# SELSFIELD RESERVOIR TO TURNERS HILL PIPELINE

# **Archaeological Watching Brief**

Prepared by

# NETWORK ARCHAEOLOGY LTD

For

**BLACK & VEATCH** 

On behalf of

**SOUTH EAST WATER** 

Report Number: 420

December 2009







# DOCUMENT CONTROL SHEET

Project title	Selsfield Reservoir to Turners Hill Pipeline							
<b>Document title</b>	Archaeolog	Archaeological Watching Brief						
Report no.	420							
Project code	SEL 57							
Accession number								
File reference	SEL 57 v1	.0						
Counties	West Suss	ex						
Parishes	Speldhurst	Parish, Wi	ithyham Pai	rish				
NGRs	534667 13	534667 137410 to 534317 135727						
Client 1	Black & Veatch							
Client 2	South East Water							
Distribution	Graham Webb, Infrastructure Manager, South East Water Nathan Camilleri, Project Manager, South East Water Chris Philipson, Project Manager, Black & Veatch Laura Baines, Senior Environmental Scientist, Black & Veatch John Mills, Archaeologist, West Sussex County Council Environment and Development							
Document	Control sheet	Table of contents	List of appends	List of tables	List of plates	List of figures	Text	Apps
Comprises	1	1	1	1	1	1	36	46

Ver	Status	Author(s)	Reviewer	Approver	Date
1.0	First Issue	Stephen Thorpe Project Officer		David Bonner Director, Project Manager BA (Hons), MIFA	04/12/2009

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#### NON-TECHNICAL SUMMARY

This report represents the results of the archaeological watching brief undertaken by Network Archaeology Ltd between May and July 2009 during the construction of a new water pipeline between Selsfield reservoir (NGR 534667 137410) and Turners Hill (NGR 534317 135727) in the county of West Sussex. The new water pipe is designed to reinforce the strategic distribution network.

The watching brief was undertaken to identify, appropriately manage and fully mitigate the archaeological resource affected by the construction of the water main.

Previous non-intrusive archaeological surveys had revealed a number of possible features along the route of the pipeline including historical field boundaries, former trackways, areas of possible enclosure, former parks and former areas of woodland. A Geophysical survey also identified a number of anomalies which may have been potentially archaeological in origin.

The watching brief corroborated the presence of a number of the former boundaries and trackways identified by the desk based assessment and field reconnaissance survey and also identified a handful of previously unidentified former field boundary ditches. One of the plots (plot 12) appeared to be utilised purely for the deposition of night-soil, a practice of depositing human bodily waste on the fields as manuring.

Evidence of possible short-term or transient prehistoric activity was identified within the majority of the plots with an apparent focus of activity within plot 14.

Evidence of deliberate land clearance was also identified within plot 20 where a layer of charcoal rich and scorched silt was located.

Evidence of settlement activity along the route of the pipeline was also indicated by a possible hearth in plot 14 and features associated with agricultural practices within plot 23.

A large volume of unstratified finds were recovered during the watching brief including pottery, ceramic building material, post-production residue, worked flint, burnt flint, clay pipe, glass, fired clay, mortar, shell, stone and metalwork. All of these artefacts were probably the result of post-Medieval or later agricultural practices such as manuring.

## 1 INTRODUCTION

# 1.1 Purpose of this Report

This report presents the results of archaeological investigations conducted during construction of a new water main between Selsfield Reservoir and Turners Hill (Figure 1).

# 1.2 Commissioning bodies

The archaeological works were commissioned by Black & Veatch on behalf of South East Water. The archaeological contractor was Network Archaeology Ltd.

# 1.3 The pipeline

# 1.3.1 Pipeline route

The pipeline was built between Crawley Down (NGR 534667 137410) and Turners Hill (NGR 534317 135727) in the county of West Sussex. The route was 1.9 km long, ran roughly north to south with a 54m long spur located 360m from the southern end. Approximately 80% of the pipeline was cross-country with the remaining 20% being street-works.

# 1.3.2 Physical environment of the pipeline

The proposed pipeline crossed the headwaters of the river Medway (110m AOD). Land on the southern side rose steeply to 175m AOD whilst the northern side was gentle sloping.

A full description of the soils, solid geology and hydrology of the pipeline route can be found in the Written Scheme of Investigation (Network Archaeology Ltd 2008i).

#### 1.3.3 Reasons for building the pipeline

South East Water constructed a 250mm diameter pipeline for the transportation of water in the area around Crawley Down in the county of West Sussex. The new water main was constructed to reinforce the local distribution network.

# 1.3.4 Pipeline specifications

The pipeline was a 250mm diameter gravity fed potable water scheme.

# 1.3.5 Pipeline construction

The Principal Contractor was Morgan Est. Cross-country sections of the pipeline were built using the 'spread' technique, where all the personnel and equipment necessary were contained within a strip of land known as the working width. The maximum working width was 15m, generally 10m on either side of the pipe trench. The working width was reduced to approximately 6m at all hedgerows, highways and watercourses and at localised positions along the route as necessary.

Construction activities in cross-country sections were in a phased sequence as follows:

- Right of Way activities, including hedge removal, cleaning, fluming and temporary bridging of ditches and temporary fencing of the working width;
- Topsoil stripping of the working width, access tracks and ancillary areas in cross-country sections;
- Subsoil grading and benching of the working width, as necessary in cross-country sections;
- Trench excavation and pipe laying in cross-country sections;
- Excavation of launch and reception pits for Horizontal Directional Drill (HDD); trenchless construction techniques (HDD) were necessary at two points where the proposed main crossed the river Medway and a tributary stream;
- Reinstatement, involving the replacement of topsoil and where necessary, the installation of post-construction drainage.
- The pipeline also included;
- 4 x Inline Restraint Blocks either side of both HDD sections: Drill 1 (Plot 09 and Plot 11) and Drill 2 (Plot 15 and Plot 09), and
- 7 x Anchor Gaskets in Plots 3-5.

#### 1.3.6 Construction programme

Construction commenced in May 2009 and was completed in September 2009.

# 1.4 Legislation, regulations and guidance

The pipeline and any temporary works fell within the definition of Permitted Development under the Town and Country Planning (General Permitted Development) Order, 1995 (S.I. 1995/418), and therefore did not require planning consent from the Local Planning Authority or any other permission.

South East Water, however, adheres to the Code of Practice on Conservation, Access & Recreation (Water Industry Act 1991), whereby the Company is obliged to consider, and mitigate the consequences of its activities upon the archaeological resource.

Relevant Structure Plans and Local Development Plans included:

- The Mid Sussex District Council Local Plan for Crawley Down, 2004
- The Mid Sussex District Council Local Plan for Turners Hill, 2004
- The West Sussex Structure Plan, 2005

The Hedgerow Regulations (1997) define a set of archaeological and historical criteria used for determining whether hedges are 'Important'. Intention to remove such a hedge requires prior notification to the local planning authority which may, within 28 days, issue a retention notice preventing removal if the hedgerow meets one of the criteria for importance. The removal of hedgerows had already been agreed by the Tree/ Landscape Officer, and a 'Hedgerow removal notice' was granted.

# 1.5 Archaeological background

#### 1.5.1 Staged approach to archaeological investigation

SEW adopted a staged, multi-discipline approach to archaeological investigation. There had been two previous stages of archaeological investigation (see Table 1.1). The watching brief formed the final element of archaeological fieldwork.

Table 1.1 Previous archaeological work

Type of work	Organisation	Report issue date	
Desk-based Assessment and Reconnaissance Survey	Network Archaeology Ltd	September 2008	
Geophysical Survey	Bartlett-Clarke Consultancy	August 2008	

#### 1.5.2 Desk-based assessment

The route of the pipeline had been subject to an archaeological desk based assessment and field reconnaissance survey prior to construction (Network Archaeology 2008).

The assessment of published archaeological information in the public domain, lying within 500m of the pipeline route, identified 104 sites of archaeological importance, including a prehistoric or Roman trackway (known as The Ashdown Forest-Horsham Ridgeway), post-medieval churches and listed buildings in Turners Hill and Crawley Down, a park, a railway and railway station, former field enclosures/boundaries/field-names, terracing, tracks, ponds, lakes and a Kentish Gun Belt anti-aircraft battery.

The pipeline had direct impact upon 34 different sites including former field boundaries, trackways, possible enclosures and paths.

#### 1.5.3 Geophysical survey

Prior to construction the proposed working width of the pipeline was subject to a geophysical survey (Bartlett-Clarke Consultancy 2008).

Anomalies of possible archaeological origin were identified in plots 3, 5, 6, 9, 15 and 20. These potential sites were directly impacted by the construction of the pipeline.

#### 1.5.4 Watching brief during topsoil stripping and pipe trench excavations

The watching brief was intended to mitigate the impact of the pipeline on the identified sites and suspected archaeological remains.

The objectives of the programme of archaeological works were:

- To identify, appropriately manage and fully mitigate the archaeological resource affected by construction of the Groombridge to Langton Green Water Main;
- To consider, in all cases of archaeological discovery, whether preservation *in situ* was desirable or achievable as the foremost response;

- To determine, where preservation *in situ* was not desirable or achievable, an appropriate strategy for preservation by record;
- To develop, where possible, knowledge and understanding of the historic landscape and archaeological resource through recording of threatened remains;
- To determine and understand the nature, function and character of any archaeological remains in their cultural and environmental setting;
- To obtain a chronological sequence for the human activity along the pipeline and to place it within its regional context;
- To establish the ecofactual and environmental sequence and context of archaeological deposits and features;
- To engage in a programme of post excavation, archiving, synthesis and study, leading to publication and dissemination of results, and
- To ensure the long-term survival of the information through deposition of a project archive.

#### 1.5.5 Archaeological resourcing

The watching brief was undertaken by a single archaeologist between May and August 2009.

Report writing was undertaken by one person over two weeks. Use was made of MapInfo GIS and AutoCAD to manage and present the data. Nine sub-contractors provided the technical assessment reports.

#### 1.5.6 Regional Research Frameworks

All archaeological works considered existing and developing research frameworks from the surrounding regions, including the South East Regional Framework (in prep), Buckinghamshire County Council 2007, Nixon, T. et al. 2002 (eds.), MoLAS 2000, Nixon, T. 2002, Glazebrook, J. 2002, Glazebrook, J. 2000, University of Leicester Archaeological Services 2006, ALGAO (in prep) and Oake, M (in prep).

#### 1.6 Distribution of this report

Copies of this report will be distributed to the following people:

- Graham Webb, Infrastructure Manager, South East Water (SEW)
- Nathan Camilleri, Project Manager, South East Water
- Chris Philipson, Project Manager, Black & Veatch
- John Mills, Archaeologist, West Sussex County Council Environment and Development (SWCCED)

# 1.7 Structure of this Report

This report is divided into five main chapters followed by nine appendices:

*Chapter 1* serves to introduce the parties involved, the pipeline route and construction methods, the aims and scope of the watching brief, and the layout of this report.

*Chapters 2* deals with the archaeological standards and methods applied in the field and for reporting.

*Chapter 3* provides the results of the archaeological fieldwork, a summary of specialist reports and a confidence rating of the results.

Chapter 4 presents the discussions and interpretations of the results.

Chapter 5 draws on conclusions inferred from the fieldwork

#### 2 PROCEDURES

#### 2.1 Standards

All archaeological work was undertaken in accordance with:

- Professional codes, standards and guidance documents (English Heritage 1991ii; IfA 2008);
- The methodology laid out in the Written Scheme of Investigation (Network Archaeology 2008i)

#### 2.2 Fieldwork

#### 2.2.1 Topsoil stripping and pipe-trench excavation in cross-country areas

Prior to construction, it was agreed with WSCCED that an archaeological watching brief was required in principle along the entire pipeline route throughout the topsoil stripping phase of the works. Based upon the results of the topsoil stripping a targeted watching brief was undertaken during the excavation of the pipetrench.

# 2.2.2 Pipe-trench excavation in streetworks areas

An opportunistic watching brief was proposed to target Grange Road and Mount Lane. However, due to construction timetables no monitoring of the streetworks was undertaken.

# 2.2.3 Historic boundaries

An opportunistic recording survey, including a combination of surface profiling and recording of exposed sections within the pipe-trench, was proposed for all boundaries crossed by the pipeline including nine historic boundaries identified by the desk based assessment and supplemented by the field reconnaissance survey (Network Archaeology Ltd 2008).

#### 2.2.4 Survey

Archaeological features and finds were recorded to sub-metre accuracy using GPS technology by the attending archaeologist.

#### 2.2.5 Hand-excavation, recording and sampling

Archaeological excavation and recording was undertaken in accordance with the methodology laid out in the Written Scheme of Investigation (Network Archaeology Ltd 2008i).

#### 2.3 Project codes and number allocations

Network Archaeology's project code for the archaeological investigations was SEL 46, the code for the reporting stage of the project is SEL 57.

Each plot of land (field, garden, track, road etc.) crossed by the pipeline had previously been allocated a unique plot number (01-23).

Each plot was allocated a unique block of 100 context numbers for recording purposes during the watching brief. The first digit corresponded to the plot number. For example, plot 01 was allocated 100-199, plot 02 was allocated 200-299 and so on to plot 23 which was allocated 2300-2399. This ensured that each context number could be recognised as being from a specific plot.

Digital images were numbered sequentially from 001 and GPS location identifiers were given a unique seven digit number generated from the GPS reading.

# 2.4 Assessment of archive, finds and soil samples

Upon completion of the fieldwork, the finds, soil samples and stratigraphic information were assessed by appropriate specialists as to their potential and significance for further analysis (Table 2.1 and Appendix F).

Table 2.1 Summary of material types and specialists

Material type	Assessment by
Cbm and fired clay	Rachel Hall
Clay pipe	Luke Barber
Glass	Luke Barber
Metalwork	Kevin Leahy
Post-Roman pottery	Luke Barber
Production residues	Roderick Mackenzie
Shell	Janey Brant
Worked and burnt Flint	Hugo Lamdin-Whymark
Worked stone	Janey Brant

# 2.5 Data management and presentation

# 2.5.1 Plot summary table

Summary plot data is presented in Appendix A.

#### 2.5.2 Context summary table

Summary context data is presented in Appendix B.

#### 2.5.3 Figures

Nine figures are presented in Appendix I. There is one overall location plan, showing the route of the pipeline in its geographical context (Figure 1), three figures presenting the watching brief sites in relation to the geophysical survey and previous findings in the locale (Figures 2 to 4) and a further three figures presenting the distribution of findspots in the context of archaeological sites and previous findings in the locale (Figures 5 to 7). Selections of sections of excavated archaeological features are also presented (Figures 8 and 9).

#### 2.5.4 Accuracy of displayed data

Data was captured from two sources: 1:2500 OS base plan provided by the client and permatrace drawings at 1:50 and 1:20 and 1:10 scale. The figures have a positional accuracy of c.  $\pm$  0.1m and the archaeological remains within them the same level of c.  $\pm$  0.1m.

#### 3 RESULTS

#### 3.1 Introduction

The watching brief revealed a combination of negative cut features, soil layers and finds, a summary of which is provided in Table 3.1 below. The cross-country results are described by plot number in Section 3.3 and the streetworks are described in Section 3.4. A summary of the historic boundaries is given in section 3.5 and the finds are described by find type in Section 3.6.

A summary of findings by plot can be found in Appendix A, a summary of contexts in Appendix B, context matrices in Appendix C, a summary table of all finds in Appendix D, a summary table of GPS finds in Appendix E, specialist finds reports in Appendix F, a summary table of boundaries in Appendix G, selected plates in Appendix H and the figures in Appendix I.

In this chapter, the term 'subsoil' refers to any naturally-developed, non-anthropogenic layer which is located below topsoil and above natural substrate.

Subsoil, may therefore constitute:

- A naturally-developed 'B' horizon directly below topsoil ('A' horizon) and directly above parent material ('C' horizon);
- A naturally-developed 'B' horizon below topsoil ('A' horizon) and above an archaeological deposit (surrogate 'C' horizon), or
- Any other naturally-developed deposit below the topsoil ('A' horizon) such as alluvium or colluvium, which may or may not contain an anthropogenic component

# 3.2 Summary of findings

A summary quantification of findings by site type is presented in Table 3.1 below. A detailed breakdown by plot is presented in Appendix A.

Table 3.1 Summary quantification of site types

Findings	Count
Area of burning	1
Colluvium	2
Construction layer	1
Cultivation features	2
Ditches	3
Field boundaries	5
Drainage ditches	2
Land drains	1
Plant holes	2
Trackways	2

# 3.3 Results by plot

#### 3.3.1 Plot 03

#### Location

This plot was located to the south of Crawley Down between Grange Road and Grange Crescent on a south facing slope at approximately 125m AoD (NGR 534480 137274 centre, figure 1).

#### Archaeological background

The DBA identified a former trackway (DBA:AB) which ran east to west through the middle of the plot (figures 2 and 5), two former tree avenues (DBA:BE and DBA:BF), all of which visible on 19<sup>th</sup> century maps (Network Archaeology Ltd 2008). This plot lay within the former parkland (SMR 2847) of The Grange and was enclosed in the mid-nineteenth century. The walkover survey also identified a former copse (FSU:001).

The Geophysical survey (Bartlett-Clarke Consultancy 2008) identified a small number of possible archaeological and geological anomalies (figure 2).

#### Soil profile

The topsoil (300) comprised 0.40m of mid grey-brown fine friable silt which overlay the natural pale yellow-grey fine silt (302).

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

Small quantities of tile, burnt flint and early modern pottery were recovered from the topsoil (300) (figure 5).

#### 3.3.2 Plot 05

#### Location

This plot was located to the south of Crawley Down on a south facing slope at approximately 125m AoD (NGR 534623 137126, figure 1).

#### Archaeological background

The desk-based assessment identified two former trackways (DBA:AB and DBA:BD) marked on the 19<sup>th</sup> century maps (Network Archaeology Ltd 2008). The geophysical survey identified a pair of linear anomalies which appeared to corroborate the location of the former trackway as well as a number of geological anomalies (Bartlett-Clarke Consultancy 2008) (figure 2).

This plot was located within former parkland (SMR 2847) to the north of The Grange (LS302887), a mid-18<sup>th</sup> century listed building which occupies the site of an earlier farm. This plot lay and was enclosed in the mid-nineteenth century.

#### Soil profile

The topsoil (500) was 0.35m deep and comprised mid grey brown friable silt overlying 0.12m of pale grey-brown friable silty subsoil (501). Directly below this was the natural silt substrate (503).

#### Archaeological features

This plot contained three archaeological features (figures 2 and 5) including a former driveway (504/505), a former drain (507) and a ditch (508), all of which were identified during topsoil stripping.

Both the drain and ditch and were sealed by the subsoil (501) and cut the natural substrate (503). The uppermost of the layers (504) was sealed by the topsoil (500) and overlay layer 505. This in turn overlay the subsoil (501).

The driveway (504/505) was located within the south half of the plot and formed a 4m wide band oriented northwest to southeast (plate 1). Layer 504 comprised 0.07m deep mixed pale yellow-brown coarse silt and sand which contained a small assemblage of undiagnostic ceramic building material and burnt flint. Directly overlying this was a layer of crushed brick and tile (505) (figure 8a).

Drain **507**, located close to the centre of the plot, was oriented north-northeast to south-southwest and had stepped sides and a slightly concave base (0.90m wide and 0.24m deep). The sole fill (506) was pale grey friable silt which contained no finds. A number of sandstone blocks appeared to have been dumped or placed in the bottom of this ditch.

Ditch **508**, located within the north half of the plot, was oriented east to west and had steep concave sides and a slightly concave base (1.30m wide and 0.35m deep, figure 8b). The primary fill (511) was 0.06m deep and comprised pale brown-grey friable silt, whilst the secondary fill (510) was 0.16m deep and comprised mottled brown-grey fine friable silt. The tertiary fill (509) was 0.13m deep and comprised pale to mid brown-grey fine friable silt. No finds were recovered from any of the fills.

No additional archaeological remains were identified during pipe-trench excavation within this plot, apart from a number of recent land drains, primarily concentrated around the centre of the plot.

#### Surface finds

A small assemblage of pottery dating from the post-medieval to early modern periods, a very small assemblage of worked flint, two fragments of brick and a 19<sup>th</sup> or 20<sup>th</sup> century copper alloy harness buckle was recovered from the topsoil (500) and subsoil (501) (figure 5).

#### 3.3.3 Plot 06

#### Location

This plot was located within former parkland (SMR 2847) on a south facing slope between 120m and 125m AoD to the south of Grange Farm (NGR 534401 136954, figure 1).

#### Archaeological background

The desk-based assessment identified two historic field boundaries, one with an important hedge (DBA:CK) and one without (DBA:CL), which were visible on the 1842 tithe maps (Network Archaeology 2008). The field reconnaissance survey also identified a trackway (DBA:BC) which was oriented broadly northwest to southeast and was visible on the 1899 Ordnance Survey map (*ibid*) whilst the geophysical survey identified only geological anomalies within this plot (Bartlett-Clarke Consultancy 2008) (figure 2).

#### Soil profile

The topsoil (600) was 0.25m deep and comprised pale brown-grey friable silt overlying 0.18m of pale red grey-brown cohesive silty subsoil (601). Directly below this was the natural substrate (602) which varied from pale grey to brown-grey friable silt.

#### Archaeological features

A layer of pale yellow friable silt (603) which had a visible width of 6m and was 0.12m deep was located during topsoil stripping close to the northern boundary of the plot directly below the topsoil (600) and adjacent to the current access road to Grange Farm.

#### Surface finds

A moderate amount of early modern pottery was recovered from the topsoil (600) as were small quantities of tile, worked and burnt flint and a single fragment of post-Medieval pottery whilst the subsoil (601) contained two fragments of worked flint (figure 5).

#### 3.3.4 Plot 07

#### Location

This plot was located on a south facing slope between 120m and 125m AoD (NGR 534319 136846 centre, figure 1).

#### Archaeological background

The desk based assessment identified a former field boundary (DBA:BJ) which was visible on the 1912 Ordnance Survey map and a possible path (DBA:AW) which was visible on an aerial photograph (Network Archaeology Ltd 2009). The geophysical survey identified a single pit-like anomaly located close to the boundary with plot 08 as well as a number of geological anomalies (Bartlett-Clarke Consultancy 2008) (figure 4).

#### Soil profile

The topsoil (700) was 0.25m deep and comprised pale brown-grey friable silt overlying 0.18m of pale red grey-brown cohesive silty subsoil (701). Directly below this was the natural substrate (702) which varied from pale grey to brown-grey friable silt.

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

The topsoil (700) contained a moderate amount of early modern pottery as well as fragments of burnt and worked flint, tile and post-Medieval pottery (figure 6).

#### 3.3.5 Plot 08

#### Location

This plot was located on a south facing slope between 110m and 120m AoD (NGR 534307 136710 centre, figure 1).

#### Archaeological background

The desk based assessment identified a pond (DBA:AR) which was still present at the time of the watching brief, two possible enclosures (DBA AJ and DBA:AX) which were visible on aerial photographs (Network Archaeology 2008). The assessment also identified a copse (DBA:BB) which was visible on the 1<sup>st</sup> edition Ordnance Survey map and a small portion of which was still visible at the time of the watching brief. The geophysical survey identified only one anomaly of possible archaeological origin as well as a single anomaly probably caused by an iron object and a number of anomalies attributed to geological disturbance (Bartlett-Clarke Consultancy 2008) (figure 3).

#### Soil profile

The topsoil (800) comprised 0.25m deep pale brown-grey cohesive friable silt which overlay 0.20m deep pale grey-brown fine friable silty subsoil (801). Directly below this was the natural pale grey silt substrate (802).

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

Small assemblages of early modern pottery, burnt and worked flint, fired clay tile and slag as well as a single shell fragment were recovered from the topsoil (800) and subsoil (801) (figure 6).

#### 3.3.6 Plot 09

#### Location

This plot was located on a south facing slope at the foot of a valley between 110m and 120m AoD between Great Nobs and Warren Wood (NGR 534367 136592 centre, figure 1). At the base of the valley was the River Medway (plot 10) which originated as a spring close to Miswell Wood to the west of this plot.

#### Archaeological background

The desk based assessment identified a former trackway or field boundary (DBA:AK) which was located within the north half of the plot. he assessment also identified the parish boundary (DBA:AD) between Crawley Down and Turners Hill which followed the course of the River Medway (Network Archaeology Ltd 2008).

Warren Wood, which partially encroached the eastern boundary of the plot, was also identified on the 1<sup>st</sup> edition Ordnance Survey map (DBA:BG) and the copse seen within plot 08 (DBA:BB) was also seen covering the northern half of plot 09.

The geophysical survey identified a small number of linear anomalies, thought to be the remnants of former agricultural features such as ridge and furrow ploughing. The survey also identified a small amount of geological anomalies (Bartlett-Clarke Consultancy 2008) (figure 3).

#### Soil profile

The topsoil (900) was 0.30m deep and comprised pale brown-grey cohesive friable silt overlying 0.20m of pale grey-brown fine friable silt subsoil (901). This directly overlay the natural substrate which varied from pale grey fine friable silt (902) to pale grey clayey silt (906).

#### Archaeological features

This plot contained a single linear feature (903) and a single pit-like feature (907), both of which located during topsoil stripping within the north half of the plot. No additional archaeological remains were identified during pipe-trench excavation.

Linear feature 903, oriented east-north-east to west-south-west, had moderate concave sides and a flat base (5.90m wide and 0.34m deep) (figure 8c). The ditch cut the subsoil (901) and was sealed by the topsoil (900). The primary fill (905) was 0.16m deep and comprised pale grey-brown clayey silt which contained no finds. The secondary fill (904) was 0.18m deep and comprised pale yellow brown-grey sandy clay which contained fragments of tile and fired clay.

Pit-like feature **907** was amorphous in plan and had moderate concave sides and an uneven base (1.60m wide and 0.20m deep). The pit cut the natural substrate (902) and was sealed by the subsoil (901). The sole fill (908) was grey clayey silt which contained no finds.

#### Surface finds

The topsoil (900) contained a single flint flake and fragment of early modern pottery whilst the subsoil (901) contained a single flint core (figure 6).

#### 3.3.7 Plot 11

#### Location

This plot was located on marshy ground on the south side of the River Medway at the foot of a valley at approximately 110m AoD (NGR 534225 136453 centre, figure 1). Clumps of marsh grass within this plot indicated that it was likely to be prone to seasonal flooding.

#### Archaeological background

The desk based assessment found no previous features of archaeological or historical importance and, at the time of the geophysical survey, the area was overgrown and therefore not surveyed.

#### Soil profile

The topsoil (1100) was 0.20m deep and comprised mid red-brown soft friable silt overlying the subsoil which varied from pale brown-grey cohesive friable silt (1101) to pale grey cohesive friable silt (1102). Directly below the subsoil was the natural pale grey silt substrate (1103).

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

No finds were recovered from this plot.

#### 3.3.8 Plot 12

#### Location

This plot was located on a north facing slope between 120m and 125m AoD on the south side of the river Medway and to the west of Burleigh Arches Wood (NGR 534301 136384 centre, figure 1).

#### Archaeological background

The desk based assessment did not identify any features of historical or archaeological potential within the plot. However, a former pond bay (SMR 6814), an artificial pond used to hold water to power industrial machinery, was located just beyond the western boundary. A field to the south-west of plot 12, identified as "Stoney Field" on the 1839 tithe map, was flagged by the assessment as potentially being the location of a former settlement (Network Archaeology Ltd 2008).

Sometime between 1899 and 1912 a sewage farm was constructed close to the western boundary of the plot (WWW). This sewage farm must have fallen into disuse midway through the 20<sup>th</sup> century as it did not appear on the 1951 Ordnance Survey map.

The geophysical survey located only a single anomaly which may have been of an archaeological nature whilst also detecting anomalies caused by ferrous material or geological variation (Bartlett-Clarke Consultancy 2008) (figure 3).

# Soil profile

Across the majority of the plot the topsoil (1201) was 0.30m deep and comprised pale grey friable silt overlying the natural pale grey-orange soft friable silt (1202).

Within the northern quarter of the plot, the topsoil (1200) was 0.30m deep and comprised pale red-brown soft friable silt overlying 0.45m of pale red-brown friable

silt (1209). Directly below this was a further layer of pale red-brown soft friable silt (1212) which overlay the natural silt substrate (1202).

#### Archaeological features

This plot contained six parallel ditches which followed the contours of the slope. Five of the ditches (1203, 1205, 1207, 1210 and 1213) crossed the pipeline's working width and were recorded during topsoil stripping (plate 2) (figures 3 and 6).

Ditches **1203**, **1210** and **1213** were located close to the centre of the plot, cut the natural substrate (1202) and were sealed by the topsoil (1200). All of these ditches were oriented east-north-east to west-south-west and were of similar dimensions (average 1m wide and 0.20m deep). Ditches **1210** and **1213** had moderate sides and a flat base (figure 8e) and were filled with pale brown-grey soft friable silt (1211 and 1214 respectively) with a single fragment of burnt flint recovered from the fill (1211) of ditch **1210**. Ditch **1203** had shallow sides and a concave base and was filled with pale grey cohesive friable silt (1204) which also contained a single fragment of burnt flint (figure 8d). All of these ditches appeared to have associated banks or terracing scarps.

Two of the ditches (1205 and 1207), located below the current northern boundary of the plot, were intercutting and both cut the natural substrate (1202) and were sealed by the lower silt layer (1212) (figure 9a). Ditch 1207 was oriented east to west and had moderate concave sides and a flat base (1m surviving width and 0.32m deep). The sole fill (1208) was pale yellow brown-grey friable silt which contained no finds and was truncated by ditch 1205.

Ditch **1205** cut the northern half of ditch **1207** and had steep, concave sides and a slightly concave base (1.40m wide and 0.58m deep). The sole fill (1206) was pale brown-grey cohesive friable silt which contained no finds.

#### Surface finds

A small quantity of pottery dating from the post-Medieval to early modern periods and small quantities of worked flint, burnt flint, tile and a single copper alloy coin were recovered from the topsoil (1200) and subsoil (1201) (figure 6).

#### 3.3.9 Plot 13

#### Location

This plot, which was located on a north facing slope at 125m AoD (NGR 534323 136357 centre, figure 1, contained a bridleway running between Turners Hill and Burleigh Oaks House (plate 3). This plot was not stripped during the watching brief.

#### Archaeological background

The desk based assessment made no mention of the bridleway, although it does appear as a trackway on the 1899 Ordnance Survey map. Two fields located to the south-west of the bridleway, Kiln Field (DBA:CB) and Stoney Field (DBA:BN), indicated that this track may have linked a possible settlement close to Turners Hill with Burleigh Oaks House (figure 3).

#### Soil profile

This plot was not stripped and the soil profile was not recorded

#### Archaeological features

The only feature identified in this plot was an extant ditch (1303) which was located on the south side of the bridleway and followed the same east to west orientation. The ditch had partially silted up (1304) and contained a small assemblage of early modern pottery and a single fragment of post-Medieval pottery.

#### Surface finds

No surface finds were recovered from this plot.

#### 3.3.10 Plot 14

#### Location

This plot was located on a steep north facing slope overlooking the River Medway between 125m and 145m AoD (NGR 534408 136269 centre, figure 1).

#### Archaeological background

The desk based assessment identified a former field boundary (DBA:AC), a series of possible field drains (DBA:AM) and a possible palaeo-channel (DBA:AU) (Network Archaeology Ltd 2008). The location of the palaeo-channel was further corroborated by the field reconnaissance survey. The geophysical survey revealed no geological or archaeological anomalies (Bartlett-Clarke Consultancy 2008) (figure 3).

#### Soil profile

The topsoil (1400) was 0.25m deep and comprised pale brown-grey friable silt overlying 0.10m of pale yellow-brown fine friable silt (1401). Directly below this was the natural silty substrate (1402).

#### Archaeological features

An area of scorched earth (1403) was visible following topsoil stripping within the south half of the plot. This comprised pale red-brown friable silt (1.25m long and 0.98m wide) containing fragments of burnt sandstone and a single worked flint (plate 4). No additional archaeological remains were identified during pipe-trench excavation.

#### Surface finds

This plot contained the largest assemblage of worked flint (41 fragments) and burnt flint (37 fragments) recovered during the watching brief. The assemblage included debitage and tools dating from the Mesolithic period through to the late Bronze Age and was all recovered from the topsoil (1400) or subsoil (1401).

Small assemblages of pottery, dating from the post-Medieval to early modern periods and also fragments of tile, coke and slag were recovered from this plot (figure 6).

#### 3.3.11 Plot 15

#### Location

This plot was located on a north facing slope overlooking the river Medway at approximately 145m AoD (NGR 534281 136135 centre, figure 1).

#### Archaeological background

The Estate map of 1776 (network Archaeology Ltd 2008) identified this filed as "Great Stoney Field" which possibly indicated the presence of a former settlement or building.

The geophysical survey (Bartlett-Clarke Consultancy 2008) revealed a small quantity of anomalies, some of which possibly archaeological in origin (figure 4).

#### Soil profile

The topsoil (1500) was 0.25m deep and comprised pale brown-grey soft friable silt which overlay 0.15m of pale yellow grey-brown friable silt (1501). Directly below this was the natural silt substrate (1502).

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

The topsoil (1500) contained a single fragment of Medieval pottery, further pottery sherds dating from the post-Medieval to early modern periods, fragments of tile, worked flint and burnt flint and a single fragment of off-cut lead (figure 7).

#### 3.3.12 Plot 18

#### Location

This plot comprised a footpath to the south of a wooded copse on a north-west facing slope between 140m and 145m AoD (NGR 534557 136094 centre, figure 1).

#### Archaeological background

The desk-based assessment showed that this footpath had been in use since at least the mid-19<sup>th</sup> century (DBA:BA) and identified a former field boundary (DBA:BH) which was visible on the Ordnance Survey maps between 1912 and 1949 (Network Archaeology Ltd 2008).

At the time of the geophysical survey this plot was overgrown and therefore not surveyed (figure 4).

#### Soil profile

The topsoil (1800) was up to 0.20m and comprised pale to mid grey red-brown fine soft silt which overlay 0.20m of pale yellow-brown fine soft silt (1801) which overlay the natural silt substrate (1802).

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

The topsoil (1800) contained small quantities of pottery dating from the post-Medieval to early modern periods whilst the subsoil (1801) contained a single sherd of post-Medieval pottery (figure 7).

#### 3.3.13 Plot 19

#### Location

This plot was located on a steep north-west facing slope between approximately 135m and 145m AoD to the north-east of Turners Hill (NGR 534557 136094 centre, figure 1).

#### Archaeological background

Both the former field boundary (DBA:BH) and the trackway (DBA:BA) mentioned above also extended into this plot (figure 4).

#### Soil profile

The topsoil (1900) was up to 0.44m deep and comprised pale red-brown fine friable silt which overlay 0.14m of pale yellow-brown fine friable silt (1901). Directly below this was the natural silt substrate (1902).

#### Archaeological features identified during controlled strip excavation

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

Small assemblages of tile, burnt and worked flint and a single fragment of post-Medieval pottery were recovered from the topsoil (1900) whilst the subsoil (1901) contained two flint flakes (figure 7).

## 3.3.14 Plot 20

#### Location

This plot was located on a steep north-west facing slope between 145m and 160m AoD to the east of Turners Hill (NGR 534461 135891, figure 1).

#### Archaeological background

The desk based assessment identified a former copse or shaw (DBA:AZ) and a former field boundary (DBA:AY), both of which were seen on the 1<sup>st</sup> edition Ordnance Survey map (Network Archaeology Ltd 2008). The copse was corroborated by field reconnaissance (*ibid*).

The geophysical survey identified a number of possible anomalies all of which were interpreted as variations within the geology or responses to ferrous material (Bartlett-Clarke Consultancy 2008) (figure 7).

#### Soil profile

Within the north half of the plot, the topsoil (2000) overlay a layer of pale yellow-brown fine friable silt (2009) which was 8m wide and 0.10m deep. Directly below this was a layer of moderately compact pink silt (2008) which overlay 0.14m of pale yellow-brown fine friable silt (2001). This directly overlay the natural silt substrate (2002).

Across the rest of the plot, the topsoil (2000) overlay the subsoil (2001) which directly overlay the natural substrate (2002).

#### Archaeological features

Three ditches (2003, 2010 and 2005), two pit-like features (2013 and 2015) and a charcoal rich layer (2007) were identified following topsoil stripping and are described below.

All of the features, with the exception of pit **2015** and layer 2007, cut the subsoil (2001) and were sealed by the topsoil (2000). Ditch **2015** was sealed by the subsoil (2001) and cut the natural substrate (2002) whilst layer 2007 overlay the subsoil (2001) and was sealed by layer 2008.

Ditch 2003, located close to the centre of the plot, was oriented north-north-west to east-south-east and had shallow, concave sides and a concave base (4m wide and 0.30m deep). The sole fill (2004) was pale brown grey fine friable silt which contained two fragments of tile.

Ditch **2010**, located in the middle of the plot close to the southern baulk, followed the same orientation and had a similar profile to ditch **2003** (plate 5). The ditch **(2010)** was 1.20m wide and 0.50m deep and contained two fills (2011 and 2012). The primary fill (2012) was 0.28m deep and comprised pale yellow-brown soft friable silt which contained no finds. The secondary fill (2011) was 0.22m deep and comprised pale to mid brown-grey fine friable silt which contained a small assemblage of early modern pottery and an iron cotter pin or nail (figure 9b).

Ditch 2005, located close to the centre of the plot, was oriented north-west to south-east and had steep, concave sides and a flat base (1.90m wide and 0.36m deep) (plate 7). The primary fill (2017) was 0.26m and comprised pale yellow grey-brown friable silt which contained a single fragment of brick. The secondary fill (2006) was 0.10m and comprised mid brown-grey fine friable silt containing ceramic building material, post-Medieval pottery, early modern pottery, fragments of undiagnostic iron, a single fragment of coal, a decorative iron plate and a fragment of hearth cinder.

Pit-like feature **2013**, located within the north half of the plot, was ovoid in plan and had shallow, concave sides and a concave base (0.80m long, 0.35m wide and 0.05m deep. The sole fill (2014) was pale grey-brown mottled silt which contained no finds.

The remaining pit-like feature (2015), located close to the northern boundary of the plot, was also ovoid in plan but had vertical edges and an uneven base (1.50m long, 0.70m wide and 0.12m deep). The sole fill (2016) was a pale brown-red friable silt which contained no finds.

Layer 2007, also identified within the north half of the plot, comprised a band of charcoal rich silt (3.80m long and 6m wide, plate 6) which was located on a natural ridge within the landscape.

No additional archaeological remains were identified during pipe-trench excavation.

#### Surface finds

The topsoil (2000) contained the largest assemblage of post-Medieval or early modern recovered during the watching brief (170 fragments weighing 817 grammes) as well as moderate quantities of tile, burnt and worked flint, two fragments of worked stone and single fragments of slag, Medieval pottery and a fragment of horn from a 19<sup>th</sup> or 20<sup>th</sup> century bracelet whilst the subsoil (2001) contained only a single flint flake (figure 7).

#### 3.3.15 Plot 21

#### Location

This narrow plot comprised a bank topped with a dense tree and shrub line at approximately 160m AoD on the north side of a tarmac road leading east from Mount Lane past the community centre known as "The Ark" (NGR 534379 135772, figure 1).

#### Archaeological background

The desk based assessment (Network Archaeology Ltd 2008) identified a possible enclosure (DBA:AL) which was seen on the aerial photographs and a former field boundary (DBA:CN) which was visible on the 1841 tithe map (figure 4).

No geophysical survey was undertaken within this plot.

#### Soil profile

The topsoil (2100) comprised 0.06m of decomposing woodland vegetation overlying the natural orange clay substrate (2101).

#### Archaeological features

This plot contained a ditch-like feature **2102**, located immediately south of the boundary between plots 20/21, and a series of overlying fills/ layers extending across the remainder of plot 21.

Ditch-like feature **2102** had a steep concave north side, a shallow south side and a sloping base (0.20m deep) and cut the natural substrate (2101). It was filled with angular stones (2103) overlain by up to 0.30m of yellow-brown clayey sand (2104), which extended as a layer to the south.

Directly above fill/ layer 2104 was 0.08m of pale-mid grey clayey silt (2105 = 2203) which contained common charcoal flecks. This was overlain by up to 0.74m of mixed yellow-brown silty clay (2106?= 2202).

#### Surface finds

No surface finds were recovered from this plot.

#### 3.3.16 Plot 22

#### Location

This plot comprised a tarmac road located at approximately 160m AoD atop the bank formed by plot 21 which ran from east to west from Mount Lane (NGR 534381 135767, figure 1).

#### Archaeological background

The desk based assessment identified a possible enclosure (DBA:AL) which was seen on the aerial photographs (Network Archaeology Ltd 2008) (figure 4).

No geophysical survey was undertaken within this plot.

#### Road profile

The tarmac (2200) was 0.03m deep and overlay 0.40m of pink aggregate hardcore (2201). Directly below this was 0.37m of mixed and dense pale to mid grey clay (2202 ?= 2106) which overlay 0.08m of pale to mid grey clayey silt (2203 = 2105) which contained charcoal flecks. Directly below this was the natural orange silty clay substrate (2204).

#### Archaeological features

No archaeological features or deposits were identified during topsoil stripping or pipe-trench excavation within this plot.

#### Surface finds

No surface finds were recovered from this plot.

#### 3.3.17 Plot 23

#### Location

This plot was located on a northeast facing slope at approximately 160m AoD immediately north of East Street to the east of Turners Hill (NGR 534583 135827, figure 1).

#### Archaeological background

The desk based assessment (Network Archaeology Ltd 2008) identified a possible enclosure (DBA:AQ) situated within the south half of the plot whilst the 1899 Ordnance Survey map indentified a quarry, located outside of the stripped area close to the northwest corner of the plot (figure 4).

No geophysical survey took place within this plot.

#### Soil profile

The topsoil (2300) comprised 0.15m of pale grey yellow-brown fine friable silt which overlay 0.14m of pale yellow-brown fine friable silt (2301). Directly below this was the natural substrate (2302).

#### Archaeological features

This plot contained two linear features (2303 and 2305), which were identified following topsoil stripping within the north half of the plot. The features were oriented west-southwest to east-southeast and had roughly similar dimensions (maximum 1m wide and 0.10m deep). Feature 2303 had irregular sides and a flat base (figure 9c and plate 8). The sole fill (2304) was mid grey-brown friable silt which contained small quantities of ceramic building material, early modern pottery and coal. Feature 2305 also had irregular sides but had a sloping base (figure 9d) although the fill (2306) was identical and also contained fragments of coal, ceramic building material and pottery as well as fragments of coal and an iron nail.

#### Surface finds

As with plot 20 to the north, the topsoil (2300) contained a large quantity of post-Medieval to early modern pottery (126 fragments weighing 592 grammes) as well as fragments of undiagnostic ceramic building material, burnt and worked flint and metalworking slag. The topsoil also contained a copper alloy thimble and a copper alloy harness buckle as well as a continental coin made from aluminium. All of the metal finds were considered to be of 19<sup>th</sup> or 20<sup>th</sup> century date (figure 7).

#### 3.4 Boundaries

The recent archaeological investigations afforded an opportunity to supplement field boundary data recovered during previous reconnaissance survey (Network Archaeology Ltd 2008). A total of sixteen boundaries, including twelve historic boundaries, had been previously identified along the route of the pipeline.

Only a single boundary (between plots 6/7) had a single bank, this boundary also providing the only identifiable ditch. A total of seven hedges, ten fences, a single brick wall and a single set of gates were also recorded during the previous phase of works.

New data has been recorded for four boundaries, all of which were historic. The combined results of previous and recent survey are presented in Appendix G. Pipetrench excavation revealed previously unidentified buried ditches at the boundaries of plots 11/12, 14/15 and 20/21. A possible ditch was also identified at the boundary of plots 13/14. A re-cut was identified at the boundary between plots 11/12 indicating a degree of longevity for this boundary.

#### 3.5 Finds

#### 3.5.1 Introduction

This section provides a summary description and quantification of the finds by material type.

#### 3.5.2 Finds quantifications

Thirteen find types were recovered. A summary count and weight of stratified finds appears in appendix D and a table of all unstratified finds recorded by GPS can be found in appendix E.

A brief summary of each find type can be found below. The full technical reports appear in appendix F.

#### 3.5.3 Burnt flint (Hugo Lamdin-Whymark)

A total of 93 fragments of burnt flint, weighing 875 grammes were recovered during the watching brief. All of the material came from the topsoil or subsoil within plots 03 to 09, 12, 14, 15, 19, 20 and 23. The only exceptions were single fragments from the fills of ditches within plot 12 (1203 and 1210). All of the flint had been subject to very high temperature heating suggesting that some might represent postmedieval agricultural practices (e.g. spreading from lime kilns), rather than prehistoric activity.

#### 3.5.4 Ceramic building material (Rachel Hall)

A total of 83 fragments of ceramic building material, weighing 4,347 grammes, were recovered during the watching brief. The assemblage comprised mainly of undiagnostic brick and tile fragments although a small quantity of roof tile was identified. The material was recovered from various plots along the length of the pipeline and no concentrations of material were evident.

#### 3.5.5 Clay pipe (Luke Barber)

A total of 31 clay pipe fragments, weighing 62 grammes, were recovered during the watching brief. All of the material came from either the topsoil or subsoil within plots 05 to 08, 15, 20 and 23. The earliest piece was a stem fragment from a mid to late 17<sup>th</sup> century example with the majority of the assemblage dated from the early to mid 18<sup>th</sup> century to the mid to late 19<sup>th</sup> century and comprising mainly of stem fragments with only 3 bows represented and only a single fragment showing signs of any decoration.

#### 3.5.6 Fired clay (Rachel Hall)

A total of 29 fragments of fired clay, weighing 238 grammes, were recovered during the watching brief. The material came from two layers, the topsoil within plot 8 (800) and the fill of trackway **903** (904).

None of the material was diagnostic.

## 3.5.7 Glass (Luke Barber)

A total of 52 fragments of glass, weighing 734 grammes, were recovered during the watching brief. Almost all of the material was recovered from topsoil or subsoil within plots 05 to 08, 12, 14, 20 and 23 with the only stratified material coming from the extant boundary in plot 13 (1303) and the former boundary in plot 20 (2005).

The earliest material recovered dated from the mid to late 18<sup>th</sup> century with the majority of the material dating from the 19<sup>th</sup> to 20<sup>th</sup> century. The majority of the

assemblage comprised bottles or vessel glass with only 2 fragments of window glass represented.

#### 3.5.8 Metalwork (Kevin Leahy)

A total of 15 objects weighing 259 grammes and comprising 8 iron, 3 copper alloy, one white metal/aluminium, one lead, one horn and a lump of cinder were recovered during the watching brief. Unstratified material was recovered from the topsoil and subsoil within plots 05, 12, 15 and 23 whilst iron objects were recovered from the cultivation feature (2305) within plot 23 and the ditch (2005) and boundary (2010) within plot 20. Where datable, all of this material can, with confidence, be assigned to the modern period.

# 3.5.9 Post-Roman pottery (Luke Barber)

A total of 542 sherds of post-Roman pottery, weighing 3,045 grammes, were recovered during the watching brief with the majority of the pottery coming from the topsoil and subsoil and was present within all of the plots covered during the watching brief. The only stratified material came from the fills of ditches within plots 13 (1303) and 20 (2003, 2005 and 2010) and from the agricultural features within plot 23 (2303 and 2305).

Almost all of the material was of post-Medieval date or later, with only 2 sherds of Medieval pottery being recovered from plots 15 and 20.

The post-Medieval and early modern pottery densities increased to the south with significant quantities being recovered from plot 20 (170 sherds, 31% of the total assemblage) and plot 23 (126 sherds, 23% of the total assemblage).

The majority of the pottery was abraded and was most likely the result of post-Medieval and later manuring.

#### 3.5.10 Production process residues (Dr Roderick Mackenzie)

A total of 23 fragments of production process residues, weighing 351 grammes, was recovered during the watching brief comprising of metalliferous and possible metalliferous slag as well as small fragments of coal. The majority of the material was recovered from the topsoil or subsoil within plots 08, 14, 20 and 23 with the only stratified material coming from the scorched silt layer within plot 20 (2008) and the two agricultural features seen in plot 23 (2303 and 2305).

#### 3.5.11 Shell (Janey Brant)

A single fragment of shell weighing 17 grammes was recovered from the topsoil within plot 08 (800). This fragment came from the upper shell of a bivalve mollusc of the genus Ostrea,

#### 3.5.12 Stone (Janey Brant)

A total of two fragments of worked stone, weighing 7 grammes, were recovered from the topsoil within plot 20 (2000). The small size of these fragments meant that it was difficult to establish with a great deal of certainty what the pieces of worked stone were used for. Given that the fragments were retrieved from an unstratified context the assemblage is of Ltd archaeological potential.

#### 3.5.13 Worked flint (Hugo Lamdin-Whymark)

A total of 84 worked flints, weighing 1085 grammes were recovered during the watching brief.

The assemblage included tools and debitage from the Mesolithic through to the late Bronze Age including flakes, scrapers and blades.

The majority of the worked flints were recovered from the topsoil and subsoil within plots 05 to 09, 12, 14, 15, 19, 20 and 23 with a concentration of material (41 worked fragments and 37 burnt fragments) found within plot 14. The only stratified material came from trackway within plot 05 (504) which contained 3 flint flakes and a single end scraper and the possible hearth in plot 14 (1403) which contained a single flint flake.

# 3.6 Summary of specialist recommendations

Recommendations made by specialists are summarised in Table 3.3.

**Table 3.2 Specialist recommendations** 

Material type	Recommendations
Burnt Flint	Discard material
Ceramic building material	No recommendations
Clay pipe	Discard material
Fired clay	No recommendations
Glass	Discard material
Metalwork	No recommendations
Post-Roman pottery	Discard material
Production process residue	Discard material
Shell	Discard material
Stone	Retain material
Worked flint	Retain material

# 3.7 Confidence rating of the results

A confidence rating in the reliability of the results of the watching brief has been undertaken. There is a moderate to high confidence in the descriptions, interpretations and relationships of the deposits and features recorded within all of the plots.

#### 4 INTERPRETATION AND DISCUSSION

#### 4.1 Plot 05

The two layers (504 and 505) almost certainly represented the remnant of the trackway (DBA:BD), identified by the desk based assessment. This trackway appeared to come into being sometime in the late 19<sup>th</sup> century as it was not visible on the 1842 tithe map but it did appear on the 1872 Ordnance Survey map. The geophysical survey identified a pair of parallel linear anomalies, which were thought to represent the remains of ditches, within the area of this trackway. Although no ditches were identified during the watching brief it is probable that the anomalies identified by the geophysical survey were the remnants of this trackway.

The watching brief revealed no evidence of the remaining trackway (DBA:AB) which appeared on the earlier 19<sup>th</sup> century mapping to cross the centre of the plot in a northwest to southeast direction.

The stone lined drain (507) appeared to correlate with a linear anomaly seen on the geophysical survey (Bartlett-Clarke Consultancy 2008). This anomaly was initially interpreted as being caused by ferrous material within the underlying soil, however, it now seems likely that the presence of sandstone blocks at the base of the drain was the cause. This drain did not follow the same orientation as the current drains or boundaries and most likely represented the remnant of an earlier system of drainage associated with a former system of enclosure.

Ditch **508** followed roughly the same orientation as the current field boundaries and most likely represented the remnant of a former boundary associated with an earlier system of enclosure upon which the current field system was based. The absence of any finds makes positive dating problematic however; as it did not appear on any of the earlier mapping it is likely that it was pre-late 18<sup>th</sup> century. The presence of multiple fills indicated that this ditch had stood open for a prolonged period of time, allowing weathering of the ditch sides to occur and natural silting to accumulate.

## 4.2 Plot 09

The linear feature (**903**) has been interpreted as the remnant of a former trackway associated with a possible former quarry. No record of a quarry was found during the desk based assessment although the 1872 Ordnance Survey map showed an irregular shaped field located to the east of plot 09 which looked remarkably similar to a quarry. The 1842 Tithe map also appears to show this feature, although on the earlier map it appeared to be linked to the River Medway and filled with water. This indicated that the postulated quarry was of some antiquity, pre-dating the mid-19<sup>th</sup> century mapping. It is likely that the trackway also pre-dated the 19<sup>th</sup> century however this can not be definitely proven as no dating evidence was recovered from either of the track's make-up layers (904 and 905). The trackway was alleged to have been used for the transport of logs relating to logging rights on land to the east (*pers. comm.* local unnamed farmer).

The pit-like feature (907) was excavated and proven to be a tree bole, possibly associated with the former copse (DBA:BB) seen on the 1<sup>st</sup> edition Ordnance Survey map.

No evidence was found of the trackway or boundary (DBA:AK) seen on the aerial photographs or any of the possible cultivation features identified by the geophysical survey.

#### 4.3 Plot 12

The six extant ditches and associated banks located close to the centre of the plot correlated with an area of terracing (FSU:004), identified by the field reconnaissance survey. The three recorded ditches (1203, 1210 and 1213) were all similar in profile and size and have been interpreted as run-off capture ditches associated with former agriculture processes. The whole plot appeared to be used for "night-soiling", the practice of depositing human waste within a field having poor soil to improve fertilisation. From as early as the 16<sup>th</sup> century people would collect waste material from latrines and cess pits and sell it on to farmers to act as manuring. Interestingly, the handling of such waste appears to have continued locally into the early 20<sup>th</sup> century when a sewage works was constructed within the southwest corner of the plot. This structure appeared on the Ordnance Survey map of 1912 but did not appear on the 1938 map.

Ditch 1207 has been interpreted as a former field boundary which followed the same orientation as the current northern boundary. The presence of a recut (1205) indicated that this boundary had been in use for a prolonged period of time and had been re-defined on at least one occasion.

#### 4.4 Plot 13

The trackway, which formed plot 13, linked Turners Hill and Burleigh Oaks House and first appeared on the 1899 Ordnance Survey map. The extant ditch (1303), which formed the southern boundary of plot 13, is thought to have been a former field boundary ditch and it may have had a secondary use as a drainage ditch for the trackway. No evidence of a ditch was seen on the northern side of the track.

#### 4.5 Plot 14

The cause of the scorched stones within this plot (1403) remains unclear; it is most likely that these stones were "pot-boilers", stones heated and then deposited in water to cause it to boil and related to prehistoric domestic activity. Alternatively, they might have been either the remnant of a bonfire or a domestic hearth. However, the absence of any charcoal within the soil matrix would appear to indicate that wood was not used as a fuel and that a bonfire was therefore unlikely as was a fire associated with land clearance. The absence of any material such as bone or pottery also indicated that it was unlikely to be a domestic hearth, the only find recovered being a single flint flake.

This plot also contained the highest concentration of worked flint (51% of the whole assemblage) which indicated that the area had been the scene of short term or transient activity between the Mesolithic and late Bronze Age periods.

#### 4.6 Plot 20

The shallow ditch (2003) located close to the centre of the plot has been interpreted as a field boundary following the eastern edge of the copse or shaw (DBA:AZ), identified by the desk based assessment. Ditches 2005 and 2010, located to the south of 2003, had a similar profile and has been interpreted as a continuation of the

boundary ditch. The historical mapping showed that a boundary (DBA:AY) had existed slightly to the west of this ditch indicating that the boundaries may have been re-defined sometime prior to the mid 19<sup>th</sup> century.

It is most likely that the areas of charcoal rich silt (2007) and scorched silt (2008) represented evidence of deliberate scrub burning to clear the fields for crops or grazing. Alternatively, they might have represented the former position of a charcoal burner. Small scale charcoal production was not uncommon in woodland areas and the trade dated back as far as the Middle Ages. However, most charcoal burners appeared to consist of cleared areas with circular ovens constructed of straw or mud whereas the area seen during the watching brief appeared more linear and no evidence of a structure was seen.

Both of the pit-like features (2013 and 2015) were excavated and found to be plant holes.

The post-Medieval and early modern pottery was likely the result to relatively recent agricultural practices such as manuring. The increased quantity may indicate that the fields close to the southern end of the pipeline were less suitable for crops and required more extensive manuring.

### 4.7 Plots 21/22

The ditch-like feature (2102) might represent a precursor to the boundary ditch which now divides plots 20/21, in which case the fills/ layers (2103 and 2104) are probably eroded bank material which has moved down slope into the ditch. The overlying charcoal-rich layer (2105) might be an old land surface. If this interpretation is correct, the ditch and fills/ layers pre-date the dumping of layer 2106 to form a flattened bank. This bank and the trackway (plot 22) which was laid upon it were most likely constructed when the houses were built on the western side of Mount Lane.

# 4.8 Plot 23

Both of the linear features (2303 and 2305) have been interpreted as features associated with horticultural practices, as the fills appeared very dark and rich in comparison to the fills within other features seen elsewhere along the pipeline. It is likely that these features represented the remnants of an allotment garden and were of no great age.

As with plot 20, the increased amount of post-Medieval and early modern pottery was probably the result of more extensive manuring of the fields within the southern half of the pipeline.

### 4.9 **Boundaries**

Previous research on this project indicated that most boundaries were marked by banks, fences and walls with only one boundary incorporating a ditch. The recent investigations, however, have shown that many more boundaries once included ditch components and that in some cases the ditch had been scoured out or re-cut. The fact that most ditches along this particular scheme have now been backfilled or allowed to fill naturally reflects a change in agricultural land practice with less concern about drainage and more emphasis upon fencing to demarcate land parcels.

# 4.10 Distribution of watching brief finds

The highest densities of worked flint and burnt flint are recorded in plot 14, indicating a potential focus of prehistoric activity on the north-facing slope overlooking the River Medway. The worked flint assemblages comprised mainly flakes but also included a small number of blades, cores and scrapers, and indicated short-term or transient prehistoric human activity (Lamdin-Whymark, Appendix D). The material varied in date from the Mesolithic through to the mid to late Bronze Age, indicating that activity may have been taking place within this area over a prolonged period of time.

The concentrations of post-Medieval and early modern pottery in plots 20 and 23 probably related to intensive manuring of certain field within the southern half of the pipeline. The pottery, post production residues, ceramic building material, clay pipe and glass were probably also the result of agricultural manuring practices.

The remaining material recovered from the topsoil and subsoil along the route of the pipeline was most likely also the result of post-medieval or later agricultural practices.

# 5 CONCLUSIONS

The watching brief has proved helpful in locating a low to moderate density of archaeological remains along the route of the pipeline. It corroborated some of the sites identified by the archaeological assessment, field reconnaissance and geophysical survey, whilst demonstrating that others were spurious. This programme of archaeological works has also ensured the long-term survival of those discovered remains which were investigated in the form of the project archive and this report.

The recent investigations have enhanced our understanding of the local archaeological record from early prehistory to the present-day.

Low level prehistoric activity of a short-term or transient nature has been identified in the form of dispersed worked flint (and possibly burnt flint) assemblages along the route of the pipeline. Collectively, the previous and recent investigations identified activity spanning from the Mesolithic through to the late Bronze Age, with a notable bias towards plot 14. Prehistoric peoples it seems placed an emphasis upon exploiting the resources of the river Medway.

There may be benefit to reassessing burnt flints recovered on other schemes in pale of this report which raises the possibility that high temperature burnt flints may be the product of post-medieval or early modern agricultural practice rather than prehistoric activity.

Evidence of post-Medieval and later agricultural practices were proven by the quantities of domestic material such as pottery which had been deposited on the fields as manuring. Further evidence of manuring was evident within plot 12 where several ditches associated with night-soiling were seen.

Map evidence suggests that the local landscape has changed little since the early 19th century and this view was supported by the recent archaeological investigations which identified a number of former field boundary ditches, most of which corroborated boundaries marked on historic maps.

The overall confidence rating for the reliability of the interpretation of results is moderate to high. The only uncertainty is with plot 20 where a definite explanation for the scorched earth remains unclear.

# 6 ARCHIVE

The documentary archive comprises:

- a copy of this report
- relevant and non confidential documents and correspondence relating to the site held by Network Archaeology
- original notes relating to the finds or post excavation assessments
- site records, as detailed in the table below:

Table 6.1 Archive summary

Item	Count
Number Record	2
Context Registers	16
Context Sheets	94
Drawing Registers	1
Boundary record	9
Plot sheets	20
Plot Sheets	22
Permatrace drawing Sheets	18
GPS logs	2
Photographic Registers	4
Colour contact prints and	25
transparencies	25
B&W contact prints and	
negatives	28
Digital Photographs	191

Crawley Museum, Goffs Park House, Old Horsham Rd, Crawley, RH11, Telephone number 01293 539088, will receive the archive generated from the archaeological work and will allocate an Accessions Number upon receipt.

Prior to the deposition of the archive, the necessary arrangements will be made with the site owners regarding the transfer of ownership of any archaeological finds to the Crawley Museum.

In the event that deposition of the archive cannot be concluded, Network Archaeology will store the archive to a suitable standard until deposition can be arranged. In this event, Network Archaeology will retain ownership of the document archive until the document archive and its ownership are passed to Crawley Museum, or until an alternatively suitable museum can be found.

# 7 ACKNOWLEDGMENTS

Network Archaeology Ltd would like to thank the following for their contribution to the project:

Organisation	Name	Position	Contribution
West Sussex County Council	John Mills	Curatorial Archaeologist	External monitoring
South East Water	Graham Webb	Infrastructure Manager	
South East Water	Nathan Camilleri	Project Manager	
Black & Veatch	Chris Philipson	Project Manager	
Black & Veatch	Laura Baines	Senior Environmental Scientist	
Morgan Est	Alan Ironside	Foreman	On-site liaison
Independent	Rachel Hall	External specialist	CBM and fired clay assessment
Independent	Susie White	External specialist	Clay pipe assessment
Independent	Kevin Leahy	External specialist	Metalwork assessment
Independent	Luke Barber	External specialist	Post-Roman pottery, glass and clay pipe assessment
Independent	Roderick Mackenzie	External specialist	PPR assessment
Independent	Janey Brant	External specialist	Stone and shell assessment
Independent	Hugo Lamdin- Whymark	External specialist	Burnt and worked flint assessment
	David Bonner	Company Director Senior Project Manager	Project Management
	Andrew Hunn	Project Officer	Fieldwork Archive consolidation
	Martin Campbell	Project Supervisor	Fieldwork
Network Archaeology Ltd	Steve Thorpe	Project Officer	Archive checking Report compilation
	Janey Brant	Finds Officer	Finds washing and cataloguing Specialist liaison
	Susan Freebrey	GIS Officer	Report figures
	Jacqueline Harding	Illustrations Officer	Report figures

# 8 REFERENCES

Organization	Date	Title	Publisher
ACAO	1993	Model briefs and Specifications for Archaeological Assessments and Field Evaluations	
ADS		Archaeology Data Service	
ALGAO	1997	Analysis and Recording for the Conservation and Control of works to Historic Buildings: Advice to Local Authorities and Applicants	
ALGAO	In prep	South East England Archaeological Framework	
Allen J L & Holt A St J	1986 (with later updates)	Health & Safety in Field Archaeology	Standing Conference of Unit Managers, London
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Bird, D	2002	The Surrey Archaeological Research Framework	
Bartlett Clarke Consultancy	2008	Selsfield reservoir to Turners Hill. Report on Archaeogeophysical Survey of Proposed Water Pipeline	Unpublished report on behalf Network Archaeology
British Geological Survey	2005	British Geological Survey 'Geology of Britain'	http://www.bgs.ac.uk/ accessed 27/04/05
Brown, N. and Glazebrook, J.	2000	Research and Archaeology: A Framework for the Eastern Counties – 2 Research Agenda and Strategy	East Anglian Archaeology Occasional Paper 8
Buckinghamshire County Archaeological Service	2007	The Solent Thames Archaeological Research Framework, covering the counties of Berkshire, Buckinghamshire, Oxfordshire, Hampshire and the Isle of Wight	STRF's web pages, hosted by Bucks CC
Crawley Down Village website	2009		http://www.crawleydown village.co.uk/historycd
Department of the Environment	1990	Archaeology and Planning, Planning Policy Guidance Note 16	
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EAA	2005	Standards for Field	Occasional Paper 14

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		Archaeology in the East	
		of England Exploring Our Past.	
English Heritage	1991	Strategies for the	
Linghish Heritage	1331	Archaeology of England,	
		The Management of	
English Heritage	1991	Archaeological Projects,	London
		2nd edition	
English Heritage	1995	Development in the Historic Environment	
		Geophysical survey in	
English Heritage	1995	archaeological field	
		evaluation	
		Sustaining the historic	
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		perspectives on the future	
		Environmental	
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		and Storage, Paper 1, Principles of	
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Tiditis L	1333	Stratigraphy	
	2002 (46	Control of Substances	
HSE	2002 (As amended)	Hazardous to Health	
	unichaea)	Regulations (COSHH)	
HSE	1994	Construction (Design and Management)	
IISL	1994	Regulations	
ПСЕ	1074	Health and Safety at	
HSE	1974	Work Act	
		Standard and guidance	
	2008 (194,	for the collection,	
IFA	revised	documentation, conservation and	
	2001)	research of	
		archaeological material	
		Standard & Guidance	
		documents (Desk-Based Assessments, Watching	
	2008 (194,	Briefs, Evaluations,	
IFA	revised	Excavations,	
	2001)	Investigation and	
		Recording of Standing	
		Buildings, Finds,	
	2008 (194,	Waterlogged Wood)	
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	2001)		
		Code of Approved	
		Practice for the	
IFA	2000b	Regulation of Contractual	
		Arrangements in Field	
		Archaeology.	
		Standards in the	
MGC	1992	Museum Care of	Museums and Galleries
		Archaeological Collections	Commission London
	İ	Collections	

Organization	Date	Title	Publisher
MoLAS (Museum of London Archaeological Service)	2001	Standards for the Preparation of Finds	
Network Archaeology	2006(2003, revised 2004, 2005, 2006)	Health, Safety and Welfare Policy	
Network Archaeology Ltd	2008	Selsfield reservoir to Tuners Hill. Archaeological desk based assessment and field reconnaissance survey	Unpublished client report no. 411, for Black & Veatch
Network Archaeology Ltd	2008i	Selsfield reservoir to turners Hill. Written scheme of investigation for an archaeological watching brief.	Unpublished client document
Nixon, T. <i>et al</i> (eds.)	2002	A Research Framework for London Archaeology	
Old maps	2009	, , , , , , , , , , , , , , , , , , , ,	www.old-maps.co.uk
Slowikowski, A, Nenk, B. & Pearce, J	2001	Minimum Standards for the Processing, Recording Analysis and Publication of Post Roman Ceramics	Medieval Pottery Research Group, Occasional Paper No2
SMPE and SEW	1983	1:250,000 Soil Survey of England and Wales	
Society of Museum Archaeologists	1993	Selection, retention and dispersal of archaeological collections	
Society of Museum Archaeologists	1995	Towards an accessible archaeological archive - the transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales	Society for Museum Archaeologists, London
United Kingdom Institute for Conservation Archaeology Section	2001	Conservation Guidelines No. 2, Packaging and Storage of Freshly Excavated Artefacts from Archaeological Sites	
Walker, K.	1990	Guidelines for the preparation of excavation archives for long-term storage.	UK Institute for Conservation, London
Watkinson, D. & Neal, A.V.	1998	First Aid for Finds	Rescue Publications, Hertford

# Appendix A Summary table of plot data

Plot	Archaeological activities	Contexts	Topsoil stripping results	Finds
1	Watching brief Topsoil strip	None issued	N/A	No
2	Watching brief Topsoil strip	None issued	N/A	No
3	Watching brief Topsoil strip	300-302	Stripped to top of Hastings Beds; Archaeological visibility = moderate - poor Early modern pottery Land drains and evidence of deep ploughing/ ripping	Yes
4	Watching brief Topsoil strip	None issued	Early modern pottery and occasional flint	Yes
4	Watching brief Topsoil strip	400	N/A	No
5	Watching brief Topsoil strip	500-511	Stripped to top of Hastings Beds; Archaeological visibility = moderate - good Former metalled driveway oriented approx E- W, located in approx position of DBA:BD; former field boundary and stone-filled drain; Early modern pottery and occasional flint	Yes
6	Watching brief Topsoil strip	600-603	Stripped to top of subsoil - tested to c.  180mm deep Archaeological visibility = moderate-good; Early modern pottery and occasional flint	Yes
7	Watching brief Topsoil strip	700-702	Stripped to top of subsoil - tested to c.  120mm deep Archaeological visibility = moderate-good; Early modern pottery and occasional flint	Yes
8	Watching brief Topsoil strip	800-802	Stripped to top of Hastings Beds at N end and subsoil at south end; Archaeological visibility = moderate - good Early modern pottery and occasional flint	Yes
9	Watching brief Topsoil strip	900-908	Stripped to top of Hastings Beds at south end and subsoil at north end; Archaeological visibility = moderate E-W oriented trackway - 6m wide soil-filled shallow depression in approx position of southern edge of copse DBA:BB Local farmer suggested that the field might have tracks crossing it due to ancient logging rights relating to woodland to the east; Soil discolouration at north end investigated and interpreted as plant holes - which could represent former historic hedgeline 7m to south of present boundary (i.e. modern boundary may have migrated northwards)	
10	Watching brief Topsoil strip	None issued	N/A	No
11	Watching brief Topsoil strip	1100-1103	Stripped to top of Hastings Beds Archaeological visibility = moderate; No archaeological observations and no finds	No
12	Watching briefTopsoil strip	1200-1214	Stripped to top of Hastings BedsArchaeological visibility = moderate- good;2 x terraces and 3 ditches (vestigial earthworks and veg mark) visible on north- facing slope of field but not evident within working width; local resident suggests that the field was used for night soil dumping; Dispersed early modern finds	Yes
13	Watching brief Topsoil strip Pipetrench excavation	1300-1304	Stripped to top of Hastings Beds Archaeological visibility = moderate-good; This plot is a green lane - early modern material recovered from one of the side ditches	Yes
14	Watching brief Topsoil strip	1400-1403	Stripped to top of subsoil - tested to c. 0- 100mm deep Archaeological visibility moderate-good; Patch of burnt sandstone; concentration of worked flint at north end of plot	Yes

# Appendix A Summary table of plot data

Plot	Archaeological activities	Contexts	Topsoil stripping results	Finds
15	Watching brief Topsoil strip	1500-1502	Stripped to top of natural subsoil - tested to c. 150mm deep Archaeological visibility = moderate-good; No archaeological observations and no finds	No
16	N/A	None issued	N/A	No
17	N/A	None issued	N/A	No
18	Watching brief Topsoil strip	1800-1802	Stripped to top of colluvium - tested to c. 200mm deep Archaeological visibility = moderate-good; No archaeological observations and no finds	No
19	Watching brief Topsoil strip	1900-1902	Stripped to top of Hastings Beds (east side) and to top of colluvium (spur section only) - tested to c. 200mm deep Archaeological visibility = moderate-good; No archaeological observations; 1 x worked flint	Yes
20	Watching brief Topsoil strip	2000-2017	Stripped to top of Hastings Beds Archaeological visibility = moderate-good; Shaw (DBA:AZ) on NE side of field - NE ditch investigated by hand - produced early modern pottery; Curvilinear spread of charcoal and scorched soil (containing lenses of ?alluvial clay) beneath c.0.1m of colluvium - no finds;	No
21	Watching brief Topsoil strip	None issued	n/a (hard-standing)	No
22	Watching brief Topsoil strip Pipetrench excavation	None issued	n/a (hard-standing)	No
23	Watching briefTopsoil strip	2300-2306	Stripped to top of Hastings BedsArchaeological visibility = moderate; Group of 4 x narrow linears (?spade-dug cultivation trenches?), containing early modern finds, and several plant holes; Stripped surface finds include 1 x flint blade and many fragments of early modern pottery and ceramic building material	Yes

# APPENDIX B

**Summary Table of Contexts** 

Plot	Context	Туре	Fill of	Dimensions	Depth BGS	Description	Interpretation
3	300	Layer		0.40m deep	0	Mid grey brown fine friable silt	Topsoil
		Not					
3	301	issued		Not issued	N/A	N/A	N/A
3	302	Layer		N/A	0.40m	Pale grey-yellow fine friable silt	Natural substrate
4	400	Layer		0.35m deep	0	Mid grey brown fine friable silt	Topsoil
5	500	Layer		0.35m deep	0	Mid grey brown friable silt	Topsoil
5	501	Layer		0.12m deep	0.40m	Light grey brown fine friable silt	Subsoil
5	502	Layer		N/A	0.52m	Pale grey fine friable silt	Natural substrate
		Not					
5	503	issued		Not issued	N/A	N/A	N/A
				4m max width x 0.07m		Light yellow brown coarse silt and fine sand	
5	504	Layer		deep	0.40m	mix	former driveway surface
5	505	Layer		4m wide	0.47m	Crushed brick and tile	make up layer for trackway
				0.90m wide x 0.24m		Pale grey friable silt with sandstone placed at	
5	506	Fill	507	deep	0.38m	the base	Sole fill of drain <b>507</b>
				0.90m wide x 0.24m		NNE/SSW oriented ditch with stepped sides	
5	507	Cut		deep	0.38m	and a concave base	Land drain
				1.30m wide and 0.35m		E/W oriented ditch with steep concave sides	
5	508	Cut		deep	0.42m	and a slightly concave base	Former field boundary
5	509	Fill	508	0.13m deep	0.42m	Light to mid brown grey fine friable silt	Tertiary fill of ditch 508
5	510	Fill	508	0.16m deep	0.58m	Mottled brown grey fine friable silt	Secondary fill of ditch 508
5	511	Fill	508	0.06m deep	0.74m	Pale brown grey fine friable silt	Primary fill of ditch <b>508</b>
						Light brown grey friable silt with ginger	
6	600	Layer		0.28m deep	0	mottling	Topsoil
6	601	Layer		0.18m deep	0.28m	Light red grey brown fine cohesive silt	Subsoil
6	602	Layer		N/A	0.46m	Pale grey and brown grey friable silt	Natural substrate
				6m+ wide x 0.12m			
6	603	Layer		deep	0.28m	Pale yellow fine silt	Redeposited natural forming former droveway
						Light brown grey friable silt with ginger	
7	700	Layer		0.25m deep	0	mottling	Topsoil
7	701	Layer		0.18m deep	0.25m	Light red grey brown fine cohesive silt	Subsoil
7	702	Layer		N/A	0.43m	Pale grey and brown grey friable silt	Natural substrate
8	800	Layer		0.25m deep	0	Light brown grey cohesive friable silt	Topsoil
8	801	Layer		0.20m deep	0.25m	Light grey brown fine friable silt	Subsoil
8	802	Layer		N/A	0.45m	Pale grey fine friable silt	Natural substrate
9	900	Layer		0.30m	0	Light brown grey cohesive friable silt	Topsoil
9	901	Layer		0.20m deep	0.30m	Light grey brown fine friable silt	Subsoil
9	902	Layer		N/A	0.50m	Pale grey fine friable silt	Natural substrate
9	903	Cut		5.90m wide x 0.34m	0.30m	ESE-WNW oriented sitch with moderate	Possible former trackway for quarry

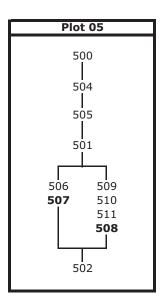
Plot	Context	Туре	Fill of	Dimensions	Depth BGS	Description	Interpretation
				max depth		concave sides and a flat base	
9	904	Fill	903	0.18m deep	0.30m	Light yellow brown grey silty clay	Secondary fill of <b>903</b>
9	905	Fill	903	0.16m deep	0.48m	Light grey brown clayey silt	Primary fill of <b>903</b>
9	906	Layer		N/A	0.50m	Pale grey clayey silt	Variation in the natural Natural substrate
				1.60m wide x 0.20m			
9	907	Cut		deep	0.50m	Amorphous cut with a gradual sloping base	Planthole
9	908	Fill	907	0.20m deep	0.50m	Light brown grey clayey silt	Sole fill of planthole <b>907</b>
11	1100	Layer		0.20m deep	0	Mid red brown soft friable silt	Topsoil
11	1101	Layer		0.12m deep	0.20m	Light brown grey cohesive friable silt	Subsoil
11	1102	Layer		0.12m deep	0.20m	Pale grey cohesive friable silt	Variation in the subsoil
11	1103	Layer		N/A	0.32m	Pale grey fine friable silt	Natural substrate
12	1201	Layer		0.30m max depth	0	Pale grey soft friable silt	Topsoil throughout remainder of plot
12	1202	Layer		N/A	0.30m	Pale grey orange soft friable silt	Natural substrate
12	1204	Fill	1203	0.20m deep	0.20m	Pale grey cohesive friable silt	Sole fill of ditch 1203
				1.40m wide x 0.58m		E-W oriented ditch with steep concave sides	
12	1205	Cut		deep	0.58m	and a concave base	Former field boundary
12	1206	Fill	1205	0.58m deep	0.58m	Pale brown grey cohesive friable silt	Sole fill of boundary <b>1205</b>
				1m surviving width x		E-W oriented ditch with steep concave sides	
12	1207	Cut		0.32m deep	0.58m	and a flat base	Heavily truncated field boundary
12	1208	Fill	1207	0.32m deep	0.58m	Light yellow brown grey friable silt	Sole fill of boundary 1207
				12m wide and up to			
12	1209	Layer		0.45m deep	0.30m	Light red brown soft friable silt	Colluvial silt at base of slope
				0.90m wide x 0.20m		ESE-WNW oriented ditch with moderate	
12	1210	Cut		deep	0.30m	concvae sides and a flat abse	Terracing run-off capture ditch
12	1211	Fill	1210	0.20m deep	0.30m	Light brown grey soft friable silt	Sole fill of ditch <b>1210</b>
				12m wide and Up to			
12	1212	Layer		0.22m deep	0.60m	Light red brown soft friable silt	Colluvial silt at base of slope
						ESE-WNW oriented ditch with moderate	
12	1213	Cut		1m wide x 0.16m deep	0.12m	concvae sides and a flat abse	Terracing run-off capture ditch
12	1214	Fill	1213	0.16m deep	0.12m	Light brown grey soft friable silt	Sole fill of ditch 1213
		Not					
13	1300	issued				N/A	
		Not					
13	1301	issued				N/A	
		Not					
13	1302	issued				N/A	
13	1303	Cut			0	E-W oriented ditch	Extant field boundary
13	1304	Fill	1303		0	Not recorded	Possible upper or sole fill of ditch 1303
14	1400	Layer		0.25m deep	0	Light brown grey friable silt with ginger	Topsoil

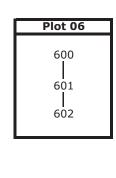
Plot	Context	Туре	Fill of	Dimensions	Depth BGS	Description	Interpretation
						mottling	
14	1401	Layer		0.10m deep	0.25m	Light yellow brown fine friable silt	Subsoil
14	1402	Layer		N/A	0.35m	Pale brown yellow soft friable silt	Natural substrate
				1.25m wide x 0.95m		Light red brown friable silt containing burnt	
14	1403	Layer		deep	0.25m	sandstone	Area of burning
15	1500	Layer		0.25m deep	0	Light brown grey soft friable silt	Topsoil
15	1501	Layer		0.15m deep	0.25m	Light yellow grey brown friable silt	Subsoil
15	1502	Layer		N/A	0.40m	Pale brown yellow soft friable silt	Natural substrate
18	1800	Layer		Up to 0.20m deep	0	Light to mid grey red brown fine soft silt	Topsoil
18	1801	Layer		0.20m deep	0.20m	Light yellow brown fine soft silt	Colluvium
18	1802	Layer		N/A	0.40m	Brown yellow fine silt	Natural substrate
19	1900	Layer		Up to 0.44m deep	0	Light red brown fine friable silt	Toposoil
19	1901	Layer		0.14m deep	0.44m	Light yellow brown friable silt	Subsoil
19	1902	Layer		N/A	0.58m	Pale brown yellow fine friable silt	Natural substrate
20	2000	Layer		Up to 0.30m deep	0	Pale grey yellow brown fine friable silt	Topsoil
20	2001	Layer		0.14m deep	0.30m	Pale yellow browm fine friable silt	Subsoil
20	2002	Layer		N/A	0.44m	Bright fine yellow brown friable silt	Natural substrate
		,		4m max width x 0.30m		NNW-SSE oriented ditch with shallow concave	
20	2003	Cut		deep	0.12m	sides and a slightly concave base	Former field boundary
20	2004	Fill	2003	0.30m deep	0.12m	Pale brown grey fine friable silt	Sole fill of boundary 2003
				1.90m wide x 0.60m		NW-SE oriented linear with moderate concave	·
20	2005	Cut		deep	0.30m	sides and a flatish base	Ditch
						Mid brown grey fine soft silt with yellow brown	
20	2006	Fill	2005	0.10m deep	0.38m	mottling	Upper fill of ditch 2005
				3.80m long x 0.60m			Possible position of charcoal burner or
20	2007	Layer		wide	0.30m	Charcoal rich deposit	evidence of delibertae land clearance
20	2009	Layer		8m wide x 0.10m deep	0.30m	Pale yellow brown fine friable silt	Colluvium
				1.20m wide x 0.50m		NNW-SSE oriented ditch with steep concave	
20	2010	Cut		deep	0.20m	sides and a flat base	Former field boundary
20	2011	Fill	2010	0.22m deep	0.30m	Light to mid brown grey fine friable silt	Upper fill of boundary 2010
20	2012	Fill	2010	0.28m deep	0.52m	light yellow brown soft friable silt	Primary fill of boundary <b>2010</b>
				0.80m L x 0.35m W x		Ovoid cut with shallow concave sides and a	
20	2013	Cut		0.05m D	0.40m	concave base	Planthole
20	2014	Fill	2013	0.05m deep	0.40m	Mixed mid to light grey brown mottled silt	Sole fill of planthole <b>2013</b>
				1.50m L x 0.70m W x		Ovoid cut with vertical sides and an irregular	
20	2015	Cut		0.12m D	0.40m	base	Planthole
20	2016	Fill	2015	0.12m deep	0.40m	Light brown red friable silt	Sole fill of planthole <b>2015</b>
20	2017	Fill	2005	0.26m deep	0.46m	Light yellow grey brown friable silt	Primary fill of ditch 2005
21	2100	Layer		0.06m deep	0	Woodland vegetation	Topsoil

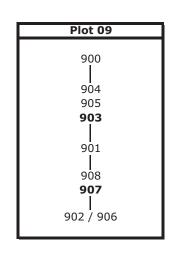
Plot	Context	Туре	Fill of	Dimensions	Depth BGS	Description	Interpretation
21	2101	Layer		N/A	1.20m	Maliable orange silty clay	Natural substrate
21	2102	Cut		0.20m depth	1.10m	Possible linear cut with irregular sides and a sloping base	Possible cut or interface between stones and natural
21	2103	Fill	2102		1.10m	Angular stones	Fill of possible cut <b>2102</b> or stone interface above natural
21	2104	Layer		0.0.20m to 0.30m depth	0.88m	Yellow brown clayey sand	Possible colluvial deposit
21	2105	Layer		0.08m deep	0.80m	Grey clayey silt with common charcoal flecks	Possible former subsoil
21	2106	Layer		0.74m deep	0.06m	Mixed yellow-brown silty clay	Dumping event to form bank
21	2107	Cut		1m wide x 0.50m deep	0.06m	E-W oriented ditch with steep concave sides and a concave base	Former field boundary
21	2108	Fill	2107	0.50m deep	0.06m	Dark organic silty clay	Sole fill of former boundary 2107
22	2200	Layer		0.03m deep	0	Black tarmac	Current track surface
22	2201	Layer		0.40m deep	0.03m	Pink aggregate	Hardocre
22	2202	Layer		0.37m	0.43m	Mixed dense brown-yellow clay	Made ground
22	2203	Layer		0.08m deep	0.80m	Light to mid grey clayey silt with charcoal flecks	Possible former subsoil
22	2204	Layer		N/A	0.88m	Maliable orange silty clay	Natural substrate
23	2300	Layer		0.15m deep	0	Pale grey yellow brown fine friable silt	Topsoil
23	2301	Layer		0.14m deep	0.15m	Pale yellow brown fine friable silt	Subsoil
23	2302	Layer		N/A	0.29m	Bright fine yellow brown friable silt	Natural substrate
23	2303	Cut		0.80m wide x 0.10m deep	0.26m	WSW-ENE oriented cut with irregular sides and a flat base	Probable cultivation feature
23	2304	Fill	2303	0.10m deep	0.26m	Mid grey brown friable silt	Sole fill of feature 2303
23	2305	Cut		1m wide x 0.10m deep	0.28m	WSW-ENE oriented cut with irregular sidesa and a sloping base	Probable cultivation feature
23	2306	Fill	2305	0.10m deep	0.28m	Mid grey brown friable silt	Sole fill of feature 2305

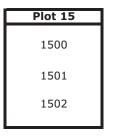
# **Appendix C Plot matrices**

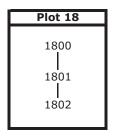
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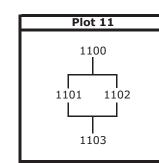


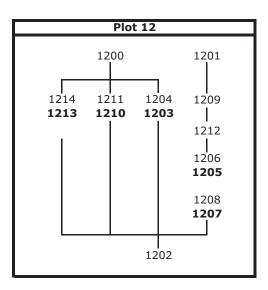




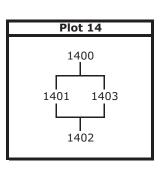


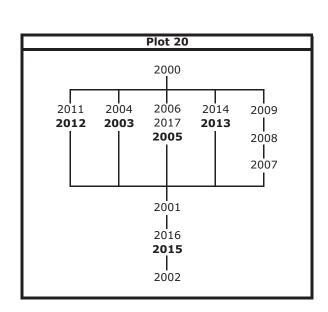


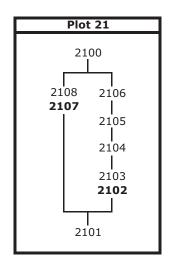


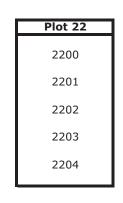


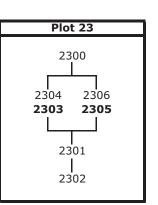
PIO	τ 13
13	304
13	803











# Appendix D Catalogue of Stratified finds

# **KEY**

Mes Mesolithic

LBA Late Bronze age

Rom Roman

Emed Early Medieval

Med Medieval

Pmed Post Medieval

Emod Early modern

Mod Modern

U/D Undated

Plot	Context	Data	СВМ		Cinder	Fired clay	Flin	t	Glass	Ir	on	Pot	tery	PI	PR	<b>Grand Total</b>
			Pmed/Emod	U/D	U/D	U/D	Mes/LBA	Burnt	Emod	Mod	U/D	Pmed	Emod	Coal	Slag	
	504	Count	-	7			3									10
5		Weight		64			34									98
_	904	Count	2			4										6
9		Weight	49			33										82
	1201	Count					1									1
		Weight					5									5
40	1204	Count						1								1
12		Weight						17								17
	1211	Count						1								1
		Weight						3								3
1.4	1403	Count					1									1
14		Weight					6									6
	2004	Count	2										2			4
		Weight	61										3			64
	2006	Count	10		1				3	3	2	1	4	1		25
		Weight	1686		16				243	170	87	6	109	8		2325
20	2008	Count	1				1								1	3
20		Weight	81				1								20	102
	2011	Count									1		3			4
		Weight									27		10			37
	2017	Count	1													1
		Weight	145													145
•	2304	Count		2									8	1		11
23		Weight		2									22	3		27
23	2306	Count		1							1		5	12		19
		Weight		3							11		68	7		89
Total	Count		16	10	1	4	6	2	3	3	4	1	22	14	1	87
Total	Weight		2022	69	16	33	46	20	243	170	125	6	212	18	20	3000

# Appendix E Catalogue of GPS finds by plot

# **KEY**

Mes Mesolithic

LBA Late Bronze age

Rom Roman

Emed Early Medieval

Med Medieval

Pmed Post Medieval

Emod Early modern

Mod Modern

U/D Undated

Plot	Data	Aluminum		СВМ	Clay	pipe	С	U alloy	Fired clay	Flin	t		Glass		Horn	Lead			Pottery		PI	PR	Shell	Stone	Grand
		Modern	Rom?	Pmed/Emod	Pmed	Emod	Emod	Emod/Mod	U/D	Mes/LBA	Burnt	Pmed	Pmed/Emod	Emod	Emod	U/D	Med	Pmed	Pmed/Emod	Emod	Coke	Slag	U/D	Worked	Total
	Count			2							5									8					15
3	Weight			225							157									41					423
	Count		1	2																3					6
4	Weight		44	87																13					144
	Count			2	_		1			2				2				4	2	9					25
5	Weight			204	11		17			56				40				18	10	111					467
	Count			3		2				4	9			3				1		30					52
6	Weight			101		4				47	61			105				1		119					438
	Count			2						4	8			1					9	32					57
7	Weight			33	3					52	31			1					18	149					287
	Count			4	2	5			25	13	10		1	6					3	29		1	1		100
8	Weight			241	2	8			205	94	126		9	37					42	163		31	17		975
	Count									2										1					3
9	Weight									51										1					52 47
	Count			3	1			1		2	14		1	1				2	8	15					47
12	Weight			45				5		43	195		2	15				9	29	108					451
	Count													2					1	10					13
13	Weight													8					6	356					370
	Count			9						40	39			12				2	2	24		2			131
14	Weight			245						536	225			113				6	17	102	30	104			1378
	Count			10		1				2	2					1	1	1		8					26
15	Weight			433		1				13	19					6	2	5		19					498
	Count																	4	6	6					16
18	Weight																	18	24	27					69
	Count			3	1					3	2									1					9
19	Weight			60						60	7									1					128 207
	Count			10		5				3	3	1	2				1	7	33	130		1		2	207
20	Weight			375		11				55	32	1	20	67			3	77	139	601		125		7	1521
	Count	1		6			1	1		5	1			10				2	9	115		3			164
23	Weight	3		163		13	3	30		80	18			73				11	73	508		23			1000
Total Co		1	1	56		20	2	2	25	80	93	1	4	44	1	1	2	23	73	421	1		1	2	871
Total We	eight	3	44	2212	25	37	20	35	205	1087	871	1	31	459	1	6	5	145	358	2319	30	283	17	7	8201

# Appendix F Specialist finds reports

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# APPENDIX F1 CERAMIC BUILDING MATERIAL AND FIRED CLAY

By Rachel Hall

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

### Introduction

A total of 29 (238g) fragments of fired clay and 83 (4347g) fragments of ceramic building material were recovered during the watching brief.

# F1.1 RESULTS

# F1.1.1 Fired clay

A small amount of fired clay was recovered from two layers, 800 and 904. The fragments are all undiagnostic in an oxidised, sandy fabric. No further work is recommended.

Table 1-1 Catalogue of fired clay

Plot	Context	Count	Weight
8	800	25	205
9	904	4	33

### F1.1.2 Ceramic building material

A total of eighty-three fragments were recovered from 21 contexts. The moderate assemblage comprises tile and brick fragments, with a small number of abraded fragments in a sandy oxidised fabric. The assemblage is largely undiagnostic but a small number of fragments exhibit diagnostic features. Two roof tiles with incomplete square peg holes were recovered from 2000 and a curved tile (possibly Romano-British imbrex tile) was recovered from 400. An incomplete frogged brick was also recovered from 2006. The assemblage as a whole does not merit further work.

Table 1-2 Catalogue of ceramic building material

Plot	GPS	Context	Material 1	Material 2	С	W
3	6219079	300	СВМ	Tile	1	151
3	6219185	300	СВМ	Tile	1	74
4	6219078	400	СВМ	Tile	3	131
5	6219073	500	СВМ	Brick	1	149
5	6219075	500	СВМ	Brick	1	55
5		504	СВМ	U/D	7	64
6	6219056	600	СВМ	Tile	2	81
6	6219057	600	СВМ	Tile	1	20
7	6219059	700	СВМ	Tile	1	21
7	6219061	700	СВМ	Tile	1	12

Plot	GPS	Context	Material 1	Material 2	С	w
8	6219037	800	СВМ	Tile	2	88
8	6219038	800	СВМ	Tile	1	22
8	6219087	800	СВМ	Tile	1	131
9		904	СВМ	Tile	2	49
12	6219003	1200	СВМ	Tile	1	14
12	6219005	1200	СВМ	Tile	2	31
14	6219020	1400	СВМ	Tile	4	81
14	6219021	1401	СВМ	Tile	3	95
14	6219023	1401	СВМ	Tile	2	69
15	6219011	1500	СВМ	Tile	2	65
15	6219012	1500	СВМ	Tile	3	197
15	6219013	1500	СВМ	Tile	4	112
15	6219164	1500	СВМ	Tile	1	59
19	6119041	1900	СВМ	Tile	3	60
20	6119005	2000	СВМ	Tile	2	66
20	6119006	2000	СВМ	Tile	2	89
20	6119007	2000	СВМ	Tile	3	60
20	6119009	2000	СВМ	Tile	1	76
20	6119024	2000	СВМ	Tile	2	84
20		2004	СВМ	Tile	2	61
20		2006	СВМ	Mixed	10	1686
20		2008	СВМ	Brick	1	81
20		2017	СВМ	Brick	1	145
23	6119001	2300	СВМ	Tile	1	15
23	6119002	2300	СВМ	Tile	1	32
23	6119003	2300	СВМ	Mixed	4	116
23		2304	СВМ	U/D	2	2
23		2306	СВМ	U/D	1	3

# APPENDIX F2 CLAY PIPE

By Luke Barber

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

#### Introduction

The excavations recovered 31 pieces of clay pipe, weighing 62g, from 7 individually numbered contexts.

# **F2.1** Assessment of the assemblage

On the whole the material is in poor condition, exhibiting moderate to heavy abrasion showing it to have been subjected to relatively long periods of arable agriculture and acidic soils. All of the material is from topsoil contexts in Plots 5, 6, 7, 8, 15, 20 and 23. The assemblage has been fully listed on pro forma for archive. Very few pieces with diagnostic features are present. Stem fragments dominate the assemblage, though two have mouth pieces, and only three bowl fragments are present. No pieces carry makers' marks and the assemblage contains only one decorated fragment.

# F2.2 Results

The earliest item consists of a single heavily abraded stem fragment of mid/late 17th-century date [2000 Gps 6119010]. The early/mid 18th century is better represented, notably in [500] which only produced pipes of this date (three stem frags). Other contexts producing pipes of this date include [600], [800] x2 and [2300] x3. The remainder of the assemblage dates from the mid 18th to, more probably, the 19th centuries. Stems of this date were recovered from [600], [800], [1500], [2000] and [2300] including later 19th- century moulded mouthpieces from [1500] and [2300]. All three bowl fragments are of mid/late 19th- century type. Two are plain (contexts [600] and [2300]) while one has crude moulded leaves on its seam (context [2300]).

#### F2.3 Conclusions

The clay pipe assemblage is not considered to hold any potential for further analysis: the material is all unstratified and lacks distinctive decoration/maker's marks. The material sheds light on past manuring regimes but these are already well represented by the pottery.

### F2.4 Recommendations

No further work is proposed and no separate report is required for publication. The material is recommended for discard rather than long-term curation in a museum.

**Table 2-1 Catalogue of clay pipes** 

Plot	Context	Gps	Part	No.	Weight	Bore di (mm)	total stem length (mm)	Heel/spur	Mouthpieces form	Decoration	Date	Notes
5	500	6219155	stem	1	3	2.2	30				e/m C18th	
5	500	6219076	stem	1	3	2.3	32				e/m C18th	
5	500	6219077	stem	1	5	2.1	37				e/m C18th	
6	600	6219083	stem	1	1	2	28				C19th	base of bowl
6	600	6219097	stem	1	3	1.2	30				C19th	
7	700	6219059	stem	1	3	1.9	18	part heel			C18th	
8	800	6219037	stem	2	1	1.2	26				C19th	
8	800	6219054	bowl frag	1	4						later C19th	no dec
8	800	6219087	stem	2	3	1.6	56				mid C18th - 19th	
8	800	6219090	stem	2	2	2	46				C18th	
15	1500	6219164	mouth	1	1	1.4	30		flattened		C19th	
20	2000	6119008	stem	1	1	1.3	26				mid C18th - 19th	v abraded
20	2000	6119010	stem	1	7	2.7	47				mid/late C17th	v abraded
20	2000	6119010	stem	2	4	1.5	67				C19th	
20	2000	6119018	stem	2	6	1.9-2.0	83				mid C18th - 19th	
23	2300	6119004	stem	1	1	1.5	25				C19th	
23	2300	6219114	stem	3	2	2.1	35				e/m C18th	
23	2300	6119035	stem	2	3	1.4	57			leaf?	C19th	base of dec bowl
23	2300	6119035	mouth	1	2	1.4	35		flattened, collared		later C19th	
23	2300	6119035	bowl frag	2	5					leaf seam x1	mid/later C19th	crude leaf

Appendix F Specialist finds reports

Plot	Context	Gps	Part	No.	Weight (g)	Bore di (mm)	total stem length (mm)	Heel/spur	Mouthpieces form	Decoration	Date	Notes
23	2300	6119036	stem	1	2	1.4	35				mid C18th - 19th	

# APPENDIX F3 GLASS

By Luke Barber

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

#### Introduction

The excavations recovered 52 pieces of glass, weighing 734g, from 11 individually numbered contexts.

# F3.1 Assessment of assemblage

On the whole the material is in good condition, exhibiting no or little surface corrosion with only a few pieces showing notable signs of abrasion. This is almost certainly the result of the late nature of the vast majority of the glass as on the whole the average size of pieces is small suggesting much breakage/reworking of the material. Most of the assemblage is from topsoil or subsoil contexts in Plots 5, 6, 7, 8, 12, 14, 20 and 23. The remaining pieces come from later 19th- to mid 20th- century deposits [1304] and [2006]. The assemblage has been fully listed on an excel table for archive. Due to the lack of large pieces most fragments, although usually identifiable to general form, are not closely datable.

### F3.2 Results

The earliest pieces recovered are probably of mid/later 18th- to early 19th- century date. These are dominated by four (31g) green wine bottle fragments, most of which show some signs of surface corrosion from topsoils [800], [1200] and [2000]. In addition there is part of a kicked base from an aqua coloured cylindrical phial (1g) from [2000] (Gps 6119008).

The remainder of the assemblage can be placed in a 19th-, or more probably mid 19th- to early/mid 20th-, century date bracket. A typical range of domestic glass is present, the identifiable pieces being summarised in Table 1 by form. Types range from wine/beer bottles, through aqua coloured mineral water bottles to square, cylindrical and panelled bottles in a variety of colours (aqua, pale green, pale blue, clear etc) probably originally carrying a number of household items including medicines.

Table 3-1 Catalogue of C19th – mid 20th- glass by form (excludes mid C18th – early 19th material)

Form	No.	Weight	Contexts
Bottle beer	1	11g	2300
Bottle beer/wine	4	18g	1400, 1401, 2000
Bottle cylindrical	4	28g	1401, (inc. milk)
Bottle panel	1	32g	2000 (medicine)
Bottle perfume	1	15	2300 (clear glass. Complete, 50mm tall)
Bottle mineral water	9	68g	500, 600, 800, 1400, 1401, 2300
Bottle square	1	15g	2000 (aqua)
Bottle wine	7	322g	500, 600, 800, 2006, 2300
Condiment	1	70g	2006 (clear facetted)

Form	No.	Weight	Contexts
Glass wine/spirit	1	36g	1400 (stem)
Jar	1	4g	2000 (jam)
Vase?	1	5g	2300 (white facetted)
Phial	1	15g	1200 (near complete – c. 55mm tall)
Tumbler	2	29g	800, 1304 (both clear/facetted)
Window	2	7g	700, 2300
Unidentified	10	27g	Inc. polychrome dec vessel from 2000

In addition there are a few pieces from drinking vessels, decorative/table wares and windows, but never in significant quantities.

### F3.3 Conclusions

Undoubtedly the glass on the site was derived via a similar process to the pottery, principally through manuring from local farms and/or during night-soiling with material from more distant urban centres. It is quite likely the 'stratified' material was also from the same source – although the pieces are larger this may simply be due to them becoming sealed in a feature early on and thus not being subjected to continual reworking.

# F3.4 Recommendations

The glass assemblage is not considered to hold any potential for further analysis: the material is all late in date, unstratified and lacks decipherable maker's marks. As with the pottery and clay pipes the material sheds light on past manuring regimes but as the actual source of the material is uncertain the social context of it cannot be proven. No further work is proposed and no separate report is required for publication. The material is recommended for discard rather than long-term curation in a museum.

Table 3-2 Glass catalogue

Context	Gps	No	Weight	Form/Type	Colour	Min. Thickness (mm)	Corrosion	Notes	Date
500	6219071	1	3	MINERAL	Aqua	4	None		mC19th - m20th
500	6219071	1	37	WINE	Green	4	None		mC19th - m20th
600	6219057	1	11	MINERAL	Aqua	3	None	embossed A	mC19th - m20th
600	6219057	1	34	WINE	Green	6	Matt surface	turn of base	C19th
600	6219086	1	60	WINE	Green	4	Matt surface	base/kick	C19th
700	6219058	1	1	WINDOW	Clear	1	None		C19th
800	6219036	1	1	?	Blue	na	None	obaque melted, originally included with pot	prob C19th
800	6219037	1	5	MINERAL	Pale green	4	None		mC19th - m20th
800	6219037	1	6	WINE	Green	3	Matt surface		C19th
800	6219038	1	9	WINE	Green	3	Matt surface	abraded	later C18th - m19th
800	6219054	1	1	?	White	1	None	obaque, cylind vessels	C19th
800	6219054	1	2	MINERAL	Aqua	4	None		mC19th - m20th
800	6219054	1	22	TUMBLER	Clear	5	None	faceted base	mC19th - m20th
1200	6219003	1	15	PHIAL	Clear	2	None	Near comp. 18mm di base, 42mm hi to shoulder. 55mm tall originally? Cork stopper	mC19th - m20th
1200	6219003	1	2	WINE	Green	2	Matt surface		later C18th - m19th
1304	6219025	1	1	?	White	1	None	obaque, cylind vessels	C19th
1304	6219025	1	7	TUMBLER	Clear	4	None	faceted base	mC19th - m20th
1400	6219015	1	36	GLASS	Clear	na	None	stem from wine/spirit glass	mC19th - m20th
1400	6219026	1	5	?	Clear	3	None	embossed vert ribs with rows of circles between	mC19th - m20th
1400	6219026	1	10	MINERAL	Aqua	3	None		mC19th - m20th
1400	6219028	1	10	BEER/WINE	Green	4	None	Collared rim	mC19th - m20th
1400	6219039	1	4	?	Aqua	?	None	melted	mC19th - m20th
1400	6219040	1	15	MINERAL	Aqua	5	None	ribbed ext rim codd	mC19th - m20th
1401	6219022	2	6	BEER/WINE	Green	1.5	None		mC19th - m20th

Appendix F Specialist finds reports

Context	Gps	No	Weight	Form/Type	Colour	Min. Thickness (mm)	Corrosion	Notes	Date
1401	6219022	1	8	CYLIN BOT	blue pale	3	Matt surface		C19th
1401	6219022	1	2	CYLIN BOT	Pale green	2	None		mC19th - m20th
1401	6219022	1	10	CYLIN BOT	Clear	4	None	Milk?	mC19th - m20th
1401	6219022	1	7	MINERAL	Aqua	5	None	embossed letters	mC19th - m20th
2000	6119007	1	32	PANEL BOT	blue pale	2	None	base	C19th
2000	6119007	1	15	SQUAR BOT	Aqua	2	None	base	C19th
2000	6119007	2	20	WINE	Green	3	Matt surface		later C18th - m19th
2000	6119008	1	2	BEER/WINE	Green	3	None		C 19th - m 20th
2000	6119008	1	1	PHIAL	Aqua	1.5	None	kick base	C18th
2000	6119026	2	6	?	Polychrome	3	None	opaque white with surface yell, red, green overlain by clear glass. Vase?	mC19th - m20th
2000	6119032	1	4	JAR?	Pale green	?	Matt surface	Collared rim	mC19th - m20th
2000	6119033	1	8	CYLIN BOT	Pale green	3	None	Collared rim	C 19th - m20th
2006		1	70	CONDU	Clear	4	None	Rectangular shallow ribbed condument 30mm hi	C 19th - m 20th
2006		2	173	WINE	Green	3	Matt surface	x1 kicked base	C19th
2300	6119001	3	9	?	Clear	?	None	melted	mC19th - m20th
2300	6119001	2	15	MINERAL	Aqua	4	None	x1 embossed LONDON	C19th
2300	6119001	1	12	WINE	Green	4	None		C 19th - m 20th
2300	6119004	1	6	WINDOW	Clear	4	None	ribbed one side	mC19th - m20th
2300	6119035	1	11	BEER	Green	4	None	embossed H.S In oval	mC19th - m20th
2300	6119035	1	5	VASE?	White	2	None	faceted side	mC19th - m20th
2300	6119038	1	15	PER BOT	Clear	2	None	Panel section, 50mm tall perfume	mC19th - m20th

# APPENDIX F4 METALWORK

By Dr Kevin Leahy

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

# F4.1 Methodology

Finds were examined at x10 magnification, sketched and described in detail. Materials were identified visually and dimensions were recorded using vernier callipers. Masses were obtained on an electronic balance to an accuracy of 0.1g.

The finds were received in an as found condition and no radiographs were available. The iron objects were found to be relatively well preserved although detail was hidden by corrosion. Copper alloy and lead was generally in a good state of preservation although the coin 6219010 had lost much of its surface and the white metal (or aluminium) coin/token was too corroded to be informative.

# F4.2 Summary

A collection of 15 objects, 8 iron, 3 copper alloy, one white metal/aluminium, one lead, one horn and one lump of cinder. Where datable all of this material can, with confidence, be assigned to a recent date.

#### F4.3 Recommendations

As this material appears to lack any stratigraphic context and is either recent or not datable it is unlikely that further work would result in any contribution to our knowledge.

#### Table 4-1 Catalogue of metal finds

Context: (0500) GPS 6219160

Material Copper alloy

Condition: Good

Description: Rectangular buckle with a rounded cross section. Bar set slightly below the line of the bow. Traces of a wrap-around iron pin present

Dimensions: Length 38.0mm, Width 32.4mm, Thickness 4.6mm

Mass: 16.8g

Provisional identification: Harness buckle

Provisional dating of find: Nineteenth - Twentieth century

Find context and dating:

Historical significance:

Context: (1200) GPS 6219010

Material Copper alloy

Condition: Poor, all details hidden by earth and corrosion

Description: Coin, appears to have been machine struck.

Dimensions: Diameter 25.5mm

Mass: 5.5g

Provisional identification: in use until recent times

The diameter suggests that it was a halfpenny of the module

Provisional dating of find: 1860 - 1971

Find context and dating:

Historical significance:

Context: (1500) GPS 6219012

Material Lead

Condition: Good

Description: Strip of lead, blade-like shape with square-cut edges

Dimensions: Length 44.7mm, Width 11.0mm, Thickness 1.7mm

Mass: 6.4g

Provisional identification: Off-cut

Provisional dating of find: Not datable

Find context and dating:

Historical significance:

Context: (2000) GPS 6119017

Material Horn, mid brown, fine textured, polished

Condition: Good

Description: Boat-shaped strip with a D shaped section the flat side of

which is slightly concave along its length. Sides straight, one bearing saw marks. Two 1.7mm diameter holes through

width.

Dimensions: Length 29.4mm, Width 8.2mm, Thickness 5.6mm

Mass: 1.0g

Provisional identification: Part of a bracelet

Provisional dating of find: Nineteenth – early Twentieth century

Find context and dating:

Historical significance:

Context: (2006) A GPS

Material Iron

Condition: Poor, heavily corroded and earth covered

Description: Irregularly shaped fragment of sheet metal. No original edges

can be identified

Dimensions: Length 89.6mm, Width 62.3mm, Thickness 3.6mm

Mass: 77.9g

Provisional identification: Not identifiable

Provisional dating of find: Probably recent

Find context and dating: Unstratified?

Historical significance: None

Context: (2006) B GPS

Material Iron

Condition: Poor, heavily corroded and earth covered

Description: Irregularly shaped fragment of sheet metal. No original edges

can be identified

Dimensions: Length 94.8mm, Width 57.0mm, Thickness 3.6mm

Mass: 70.9g

Provisional identification: Not identifiable

Provisional dating of find: Probably recent

Find context and dating: Unstratified?

Historical significance: None

Context: (2006) C GPS

Material Iron

Condition: Poor, heavily corroded and earth covered

Description: Irregularly shaped fragment of sheet metal. No original edges

can be identified

Dimensions: Length 47.4mm, Width 42.0.0mm, Thickness 3.0mm

Mass: 20.9g

Provisional identification: Not identifiable

Provisional dating of find: Probably recent

Find context and dating: Unstratified?

Historical significance: None

Context: (2006) D GPS

Material Iron

Condition: Poor, heavily corroded all detail being hidden. The original

cross section cannot be determined.

Description: Piece of iron bar

Dimensions: Length 137.0mm, Diameter c. 12.0mm

Mass: 81.4g

Provisional identification: Not identifiable

Provisional dating of find: Not datable

Find context and dating: Unstratified?

Historical significance: None

Context: (2006) E GPS

Material Cinder?

Condition: Good

Description: Lump of what appears to be cinder, open ragged surface, one

area covered in what appears to be glass melt. Weak

magnetic response.

Dimensions: 38.0 x 32.7 x 17.7mm

Mass: 15.9g

Provisional identification: Hearth cinder

Provisional dating of find: Not datable

Find context and dating: Unstratified?

Historical significance: None

Context: (2006) F GPS

Material Iron

Condition: Corroded and encrusted, some exfoliation

Description: Plate, now with a figure 8 shape but may have originally

been three lobed. In the centre of one face is a 6.3mm long

spike or nail.

Dimensions: Length 37.4mm, Width 17.3mm, Thickness 7.0mm

Mass: 6.2g

Provisional identification: Decorative plate

Provisional dating of find: Not datable

Find context and dating: Unstratified?

Historical significance: None

Context: (2011) GPS

Material Iron

Condition: Corroded and earth covered

Description: Bar, appears to have had a flat section but details now

hidden. One end bent at 45 degrees

Dimensions: Length 70.0mm, Width 21.6mm, Thickness 8.2mm

Mass: 27.3g

Provisional identification: Nail or cotter pin?

Provisional dating of find: Not datable

Find context and dating: Unstratified?

Historical significance: None

Context: (2300) GPS 6119035

Material Copper alloy

Condition: Good but crushed and distorted

Description: Thimble, conical sides with a domed top. Sides covered in

concentric rings of fine indentations, The top bears a coarse pattern of square indentations set in a checked pattern.

Machine made

Dimensions: Base 18.9 x 12.8mm, Height 17.0mm

Mass: 3.3g

Provisional identification: Thimble

Provisional dating of find: Nineteen - Twentieth century

Find context and dating: Unstratified?

Historical significance: None

Context: (2300) GPS 6119036

Material White metal/aluminium?

Condition: Poor, corroded with much loss of surface

Description: Coin like disc, much loss of detail but on one face the

number '10' can be seen

Dimensions: Diameter 22.2mm, Thickness 2.0mm

Mass: 3.2g

Provisional identification: Continental coin

Provisional dating of find: Twentieth century

Find context and dating: Unstratified?

Historical significance: None

Context: (2300) GPS 6119036

Material Copper alloy

Condition: Good

Description: Rectangular buckle with a rounded cross section. Bar set

slightly below the line of the bow. Traces of an iron pin

present

Dimensions: Length 49.3mm, Width 40.9mm, Thickness 5.9mm

Mass: 30.3g

Provisional identification: Harness buckle

Provisional dating of find: Nineteenth - Twentieth century

Find context and dating: Unstratified?

Historical significance: None

Context: (2306) GPS

Material Iron

Condition: Corroded and covered in concretions

Description: Bar, section unknown

Dimensions: Length 59.4mm, Section now oval 7.4 x 5.6mm

Mass: 10.8g

Provisional identification: Nail?

Provisional dating of find: Not datable

Find context and dating: Unstratified?

Historical significance: None

# APPENDIX F5 POST-PRODUCTION RESIDUES

By Dr Roderick Mackenzie

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

# Introduction

The aim of this assessment has been to provide a basic catalogue of the residues and determine whether further analysis could provide additional information about the sites that they were recovered from. Table 5.1 below is a basic catalogue of the material assessed.

# F5.1 Summary

The assemblage consists of a small amount of metalliferous and possible metalliferous slag, as well as a few small fragments of coal. Given the nature of the material and the unstratified contexts that it was retrieved from, the assemblage is of limited archaeological or archaeometallurgical research potential.

#### F5.2 Recommendations

No further archaeometallurgical work is recommended on the material covered by this assessment, and the material can be disposed of.

Table 5-1 Catalogue of post-production residues

Plot	Context No.	GPS Ref.	Description
8	800	6219037	Possible metalliferous slag
14	1400	6219004	Possible metalliferous slag
14	1401	6219030	Coke
14	1401	6219016	Metalliferous slag, possibly relating to post-medieval bulk iron or steelmaking
20	2000	6119005	Metalliferous slag, possibly blast furnace slag
20	2008	n/a	Undiagnostic slag
23	2300	6119001	Metalliferous slag, possibly blast furnace slag
23	2300	6119004	Possible metalliferous slag
23	2306	n/a	Coal derived fuel ash slag
23	2006	n/a	Small fragment(s) of coal
23	2304	n/a	Small fragment(s) of coal
23	2306	n/a	Small fragment(s) of coal

# APPENDIX F6 POST-ROMAN POTTERY

By Luke Barber

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

#### Introduction

The archaeological work recovered a total of 542 sherds of post-Roman pottery, weighing 3,045g, from 23 individually numbered contexts.

# F6.1 Assessment of the assemblage

The pottery is generally in poor condition with small abraded sherds (average sherd size 5.6 grams) dominating the assemblage. In addition, lower fired fabrics usually show signs of being adversely affected by acidic ground conditions. A few larger less abraded sherds are present but these are the exception rather than the rule – there are many sherds weighing 2g or less. The vast majority of the assemblage was recovered from unsealed topsoil or subsoil layers in the different plots though some material was recovered from archaeological features, most notably in plot 20. Assemblages from features are always very small and chronologically late – the largest being eight (context 2304) and five (contexts 2306 and 2006) and all being of mid 19th- to early 20th- century date. The whole assemblage has been placed on an excel database as part of the site archive.

#### F6.2 Results

A number of different periods are represented in the overall assemblage. The chronological breakdown is summarised in Table 1. Some wares cross the chronological boundaries given in Table 1 and have had to be placed in one or other of the periods. For example the tinglazed ware and Staffordshire white salt glazed stoneware and slipware, typically spanning the 18th century, have been placed in the early post-medieval period while the London stoneware and Chinese porcelain have been placed in the late post-medieval I period. This division has been made by assessing the likely date of the majority based on fabric and form development and although some inaccuracy in inevitable Table 1 gives a reliable chronological spread and shows the notable increase in the final ceramic period.

Table 6-1: Characterisation of the pottery

Period	No/weight	Average sherd size	No. of different fabric groups	No. of contexts dated to each period
				(excludes unstratified/mixed contexts)
Medieval	2/5g	2.5g	Local -1	-
C13th – mid 14th				
Early post- medieval	18/119g	6.6g	Local - 3	-
Mid C16th - mid 18 <sup>th</sup>			Regional - 3	
Late post-	91/418g	4.6g	Local - 2	-

Period	No/weight	Average sherd size	No. of different fabric groups	No. of contexts dated to each period
medieval I				
Mid C18th – early 19th			Regional - 4	
			Imported - 1	
Late post- medieval II	431/2503g	5.8g	Local - 1	6
Mid C19th – early 20th			Regional - 8	

<sup>\*</sup> NB. Totals include all residual/intrusive and unstratified material. Local equates to Wealden wares; Regional to other English wares.

#### F6.2.1 Medieval

The medieval assemblage consists of only two heavily abraded oxidised cooking pot body sherds, both tempered with medium/coarse sand (topsoil contexts [1500] and [2000]). Both sherds are likely to be of 13th- century date and represent very low levels of medieval manuring.

# **F6.2.2** Early post-Medieval

The 18 sherds of early post-medieval pottery from the pipeline include a mix of wares potentially spanning the mid 16th to mid 18th centuries. However, the majority can be placed in the 18th century with the earliest material probably being of the second half of the 17th century. With the exception of a residual sherd in [2004] all of the material is from topsoil/subsoil contexts in plots 5, 14, 15, 18 and 20 and as such is widely spread, probably as the result of increased manuring of land during arable spells. All of the material, particularly the lower fired earthenwares are heavily abraded which would be in keeping with such a scenario. Local fabrics consist of early post-medieval glazed redwares (PMRE: 3/21g), Wealden buff earthenware (WEAL: 1/9g) and Border ware with olive glaze (BORD O: 1/2g). Regional wares include 18th- century London tin-glazed ware with blue-tinged glazes (TGW: 3/5g), late 17th- to 18th- century Staffordshire combed slipware (STSL 1/24g) and 18th- century white salt-glazed stoneware (SWSG: 9/58g). No imported material is present. Most pieces are too small to be diagnostic of form but a range of domestic wares including jars, bowls, and in SWSG, moulded dinner plates are present.

#### **F6.2.3** Late post-Medieval I

This period has been divided in two in order to ensure that the lower levels of later 18th- to early/mid 19th- century activity, which continue from the previous period, is not lost amongst the much higher levels of later activity. As such 91 sherds (418g) have been allocated to this earlier part of the late post-medieval period though they mark a seamless continuation of activity, perhaps increasing somewhat, from probably the early/middle 18th century through to the early/middle 19th century. All of the material is from unstratified topsoil/subsoil contexts suggesting manuring, and thus probably arable agriculture, had increased during this period though the low numbers would be in keeping with local spreading in a period prior to the main establishment of the rail network. The material is widespread, being located in most plots (eg 5, 7, 8, 12, 20 and 23) with the highest

concentration being in [2000] where 46 sherds (226g) of this period were recovered. A typical range of domestic wares is present. This includes developed post-medieval glazed redware (PMR: 17/142g – see also PMR below) plates, bowls and jars, sometimes with trailed slip (SLIP: 1/9g), creamware plates and teawares (CREA: 33/91g), plain and transfer-printed pearlware plates and teawares (PEAR: 13/25g and PEAR TR 18/81g), some late London stoneware (LONS: 5/58g) and even four sherds of Chinese porcelain (CHPO: 4/12g).

#### **F6.2.4** Late post-Medieval II

From the mid 19th to early 20th century there is a notable rise in the quantity of pottery along the pipeline: 431 sherds weighing just over 2.5kg (80% of the overall assemblage by sherd count). This can be seen as a combination of increased arable/cultivation activity and the delivery of night-soil from urban centres using the railway network. Within this period there appears to be an increase in activity toward the late 19th and early 20th centuries, particularly notable in plot 20's topsoil which produced 123 sherds (576g) though this period is well represented in most plots. Some of the PMR sherds probably belong to this late phase: 28 (294g) have been allocated here, including both glazed jars/bowls and unglazed flower pots. A typical range of domestic wares is present. English stoneware (ENGS: 49/651g), most notably late 19th- to early 20th- century preserve jars, English porcelain, including a figurine/lamb's head (ENPO: 25/79g), Rockingham-type teapots (ROCK: 5/172g), industrial slipware (IND SLIP: 1/1g), yellow ware (YELL: 22/118g), transfer-printed ware (TPW 108/380g) with blue, black/brown, green, red and purple decoration are all represented. The late nature of the assemblage is well shown by the large quantity of plain refined white earthenware vessels (REFW: 153/596g), including more preserve jars, and late Ironstone china (IRON: 40/212g) cups and plates. The latest material could easily be as late as the 1930s.

# **F6.3** Notes on the assemblages

#### F6.3.1 Plot 3

The topsoil [300] produced eight sherds (41g) to suggest low levels of manuring between the mid 19th and early 20th centuries. Wares include a Yellow ware mixing bowl with internal white slip as well as TPW, REFW and IRON mixed assemblage.

#### F6.3.2 Plot 4

The topsoil [400] produced only three sherds (13g) of REFW suggesting very low levels of manuring between the mid 19th and early 20th centuries.

# F6.3.3 Plot 5

The topsoil [500] produced 15 sherds (139g). Of these six (28g) are of 18th- to early 19th-century date. These include a creamware cup and plate, a London stoneware tankard, WSGS moulded plates and a Chinese porcelain plate with blue Chinese landscape decoration. The remaining part of the assemblage is of mid 19th- to early 20th- century date and consists of an ENGS blacking pot, ROCK teapot, PMR jars, TPW and REFW. All in all manuring appears to have been fairly constant between the two periods.

#### F6.3.4 Plot 6

The topsoil [600] produced 31 sherds (120g) only two of which (2g) are of 18th- to early 19th- century date (though the Chinese porcelain plate may be the same vessel as in [500]). The remainder of the assemblage is of mid 19th- to early 20th- century date and includes ENGS ink bottles, TPW decorated in blue and purple as well as REFW plates and sherds of IRON and ENPO.

#### F6.3.5 Plot 7

The topsoil [700] produced 41 sherds (167g) of which 10 (19g) can be given an 18th-to early 19th- century date (including a range of CREA, PMR, PEAR and a single sherd (1g) from a CHPO plate). The remainder of the assemblage demonstrates an increased level of manuring during the mid 19th to early 20th centuries. The range of late wares includes ENGS with Bristol glazes, PMR flower pots, REFW plates and preserve jars, YELL and TPWs including a late 19th- century example printed 'England' on its base.

#### F6.3.6 Plot 8

The topsoil [800] produced 23 sherds (133g) or which six (83g) are of the late 18th to early/mid 19th centuries. These wares include a LONS bottle, a PEAR vessel with blue sponged decoration, a PEAR TR with blue landscape scene and a sherd from a CHPO bowl. The remaining sherds are from later, more intense, manuring during the mid 19th to early 20th centuries. Wares include ENGS (with Bristol glaze), IND SLIP, PMR flower pot, TPW, YELL and REFW. Five sherds were recovered from the subsoil [801] all of which are of mid 19th- to early 20th- century date and including an REFW preserve jar from the Maling factory.

#### F6.3.7 Plot 9

A single chip of TPW (1g) with blue Chinese landscape was the only sherd recovered suggesting very low levels of 19th- century manuring.

#### F6.3.8 Plot 12

The topsoil [1200] produced 25 sherds (146g) of which 11 (39g) are of later 18th- to early/mid 19th- century date. This period is represented by sherds in CREA, LONS, PMR (a plate, bowl and jug), PEAR (a green shell-edged plate), PEAR TR and TGW. Manuring appears to have continued at about the same rate between the mid 19th and early 20th centuries with a range of ENGS (preserve jar), PMR (glazed jars and flower pots), YELL (bowl), TPW (in blue and green), ENPO and REFW (bowl).

# F6.3.9 Plot 13

Pottery from a field ditch (context [1304]), consisting of 11 sherds (362g) is all of the later 19th century, possibly extending into the early 20th century. Sherds, which are notably larger than elsewhere, though of similar types, include ENGS (preserve jar), PMR. ROCK (teapot lid), TPW, ENPO, REFW and IRON.

#### F6.3.10 Plot 14

The topsoil [1400] produced 19 sherds (81g) of pottery the earliest of which consists of two (6g) abraded sherds of early post-medieval redware (PMRE), probably of 17th- to early 18th- century date. Four sherds (20g) show low level manuring during the later 18th to early 19th century (including CREA and PEAR) with the remainder showing a slight increase in manuring between the mid 19th and early 20th centuries. The subsoil [1401] produced a further nine sherds of the same late period demonstrating ploughing was initially deep.

#### F6.3.11 Plot 15

The topsoil [1500] produced a single abraded 13th- century sand tempered cooking pot sherd suggesting some early activity in the area. A single SWSG sherd (5g) indicates some 18th- century activity but the remaining eight sherds are of mid 19th- to early 20th- century date and include TPW and REFW types.

# F6.3.12 Plot 18

The topsoil [1800] produced 15 sherds (60g) the earliest of which was a single abraded Border ware sherd (BORD O: 2g) of probable 17th- century date. Some manuring in the mid/later 18th to early 19th century is represented by eight sherds (31g) including a LONS tankard, CREA plates, SWSG bowl, PEAR blue shell-edged plate and PEAR TR plate. The remaining pottery shows a continued level of manuring into the early 20th century. The subsoil [1801] produced a single abraded sherd of Wealden buff earthenware (WEAL) of probable 17th- to early 18th- century date.

#### F6.3.13 Plot 19

The topsoil [1900] produced a single (1g) REFW plate chip of mid 19th- to early 20th-century date suggesting little activity.

#### F6.3.14 Plot 20

The plot produced by far the largest assemblage of any of the plots. The topsoil [2000] yielded 171 sherds (820g) the earliest of which consists of a single (3g) abraded sand tempered cooking pot sherd of 13th- century date. A single sherd (15g) of PMRE jar was also recovered suggesting some 17th- to early 18th- century activity. Manuring on a notable scale appears between the mid 18th and early/mid 19th centuries: some 46 sherds (226g) of this period having been recovered from [2000]. The usual range of wares are represented: CREA plates (16/48g), SWSG plates/bowls (3/28g), a Staffordshire combed slipware (STSL) press moulded dish (1/24g), TGW (1/1g), PMR jars (10/77g), PEAR tea bowl and saucer with hand-painted decoration (5/9g) and PEAR TR with blue Chinese landscape scenes (9/30g). Between the mid 19th and early 20th century there is a notable increase in the quantity of pottery suggesting an increase in manuring. Wares are as before but include an ENGS preserve jar from W.P. Hartley of London and Liverpool, a range of yellow wares (YELL) including bowls with blue, brown and black mocha decoration and a plain oven dish, TPWs in blue, purple and green designs and a good spread of REFW (43 sherds).

Field ditch fills [2004], [2006] and [2011] all produced small assemblages of pottery (2/3g, 5/115g and 3/10g respectively). They are all dominated by sherds of early/mid to late 19th-century date, some which may continue into the early 20th century. Most are too small to be certain of form. The exceptions to this come from [2006] which included a residual 18th-

century SWSG moulded plate and larger sherds of ENGS easily identifiable as 19th- century ink and blacking bottle tops.

#### F6.3.15 Plot 23

The topsoil [2300] also produced a notable quantity of pottery: 126 sherds weighing 592g. The earliest activity is represented by low numbers of mid 18th- to early 19th- century sherds (8/40g) including a SWSG moulded plate, a TGW hollow ware with polychrome decoration, a PMR jar, a CREA cup and a plate and tureen in PEAR TR. However, as with Plot 20, there is a notable increase in the quantity of pottery/manuring between the mid 19th and early 20th centuries with a similar range of fabrics. The exception being the head of an ENPO lamb from a small shepherd / shepherdess figurine.

The fills of two linear cultivation features (contexts [2304] and [2306]) contained eight (22g) and five (68g) sherds of pottery respectively. Both assemblages are of mid 19th-to early 20th- century date, containing ENGS vessels with Bristol glazes and REFW.

# **F6.4** Conclusions

The pottery assemblage from the site is not considered to hold any potential for further analysis. The vast majority of the material consists of small featureless sherds from unstratified deposits. Only a handful of stratified assemblages are present and they are all small and very late in date. Although the general assemblage has the potential to study past agricultural regimes from the 13th to early 20th centuries this can be carried out from work already done during the assessment.

#### **F6.5** Recommendations

The excel database and above Plot chronological summaries can be used to make observations about past land use but no further work on the actual pottery itself is proposed and no separate report for publication is needed. The actual assemblage itself is recommended for discard rather than long-term curation in a museum.

Table 6-2 Catalogue of post-Roman pottery

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
3	300	6219186	IRON	1	1	bs	later C19th - mid 20th
3	300	6219079	REFW	1	8	bowl rim, rolled	mid C19th - early 20th
3	300	6219186	REFW	1	4	footring base	mid C19th - early 20th
3	300	6219185	REFW	1	3	bs	mid C19th - early 20th
3	300	6219187	TPW	2	4	blue/purple foliage	C19th
3	300	6219186	TPW	1	11	green border on plate	mid C19th - early 20th
3	300	6219187	YELL	1	10	mixing bowl, int white slip	mid C19th - early 20th
4	400	6219078	REFW	3	13	x1 ribbed plate, x1 stencilled gr pattern plate	mid C19th - early 20th
5	500	6219072	CHPO	1	5	blue Chinese landscape - same vessel as in 600?	1700-1800
5	500	6219072	CREA	1	5	cup? Late/pale	late C18th - early 19th
5	500	6219077	CREA	1	5	plate	late C18th - early 19th
5	500	6219075	ENGS	1	52	blacking bottle base (stamped)	C19th
5	500	6219074	IRON	1	13	blue will pat tp	mid C19th - early 20th
5	500	6219071	LONS	1	5	bs ?tankard	1700-1800
5	500	6219071	PMR	1	20		C19th
5	500	6219076	REFW	1	9	mug? X1 red line hor	mid C19th - early 20th
5	500	6219071	REFW	3	7	cup & saucer with red lines, x1 cup gold gilt rim	mid C19th - early 20th
5	500	6219160	ROCK	1	4	bs	C19th
5	500	6219075	SWSG	1	7	moulded plate	1730-1780
5	500	6219071	SWSG	1	1	bs	1730-1780
5	500	6219071	TPW	1	6	blue will pat plate	C19th
6	600	6219057	CHPO	1	1	blue Chinese landscape	1700-1800
6	600	6219086	ENGS	1	3	top of dwarf ink	mid C19th - early 20th
6	600	6219056	ENGS	2	6	bottle	C19th
6	600	6219083	ENGS	1	18	bs	C19th
6	600	6219097	ENPO	1	1	bs	C19th
6	600	6219056	IRON	2	5	bs	later C19th - mid 20th
6	600	6219083	PEAR TR	1	1	blue landscape	early C19th
6	600	6219086	REFW	4	7	Inc. pres jar base	mid C19th - early 20th
6	600	6219056	REFW	2	8	plate - could be v late creamware	C19th
6	600	6219057	REFW	2	1	bs	mid C19th - early 20th
6	600	6219097	REFW	7	46	x1 pres jar	mid C19th - early 20th
6	600	6219097	REFW	1	5	unglazed pipe clay sphere - doll's head?	C19th
6	600	6219083	REFW	2	3	bs	mid C19th - early 20th
6	600	6219057	TPW	2	8	blue floral plate	C19th
6	600	6219097	TPW	1	1	blue tp	C19th

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
6	600	6219083	TPW	1	6	x1 blue x1 pur	C19th
7	700	6219061	CHPO	1	1	plate	1700-1850
7	700	6219058	CREA	2	6	abraded	late C18th - early 19th
7	700	6219060	CREA	3	2	bs	late C18th - early 19th
7	700	6219061	CREA	2	1	bs	late C18th - early 19th
7	700	6219061	ENGS	1	16	Brist gl	mid C19th - early 20th
7	700	6219059	ENGS	1	14	bs	C19th
7	700	6219058	IRON	3	8	bs	later C19th - mid 20th
7	700	6219080	IRON	1	22	bs	later C19th - mid 20th
7	700	6219061	IRON	2	3	bs	mid C19th - early 20th
7	700	6219059	PEAR	1	1	chip	early C19th
7	700	6219058	PMR	1	22	flower pot	C19th
7	700	6219059	PMR	1	8	bs	1750-1850
7	700	6219058	REFW	7	40	inc pres jar and plate	mid C19th - early 20th
7	700	6219080	REFW	2	4	bs	mid C19th - early 20th
7	700	6219060	REFW	4	6	plate x3 red lines round rim	mid C19th - early 20th
7	700	6219061	REFW	1	1	bs	mid C19th - early 20th
7	700	6219058	TPW	2	3	blue	C19th
7	700	6219080	TPW	1	1	blue tp. Maker's tp on base '[Engla]nd'	later C19th - mid 20th
7	700	6219061	TPW	1	1	blue tp	C19th
7	700	6219059	TPW	3	5	x2 blue Chin landscape, x1 black	C19th
7	700	6219058	YELL	1	2	bs	C19th
8	800	6219037	CHPO	1	5	tea bowl, blueChinese landscape	C19th
8	800	6219038	ENGS	3	31	large bottle, tan top, Brist gl	mid C19th - early 20th
8	800	6219036	glass				1/1g molten
8	800	6219035	IND SLIP	1	1	blue band, below black lines on rim	C19th
8	800	6219054	IRON	1	5	poss feldspaic stoneware, moulded dec	C19th
8	800	6219054	LONS	1	35	cylindrical bottle?	1750-1850
8	800	6219055	LONS	1	6	bs fe wash	1700-1800
8	800	6219090	PEAR	1	3	blue spong marbled	early C19th
8	800	6219087	PEAR TR	1	1	blue tp plate	v late C18th - mid 19th
8	800	6219055	PEAR TR	1	33	blue tp Eng landscape with figures. Plate	early C19th
8	800	6219054	PMR	1	7	flower pot	C19th
8	800	6219087	REFW	3	4	inc x1 with lines round rim blue/brown	mid C19th - early 20th
8	800	6219037	REFW	1	3	base stained	mid C19th - early 20th
8	800	6219036	REFW	2	3	bs	mid C19th - early 20th
8	800	6219090	REFW	1	2	bs	mid C19th - early 20th
8	800	6219054	TPW	2	2	blue x1 flow blue	C19th

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
8	800	6219088	TPW	3	7	blue floral	C19th
8	800	6219035	TPW	1	12	plate flow blue	C19th
8	800	6219055	TPW	1	2	blue/grey tp foreign landscape	C19th
8	800	6219054	YELL	1	7	white slip lines	C19th
8	801	6219081	IRON	1	4	Saucer moulded	mid C19th - early 20th
8	801	6219082	REFW	3	29	x1 pres jar ribbed. Base stamped [Newcast]le (Malings)	mid C19th - early 20th
8	801	6219081	TPW	1	3	blue	C19th
9	900	6219033	TPW	1	1	blue Chinese landscape	C19th
12	1200	6219010	CREA	1	1	bs	late C18th - early 19th
12	1200	6219006	ENGS	1	4	bs bottle	C19th
12	1200	6219005	ENGS	1	50	pres jar	later C19th - mid 20th
12	1200	6219003	ENGS	1	12	bs	C19th
12	1200	6219010	ENGS	1	12	bs	C19th
12	1200	6219006	ENPO	1	1	bs	C19th
12	1200	6219005	ENPO	1	2	bowl base	C19th
12	1200	6219010	LONS	1	8	bs fe wash on upper section	1700-1800
12	1200	6219009	PEAR	1	2	green shell edged plate	v late C18th - mid 19th
12	1200	6219005	PEAR	1	1	footring base	v late C18th - mid 19th
12	1200	6219007	PEAR	1	1	bs	early C19th
12	1200	6219003	PEAR TR	2	1	blue tp	v late C18th - mid 19th
12	1200	6219006	PMR	1	2	flower pot	C19th
12	1200	6219005	PMR	1	4	flower pot	C19th
12	1200	6219003	PMR	1	3	bs jar	C19th
12	1200	6219008	PMR	1	8	bowl bs, ext rouletted line	1750-1850
12	1200	6219010	PMR	2	16	x1 plate, x1 jug	1700-1850
12	1200	6219003	REFW	1	1	bowl with D rim	mid C19th - early 20th
12	1200	6219009	TGW	1	1	blue tinged/late, blue dec	1700-1800
12	1200	6219005	TPW	1	1	green tp	mid C19th - early 20th
12	1200	6219003	TPW	2	4	blue tp	C19th
12	1200	6219010	YELL	1	11	Bowl rim, rounded	C19th
13	1304	6219025	ENGS	1	12	pres jar	mid C19th - early 20th
13	1304	6219025	ENPO	4	33	Mug. Overgl gr foliage	mid C19th - early 20th
13	1304	6219025	IRON	1	28	bowl	later C19th - mid 20th
13	1304	6219025	PMR	1	6	bs	1750-1850
13	1304	6219025	REFW	2	160	x1 bowl base with stencilled blue flower int centre	mid C19th - early 20th
13	1304	6219025	ROCK	1	122	teapot lid complete	C19th
13	1304	6219025	TPW	1	1	blue tp	C19th

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
14	1400	6219026	CREA	1	1	bs	late C18th - early 19th
14	1400	6219015	ENGS	1	31	Bristol glaze large bottle	mid C19th - early 20th
14	1400	6219026	ENPO	1	1	bs	C19th
14	1400	6219020	ENPO	2	5	tea cup	mid C19th - early 20th
14	1400	6219026	PEAR	1	2	ribbed mug/jug	C19th
14	1400	6219017	PEAR	1	1	blue hand painted	early C19th
14	1400	6219041	PMR	1	16	plate, rounded club rim	1750-1850
14	1400	6219020	PMRE	2	6	abraded int gr gl	1600-1750
14	1400	6219027	REFW	1	3	rim pres jar	mid C19th - early 20th
14	1400	6219015	REFW	2	2	bs	mid C19th - early 20th
14	1400	6219026	TPW	3	8	x1 blue floral, x2 will pat plates	C19th
14	1400	6219015	TPW	1	1	green tp	C19th
14	1400	6219039	TPW	1	3	blue floral tea cup - late	mid C19th - early 20th
14	1400	6219028	TPW	1	1	red tp, burnt	C19th
14	1401	6219023	ENGS	1	16	bottle	C19th
14	1401	6219021	ENPO	1	1	bs	C19th
14	1401	6219030	PMR	1	9	flower pot	C19th
14	1401	6219021	PMR	2	13	bs	C19th
14	1401	6219095	REFW	1	2	burnt	mid C19th - early 20th
14	1401	6219023	REFW	1	1	bs abraded	mid C19th - early 20th
14	1401	6219022	REFW	1	1	sprigged floral dec under blue gl patches	C19th
14	1401	6219014	TPW	1	1	green tp	C19th
15	1500	6219011	Med sand	1	2	cp bs abraded	1200-1325
15	1500	6219011	PMR	1	10	jar with rounded club rim	C19th
15	1500	6219013	REFW	1	1	bs	mid C19th - early 20th
15	1500	6219164	REFW	5	6	bs	mid C19th - early 20th
15	1500	6219164	SWSG	1	5	tankard base	1730-1770
15	1500	6219011	TPW	1	2	blue floral with blue ribbed zones	C19th
18	1800	6119040	BORD O	1	2	bs	1550-1700
18	1800	6119039	CREA	2	13	plates	late C18th - early 19th
18	1800	6119040	CREA	2	4	bs	late C18th - early 19th
18	1800	6119040	LONS	1	4	bs tankard?	1700-1800
18	1800	6119040	PEAR	1	5	plate with blue shell edge	v late C18th - mid 19th
18	1800	6119039	PEAR TR	1	2	blue tp plate	v late C18th - mid 19th
18	1800	6119040	REFW	1	1	blue gl?	C19th
18	1800	6119039	SWSG	1	3	bowl rim, rolled	1730-1770
18	1800	6119040	TPW	2	13	blue floral, wild rose plate, floral serving dish	C19th
18	1800	6119039	YELL	2	6	jug, blue slip line	C19th

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
18	1800	6119040	YELL	1	7	bs	C19th
18	1801	6119040	WEAL	1	9	bs all over br gl	1600-1750
19	1900	6119041	REFW	1	1	plate	mid C19th - early 20th
20	2000	6119024	CREA	1	4	tea cup	late C18th - early 19th
20	2000	6119032	CREA	1	2	bs quite early/yellow	1760-1830
20	2000	6119007	CREA	3	10	plates, stained	late C18th - early 19th
20	2000	6119010	CREA	4	13	plates, abraded	late C18th - early 19th
20	2000	6119009	CREA	4	10	bowl	1780-1830
20	2000	6119033	CREA	1	4	base	late C18th - early 19th
20	2000	6119008	CREA	2	5	plate	late C18th - early 19th
20	2000	6119032	ENGS	1	4	Bristol glaze	mid C19th - early 20th
20	2000	6119007	ENGS	2	22	ginger beers	C19th
20	2000	6119010	ENGS	2	25	Bristol gl pres jar	mid C19th - early 20th
20	2000	6119048	ENGS	2	23	x1 Bristol gl	C19th
20	2000	6119006	ENGS	2	23	Bristol glaze	mid C19th - early 20th
20	2000	6119033	ENGS	1	4	bs	C19th
						pres jar stamped with lighthouse on base: Trade Mark (W.P. Hartley of London &	
20	2000	6119019	ENGS	2	27	Liverpool)	later C19th - mid 20th
20	2000	6119007	ENPO	1	1	bs	C19th
20	2000	6119010	ENPO	1	1	bs overgl dec	C19th
20	2000	6119006	ENPO	2	9	x1 poss feldspaic stoneware	C19th
20	2000	6119007	IRON	1	18	bs cylindrical jar	mid C19th - early 20th
20	2000	6119018	IRON	2	7	bs	later C19th - mid 20th
20	2000	6119009	IRON	1	2	bs	later C19th - mid 20th
20	2000	6119027	Med sand	1	3	abraded cp bs oxid. Quite coarse sand	1200-1275/1300
20	2000	6119007	PEAR	1	2	plate	v late C18th - mid 19th
20	2000	6119048	PEAR	1	1	hand painted saucer	early C19th
20	2000	6119034	PEAR	1	2	plate	late C18th - early 19th
20	2000	6119008	PEAR	2	4	x1 early tea bowl, x1 hp green, brown, blue floral	early C19th
20	2000	6119032	PEAR TR	1	5	blue tp plate	v late C18th - mid 19th
20	2000	6119007	PEAR TR	4	7	blue tp floral & will pat	v late C18th - mid 19th
20	2000	6119005	PEAR TR	1	2	bs blue foliage	v late C18th - mid 19th
20	2000	6119034	PEAR TR	1	7	plate will patt	early C19th
20	2000	6119033	PEAR TR	1	7	blue Chinese pat plate	early C19th
20	2000	6119008	PEAR TR	1	2	blue floral flo blu	early C19th
20	2000	6119031	PMR	1	13	jar with flattened club rim	C19th
20	2000	6119032	PMR	2	30	bs	1750-1850
20	2000	6119007	PMR	3	22	jars	1750-1850

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
20	2000	6119005	PMR	4	19	jars	1750-1850/75
20	2000	6119018	PMR	1	9	flower pot	C19th
20	2000	6119010	PMR	2	9	x1 flower pot, x1 gl jar	C19th
20	2000	6119048	PMR	3	37	x1 flower pot, x2 gl jar	C19th
20	2000	6119006	PMR	1	2	flower pot	C19th
20	2000	6119026	PMR	1	2	bs	C19th
20	2000	6119033	PMR	1	27	bs	C19th
20	2000	6119008	PMR	1	6	bs	1750-1850
20	2000	6119010	PMRE	1	15	bs part gl externally	1600-1750
20	2000	6119024	REFW	2	12		mid C19th - early 20th
20	2000	6119031	REFW	3	6	x1 with tp on base: Royal semi porcelain, Marlboro[gh], Booth[E]ngla[nd]	mid C19th - early 20th
20	2000	6119032	REFW	2	4	bs	mid C19th - early 20th
20	2000	6119007	REFW	4	5	bs	mid C19th - early 20th
20	2000	6119005	REFW	4	12	blue gl?, blue lines round plate rim	mid C19th - early 20th
20	2000	6119018	REFW	3	12	plates, purple lines	mid C19th - early 20th
20	2000	6119010	REFW	2	3	cup with x3 red lines below rim	mid C19th - early 20th
20	2000	6119009	REFW	6	16	stained	mid C19th - early 20th
20	2000	6119006	REFW	4	5	stained	mid C19th - early 20th
20	2000	6119026	REFW	2	2	bs	mid C19th - early 20th
20	2000	6119033	REFW	6	13	bowl etc	mid C19th - early 20th
20	2000	6119033	REFW	1	5	bowl flow blue	C19th
20	2000	6119019	REFW	1	1	bs	mid C19th - early 20th
20	2000	6119008	REFW	3	6	x1 spong blue marble, x1 blue stencilled	mid C19th - early 20th
20	2000	6119031	ROCK	1	41	tea pot lid	C19th
20	2000	6119006	ROCK	1	3	sprigged foliage dec	C19th
20	2000	6119010	SLIP	1	9	plate rim, abraded	1650-1750
20	2000	6119009	STSL	1	24	dish with mould-pressed rim	1700-1780
20	2000	6119032	SWSG	2	18	footring base	1730-1770
20	2000	6119034	SWSG	1	10	plate?	1730-1780
20	2000	6119007	TGW	1	1	plate, blueish/late glaze with blue hp dec	1700-1775
20	2000	6119024	TPW	1	1	blue tp plate	C19th
20	2000	6119031	TPW	3	7	x2 blue floral, x1 brown tp	C19th
20	2000	6119005	TPW	5	21	blue floral, will pat plates, x1 jug	C19th
20	2000	6119018	TPW	2	6	x1 green x1 blue foliage	C19th
20	2000	6119010	TPW	7	25	blue plates: will pat, wild rose	C19th
20	2000	6119009	TPW	5	18	blue will pat x2, x1 jug, x1 blue sponged	C19th
20	2000	6119048	TPW	6	17	blue will pat x1, purple landscape/urn	C19th

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
20	2000	6119006	TPW	6	10	blue floral, grren foliage, brown floral	C19th
20	2000	6119026	TPW	1	1	black tp	mid C19th - early 20th
20	2000	6119034	TPW	1	2	blue tp	C19th
20	2000	6119031	YELL	1	1		C19th
20	2000	6119007	YELL	3	15	bowls, simple rim. Brown & black mocha dec x1 stamped oven dish	C19th
20	2000	6119010	YELL	3	19	bowl blue mocha	C19th
20	2000	6119009	YELL	1	3	bowl blue mocha	C19th
20	2000	6119048	YELL	1	3	bs	C19th
20	2000	6119033	YELL	2	16	blue mocha	C19th
20	2004		ENPO	1	1	saucer	C19th
20	2004		REFW	1	2	footring base	mid C19th - early 20th
20	2006		ENGS	2	86	x1 ink bot, x1 blacking bot rims	C19th
20	2006		REFW	1	10	pres jar	mid C19th - early 20th
20	2006		SWSG	1	6	plate moulded queens pattern	1730-1780
20	2006		TPW	1	13	black tp doves on rim	mid C19th - early 20th
20	2011		REFW	2	2	bs	mid C19th - early 20th
20	2011		YELL	1	8	bowl foot ring	C19th
23	2300	6119035	CREA	1	4	plate, stained	late C18th - early 19th
23	2300	6119002	CREA	1	1	cup rim, late/pale	late C18th - early 19th
23	2300	6119036	ENGS	3	44	x1 large bot, x1 pres jar	mid C19th - early 20th
23	2300	6119038	ENGS	3	46	x1 pres jar ribbed	later C19th - mid 20th
23	2300	6119035	ENGS	1	5	bs	C19th
23	2300	6119004	ENGS	2	7	bs bottle	C19th
23	2300	6119003	ENGS	6	20	pres jar	mid C19th - early 20th
23	2300	6119037	ENGS	1	24	pres jar. Wide set vert grooves	mid C19th - early 20th
23	2300	6119036	ENPO	1	1	base cup	C19th
23	2300	6119004	ENPO	3	9	cups	later C19th - mid 20th
23	2300	6119037	ENPO	2	6	inc x1 figurine of lamb	C19th
23	2300	6119038	IRON	7	32	hard white plates & cups	later C19th - mid 20th
23	2300	6119035	IRON	9	31	plain bowl, x2 blue tp, x1 black tp	later C19th - mid 20th
23	2300	6119001	IRON	2	11	cylindrical mug	later C19th - mid 20th
23	2300	6119004	IRON	5	22	plates	later C19th - mid 20th
23	2300	6119038	PEAR TR	3	13	blue floral plate and ?tureen	late C18th - early 19th
23	2300	6119036	PMR	1	9	ext gl only	C19th
23	2300	6119035	PMR	2	16	flower pot	C19th
23	2300	6119004	PMR	1	9	bs	C19th
23	2300	6119002	PMR	1	11	jar	1750-1850

Appendix F Specialist finds reports

Plot	Context	Gps	Fabric	No.	Weight	Comments	Date
23	2300	6119037	PMR	1	9	flower pot	C19th
23	2300	6119036	REFW	4	13	inc plate with pink lustre rim edge	C19th
23	2300	6119038	REFW	4	8	blue & pink bands, engine turned	mid C19th - early 20th
23	2300	6119038	REFW	1	4	coloured glaze	C19th
23	2300	6119035	REFW	8	24		mid C19th - early 20th
23	2300	6119001	REFW	3	8	inc fluted cup rim	mid C19th - early 20th
23	2300	6119004	REFW	9	20	x1 pink gl, x1 fluted saucer	mid C19th - early 20th
23	2300	6119002	REFW	2	6		mid C19th - early 20th
23	2300	6119003	REFW	3	7		mid C19th - early 20th
23	2300	6119037	REFW	2	4	x1 illeg brown maker's tp	mid C19th - early 20th
23	2300	6119004	ROCK	1	2	bs	C19th
23	2300	6119001	SWSG	1	8	plate moulded diaper rim	1730-1780
23	2300	6119004	TGW	1	3	polychrome black, blue, green, yellow hollow ware	1700-1800
23	2300	6119036	TPW	11	48	x1burnt/slagged, x1 red tp, x2 brown tp, rest blue floral & late patterns	mid C19th - early 20th
23	2300	6119038	TPW	2	1	blue bs	C19th
23	2300	6119035	TPW	7	41	x1 polychrome roses plate, rest blue tp & x1 sponged	mid C19th - early 20th
23	2300	6119001	TPW	1	1	purple sponged	C19th
23	2300	6119004	TPW	4	48	ewer handle bown tp design with gold lustre, blue, green, grey tp floral plates	C19th
23	2300	6119037	TPW	3	6	x1 blue, x1 red, x1 poly	mid C19th - early 20th
23	2300	6119036	YELL	1	3	bs bowl, blue slip line	C19th
23	2300	6119035	YELL	1	4	mixing bowl, int white slip	mid C19th - early 20th
23	2300	6119037	YELL	1	3	bowl int white slip, ext moulded	mid C19th - early 20th
23	2304		ENGS	1	9	Bristol glaze	mid C19th - early 20th
23	2304		ENPO	3	7	x2 overgl polychrome	C19th
23	2304		REFW	1	1	bs	mid C19th - early 20th
23	2304		TPW	3	5	blue floral & late pattern	mid C19th - early 20th
23	2306		ENGS	1	5	Bristol glaze	mid C19th - early 20th
23	2306		PMR	3	62	inc bead & flanged jar rim	C19th
23	2306		TPW	1	1	blue tp plate	C19th

# APPENDIX F7 SHELL

By Janey Brant

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

# Introduction

An archaeological watching brief was carried out by Network Archaeology along the route of the Selsfield Reservoir to Turners Hill pipeline, West Sussex in 2009. A very small amount of hand collected shell (from one context) was recovered. The shell assemblage is shown in Table 7.1.

Table 7-1 Catalogue of shell

Context No.	GPS Number	No. of fragments	Description	Approx Weight
800	6219038	1	Fragment comes from the top section of an oyster shell (ostrea edulis).	17g

# F7.1 Summary

The single piece represents a section of the upper shell of a bivalve mollusc of the genus Ostrea. Given that the fragment was retrieved from an unstratified context and there is such a small quantity of material, the assemblage is of limited archaeological potential.

# F7.2 Recommendations

No further analysis of this deposit is recommended. The material can be disposed of.

# APPENDIX F8 STONE

By Janey Brant

Client: Network Archaeology on behalf of Black and Veatch Ltd for South East Water

# Introduction

An archaeological watching brief was carried out by Network Archaeology along the route of the Selsfield Reservoir to Turners Hill pipeline, West Sussex in 2009. A small amount of stone (from one context) was recovered. The stone assemblage is shown in Table 8.1.

Table 8-1 Catalogue of shell

Context No.	GPS Number	No. of fragments	Description	Approx Weight
2000	6119023	1	A non-local, worked, fragment of probable quartz schist. A modern cut off piece from a thin slab. Evidence on the finished surface that it had been coated by a black paint like substance.	5g
2000	6119031	1	A non-local, worked, fragment of probable quartz schist. Maybe a cut out piece which was discarded or could be the end of a long thin object.	2g

# F8.1 Summary

The small size of the two fragments mean that it is difficult to establish with a great deal of certainty what the pieces of worked stone were used for. Given that the fragments were retrieved from an unstratified context the assemblage is of limited archaeological potential.

# F8.2 Recommendations

No further analysis of this deposit is recommended. However it is recommended that the fragments be retained..

# APPENDIX F9 WORKED AND BURNT FLINT

By Hugo Lamdin-Whymark

Client: Network Archaeology Ltd on behalf of Dalcour Maclaren for South East Water

#### INTRODUCTION

Eighty-four worked flints and ninety-three pieces (875 g) of burnt unworked flint was recovered from a watching brief on the route of a water pipeline between Selsfield Reservoir and Turners Hill (Table 1). The assemblage was predominately recovered from topsoil and subsoil, but a few artefacts were found in other contexts as residual finds. The assemblage includes a Mesolithic micro-burin (Plot 14, 1401), blade cores and a small quantity of debitage that dates from the Mesolithic or early Neolithic, regular flakes and a serrated flake that date from the Mesolithic to early Bronze Age and thick hard hammer flakes and simple flake tools that date from the middle to late Bronze Age.

# F9.1 Methodology

The flints were catalogued according to broad artefact/debitage type and retouched pieces were classified following standard morphological descriptions (Bamford 1985; Healy 1988; Bradley 1999; Butler 2005). Additional information was recorded on condition of the artefacts including, burning and breakage. Unworked burnt flint was quantified by weight and number. The assemblage was catalogued directly onto a Microsoft Access database and data manipulated in Microsoft Excel.

# F9.2 Raw material and condition

The raw materials exploited include a grey cherty flint, a dark black flint and a light to mid brown flint with small cherty inclusions. The cortex, where present, was eroded and buff coloured indicating the flint was probably collected from a secondary source. In addition, a few flints exhibited a worn pitted surface typical of pebbles from river gravels.

The flints exhibited extensive edge-damage, including irregular areas that resemble retouch. This condition is characteristic of artefacts recovered from agriculturally disturbed layers. The majority of the assemblage was free surface cortication, but several artefacts exhibited a light speckled bluish-white surface or a moderate white cortication. One orange iron-stained flint was noted.

# F9.3 Provenance

The lithic assemblage was predominately recovered from the topsoil and subsoil; no stratified assemblages were noted. Isolated artefacts were recovered from many of the plots, but approximately half the assemblage (41 artefacts) was recovered from Plot 14. This plot was subject to more prehistoric activity than the other plots, but the level of activity does not appear particularly intense or period specific as Mesolithic, Neolithic and Bronze Age flints were present (see 10.4 below).

# F9.4 The assemblage

The flint assemblage includes debitage and tools that clearly derive from different industries. A micro-burin from Plot 14 provides evidence for Mesolithic activity, but it is not possible to definitively assign any other artefacts to this period. Several thin and narrow flakes and blades that exhibit dorsal blade scars and platform-edge abrasion, along with two single-platform blade cores, are the product of a blade-orientated industry that can be broadly dated to the Mesolithic or early Neolithic. In addition, a small quantity of regular flake debitage and a serrated flake (Plot 14, 1400) can be assigned a broad Mesolithic to early Bronze Age date. The assemblage, however, also includes a number of thick hard hammer flakes, crude irregular scrapers (including one example with a concave edge), thick awls and a coarse denticulate that are most characteristic of flake-orientated industries dating from the middle to late Bronze Age.

The burnt unworked flint is heavily calcined and many pieces exhibit a bright evaporation gloss. Few prehistoric artefacts exhibit this surface condition, with the exception of those from cremation pyres, as it forms at extremely high temperatures (c 600-900°C: Shepherd 1972). However, flints that have been accidentally burnt in lime kilns frequently exhibit this gloss. The burnt unworked flint therefore probably represents the post-medieval improvement of agricultural soils rather than prehistoric activity.

#### F9.5 Potential and discussion

The flint assemblage from the water pipeline between Selsfield Reservoir and Turners Hill provides evidence for a Mesolithic to Bronze Age presence in the local landscape through a surface artefact scatter, with a slight focus of activity on Plot 14. The assemblage is, however, comparatively small and contains artefacts of mixed date that are not closely datable on typological or technological grounds. The assemblage therefore has no potential for further work.

#### F9.6 Recommendations

No further work is recommended, but this report should be deposited with the archive.

# F9.7 Retention, storage and curation

The stuck flints from this site should all be retained, but the burnt unworked flint should be discarded. The struck lithics are stored by context in plastic bags with white writing panels that have been marked using a black permanent marker. Lithics are a comparatively robust material and the current storage arrangements are appropriate for long term curation and conservation.

# F9.8 Bibliography

Bamford, H. (1985). *Briar Hill: excavation 1974-1978*. Northampton, Northampton Development Corporation.

Bradley, P. (1999). *Worked flint. Excavations at Barrow Hills*, Radley, Oxfordshire. Volume 1: *The Neolithic and Bronze Age monument complex*. A. Barclay and C. Halpin. Oxford, Oxford Archaeology: 211-227.

Butler, C. (2005). Prehistoric flintwork. Stroud, Tempus.

Healy, F. (1988). *The Anglo-Saxon cemetery at Spong Hill, North Elmham. Part VI: Occupation in the seventh to second millennia BC*. Gressenhall, Norfolk Archaeological Unit.

Shepherd, W. (1972). Flint: its origin, properties and uses. London, Faber.

Table 9-1 Catalogue of worked and burnt flint

		Context																								
CATEGORY TYPE	300	500	501	504	600	601	700	800	801	900	901	1200	1201	1204	1211	1400	1401	1403	1500	1900	1901	2000	2001	2008	2300	Grand Total
Flake			1	2	1	2	2	6	3	1			1			9	15	1	2	1	2		1	1	3	54
Blade																									1	1
Blade-like									1				1			2	2					1				7
Irregular waste																1	1									2
Micro-burin																1										1
Single platform blade core					1												1									2
Tested nodule/bashed lump		1														1									1	3
Single platform flake core							1				1					1	1									4
Multiplatform flake core																2										2
End scraper				1													1									2
End and side scraper																	1									1
Awl							1					1														2
Serrated flake																1										1
Denticulate																	1									1
Hammerstone																						1				1
Burnt unworked	5				9		8	9	1			12	2	1	1	24	13		2	2		3			1	93
Grand Total	5	1	1	3	11	2	12	15	5	1	1	13	4	1	1	42	36	1	4	3	2	5	1	1	6	177

# Appendix G Summary table of boundaries

Appendix G Summary table of boundaries

DBA Boundary	Plots	DBA Reference	Extant ditch	Buried ditch	Bank 1	Bank 2	Fence / Wall	Hedge 1	Historic boundary	Important Hedge
1	03/04	N/A	No	None	None	None	Post/wire	None	No	No
2	04/05	N/A	No	None	None	None	Post/wire	None	No	No
3	5/6-17	DBA:CL	No	None	None	None	Post/wire x 2	None	Yes	No
4	06/07	DBA:CK	0.75 wide x 0.20m deep	None	1.0m wide x 0.40m high	None	None	Yes	Yes	Yes
5	07/08	N/A	No	None	None	None	Post/wire	None	No	No
6	08/09	DBA:CM	No	None	None	None	Post/wire	None	Yes	No
7	09/10	N/A	No	None	None	None	Post/wire	None	No	No
8	10/11	N/A	No	None	None	None	Post/wire	None	No	No
9	11/12	DBA:CD	None	1m wide x 0.32m deep. Recut 1.40m wide x 0.58m deep	None	None		Yes	Yes	Yes
10	12- 13&14	DBA:CF	None	Vestigial depression 1.50m wide	None	None	Post/wire x 2	Yes	Yes	Yes
11	14/15	DBA:CG	None	1.10m wide x 0.40m deep	None	None	None	Yes	Yes	Yes
12	15/16	DBA:CH	None	None	None	None	Post/wire x 2	None	Yes	
13	19/20	DBA:CJ	None	None	None	None		Yes	Yes	Yes
14	20- 21&22	DBA:CN	None	1m wide x 0.50m deep	None	None	Post/wire	Yes	Yes	Yes
15	21/22	N/A	None	None	None	None	Brick wall	Yes	No	No
16	18/19	N/A	None	None	None	None	Gates x 2	None	No	No

# Appendix H Plates



Plate 1: Former trackway 504



Plate 2: Plot 12 showing extant run-off ditches



Plate 3: Extant trackway plot 13



Plate 4: Area of burning 1403 plot 14



Plate 5: Ditch **2010** 



Plate 6: Charcoal rich layer 2007 and scorched silt 2008

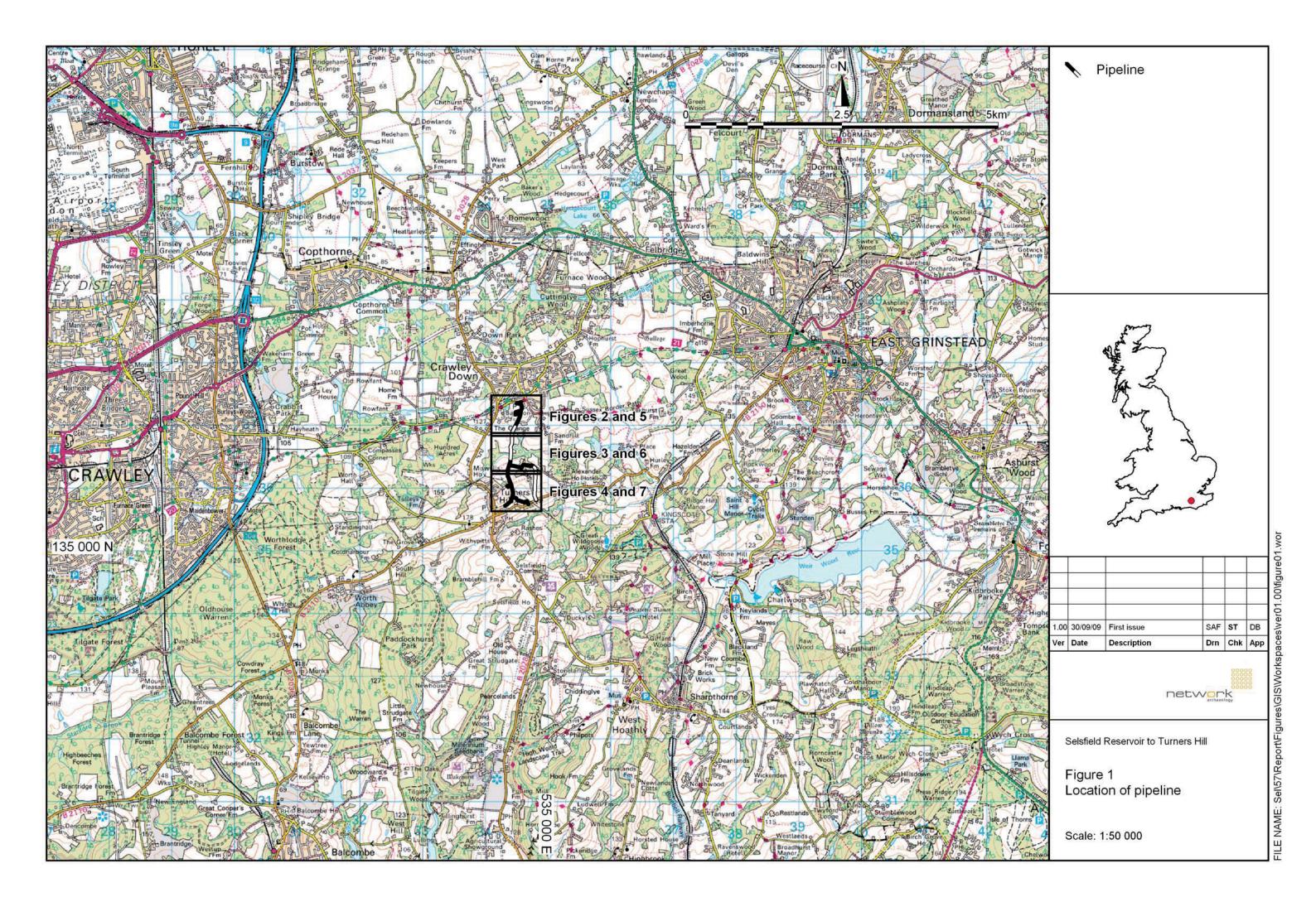


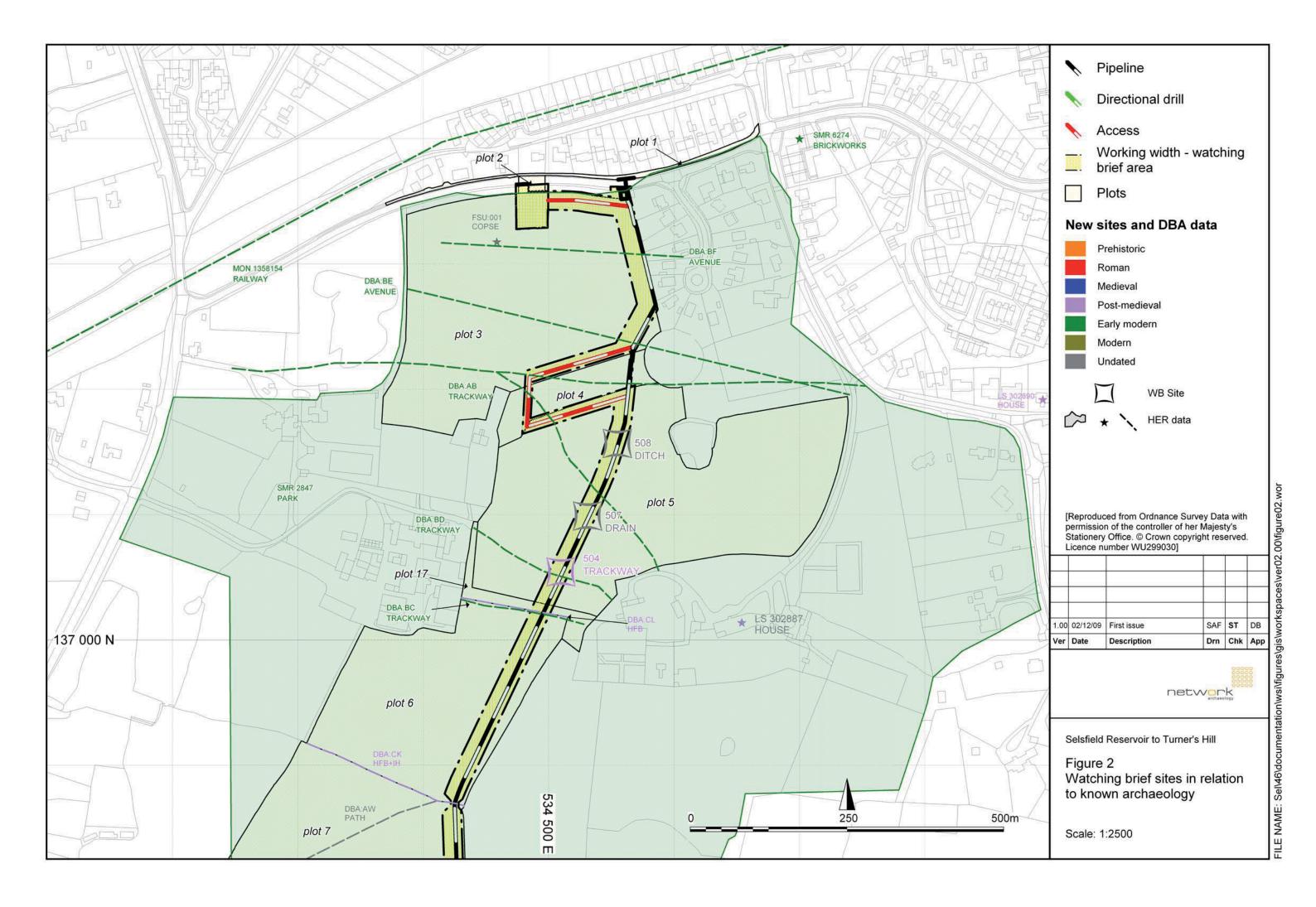
Plate 7: Ditch **2005** 

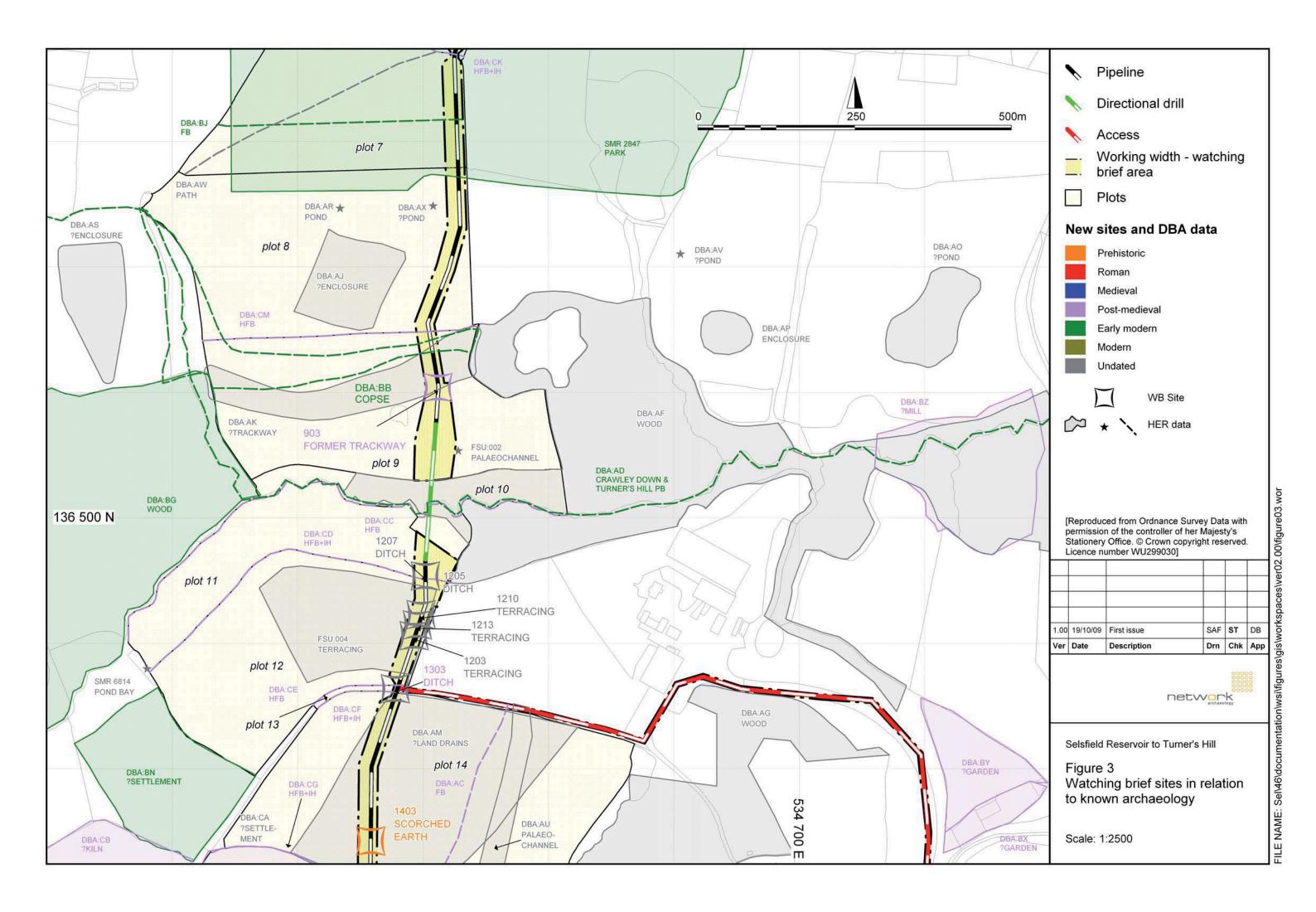


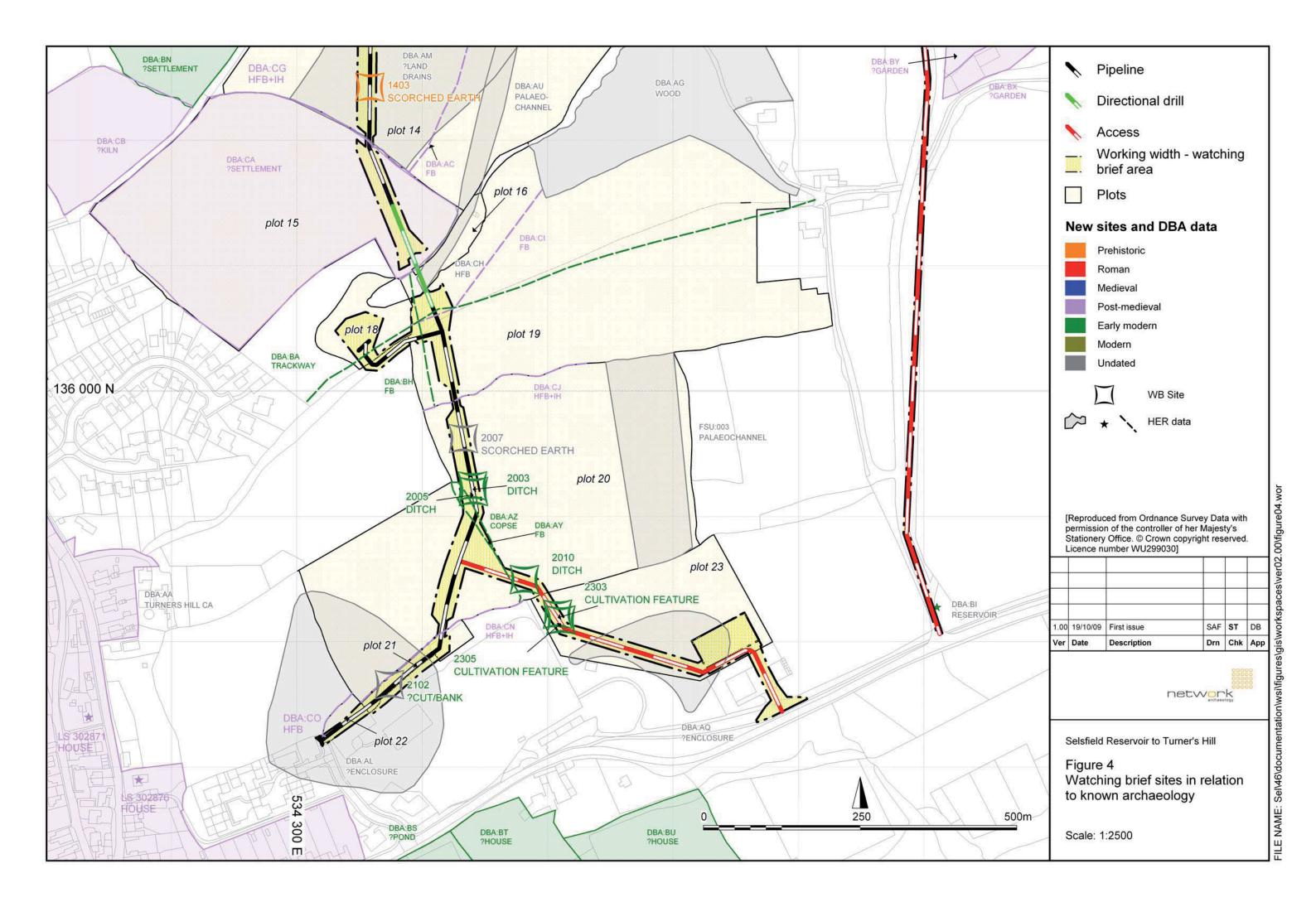
Plate 8: Cultivation feature 2305

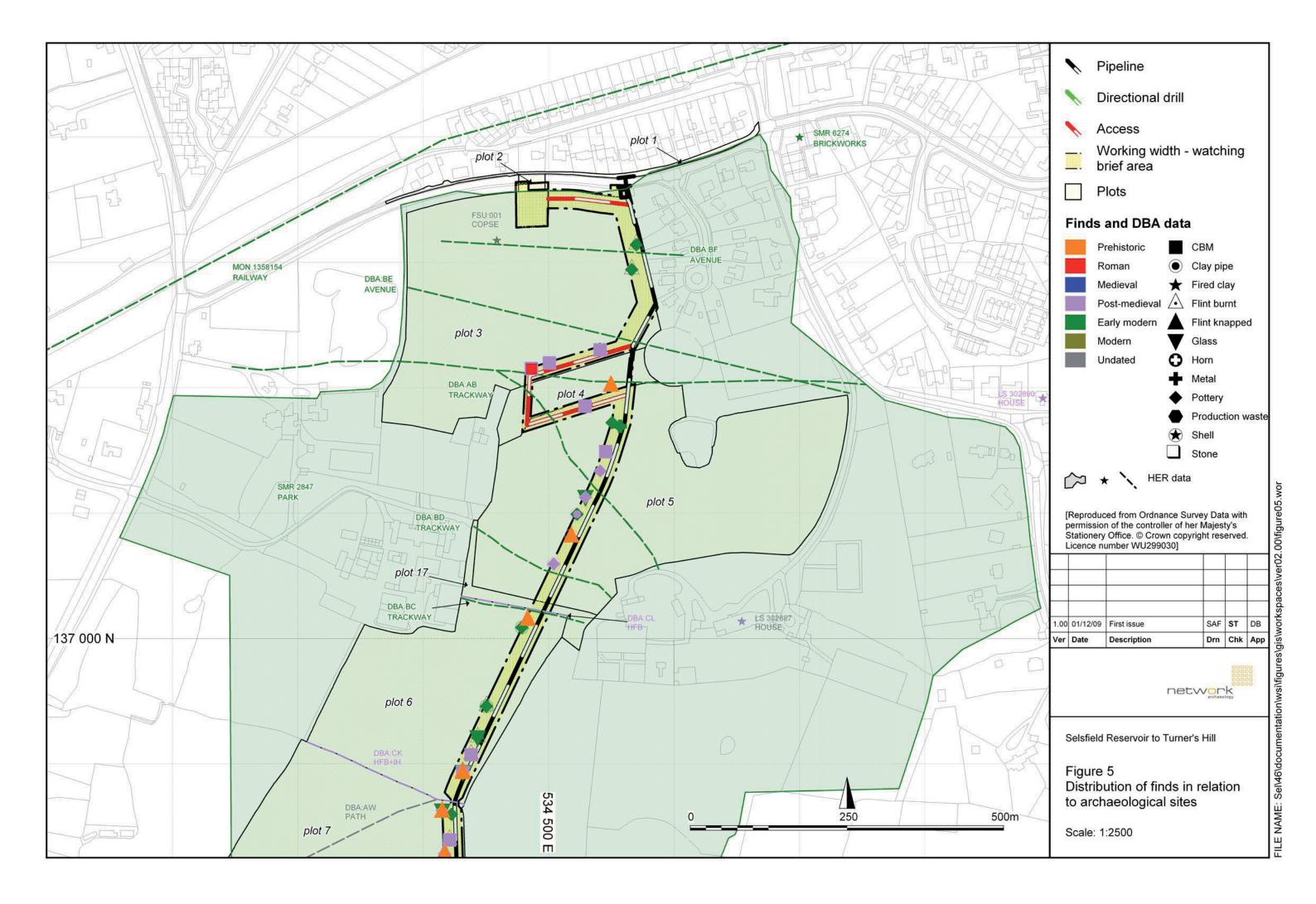
# Appendix I Figures

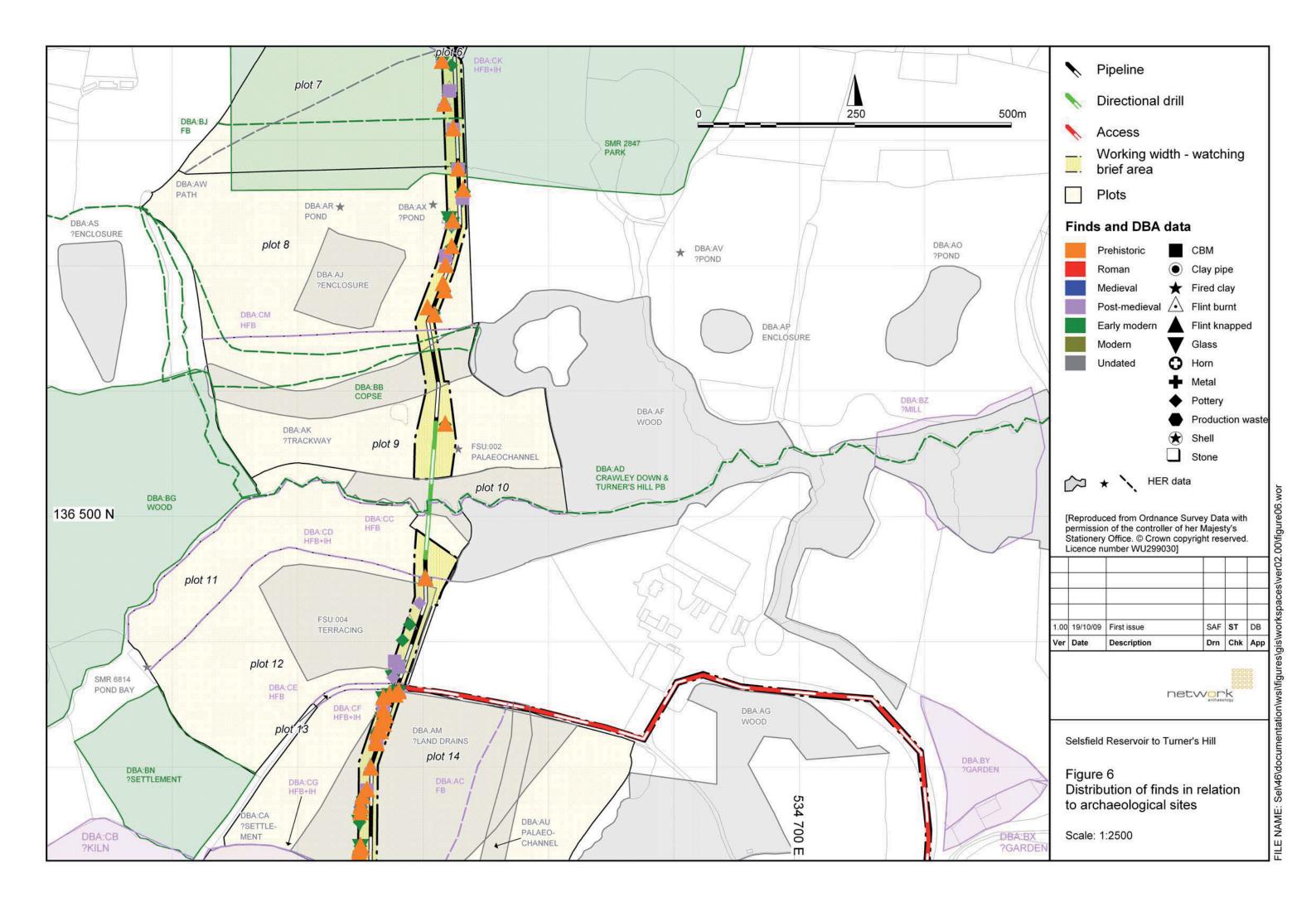


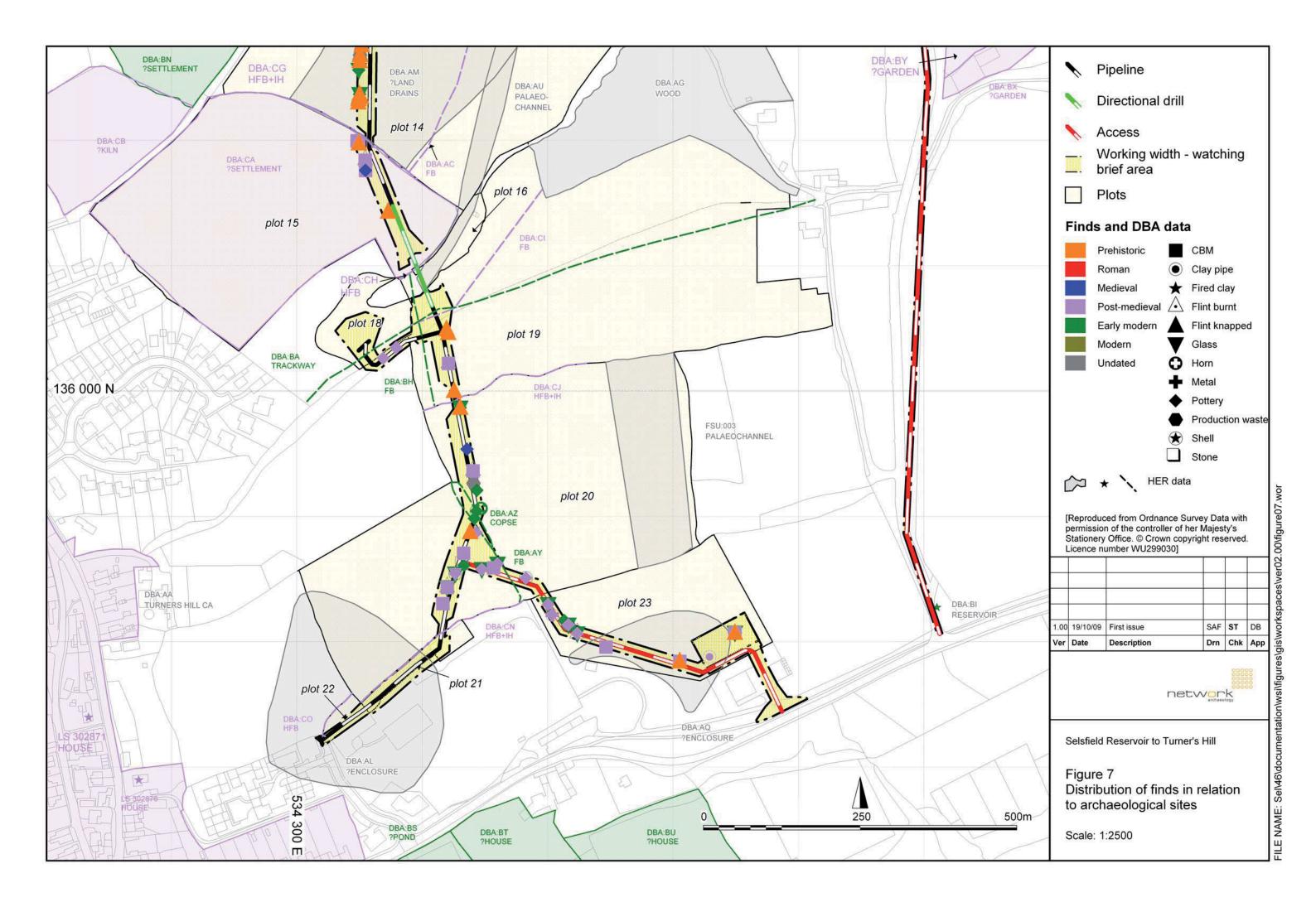


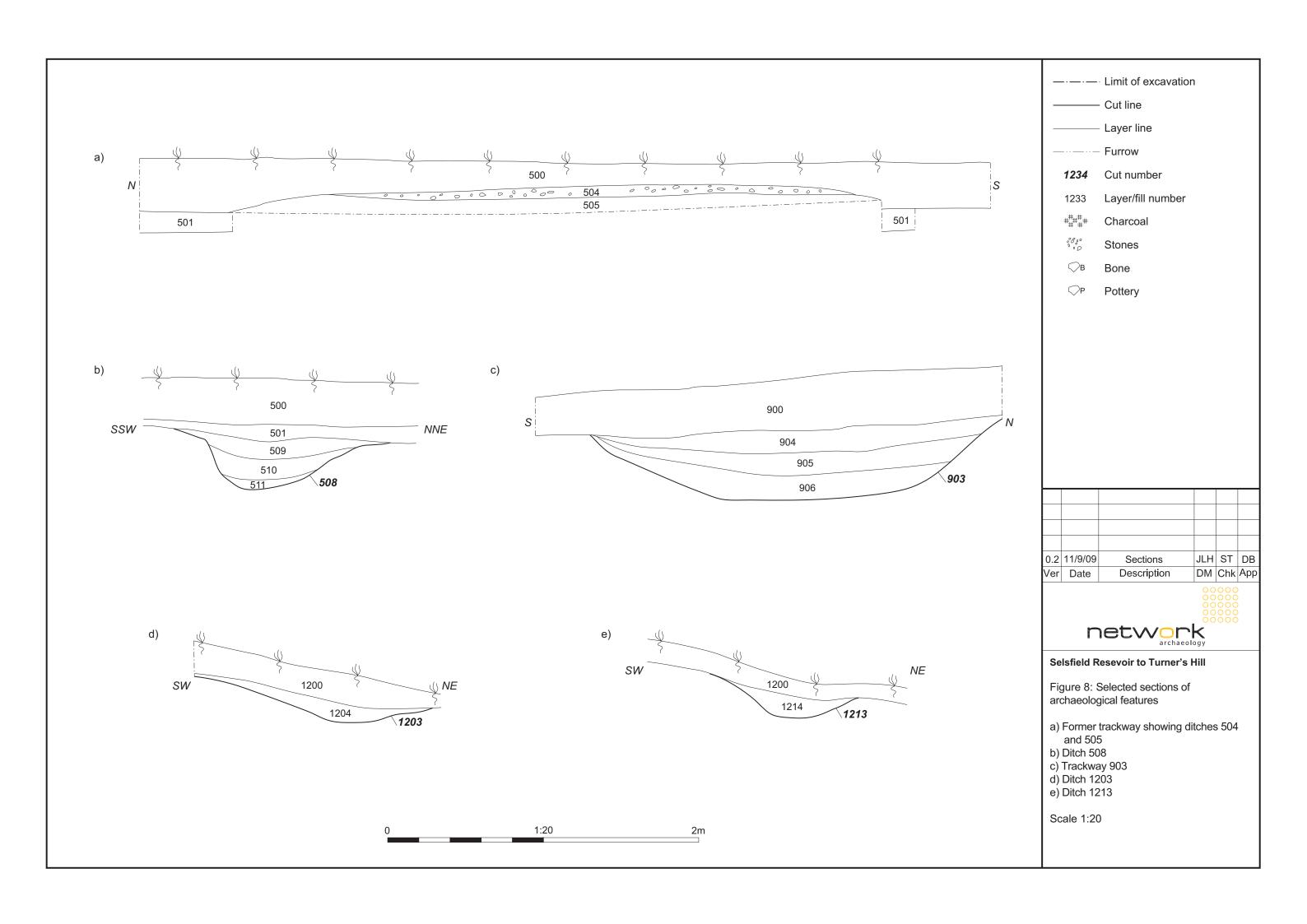


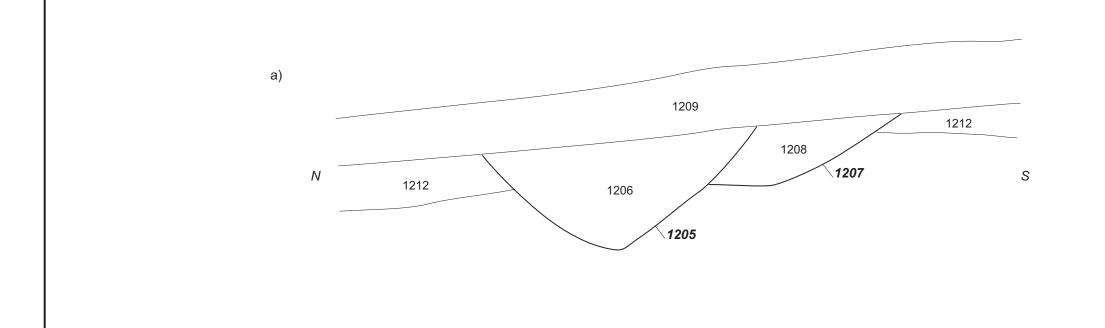


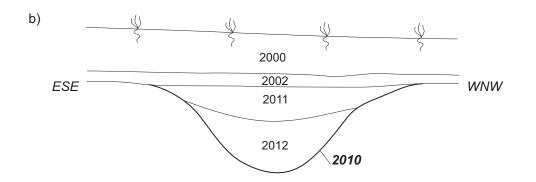


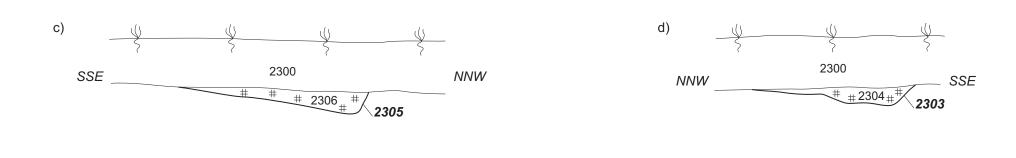












1:20

Cut line Layer line Furrow 1234 Cut number Layer/fill number Charcoal Stones  $\bigcirc$ B Bone Pottery 0.2 11/9/09 Sections JLH ST DB DM Chk App Ver Date Description network Selsfield Resevoir to Turner's Hill Figure 9: Selected sections of a) Intercutting ditches 1205 and 1207 b) Ditch 2010 c) Cultivation feature 2302 d) Cultivation feature 2305

—·—· Limit of excavation

archaeological features

Scale 1:20