing.

/21\ Part of an iron bar, up to 116mm x 38-39mm x 3 to 6mm thick, tapering towards one end. May have formed part of a hinge?

The bar appears to have been broken at both ends, the exposed edge at the thicker end containing one side of 8mm diameter hole. It is also very slightly curved, although this may not be original

/22\ Rectangular iron buckle frame, tongue missing. Circular section. Probably post-medieval. 40x33mm

/23\ Small knob for a bureau draw or similar, up to 12.5mm diam. by 14mm long. Cu. alloy with remnant of Fe. screw thread to the rear

/24\ Victorian silver sixpence. Heavily worn.

Obverse has the left-facing 'Young Head' of the Queen – used with only slight modification on lower denomination silver coinage from 1837-87 (although close examination would suggest Type 1, in use till 1866). On reverse is just visible SIX PENCE within a wreath, crown above, date below but not decipherable.

/25\ Cu. alloy button, *c* 16mm diam.

Recessed centre with two holes; surrounding external face inscribed H.WOODRUFF. SITTINGBOURNE. The reverse is also inscribed: *J. N & C.^o* BIRMINGHAM. These names presumably represent, respectively, the retailer and manufacturer.

/26\

Copper alloy handle fragment, probably from a vessel though of uncertain form. Cast. Probably post-medieval. L. 43mm.