



Dynamic Bus Facility Chatham, Medway, Kent

Updated Archaeological Watching Brief Report:
Monitoring of the Services Diversion Trench Footprint,
Underpinning of the White House Foundations
and General Ground Reduction Below 1m





**DYNAMIC BUS FACILITY
CHATHAM, MEDWAY, KENT**

**Updated Archaeological Watching Brief Report:
Monitoring of the Services Diversion Trench Footprint,
Underpinning of the White House Foundations and General
Ground Reduction Below 1m**

Prepared for:
Medway Renaissance
Eastgate House Annexe
High Street
Rochester
Kent
ME1 1EW

By:
Wessex Archaeology
Portway House
Old Sarum Park
SALISBURY
Wiltshire
SP4 6EB

Report reference: 71184.03 and 71185.03

June 2011

DISCLAIMER

THE MATERIAL CONTAINED IN THIS REPORT WAS DESIGNED AS AN INTEGRAL PART OF A REPORT TO AN INDIVIDUAL CLIENT AND WAS PREPARED SOLELY FOR THE BENEFIT OF THAT CLIENT. THE MATERIAL CONTAINED IN THIS REPORT DOES NOT NECESSARILY STAND ON ITS OWN AND IS NOT INTENDED TO NOR SHOULD IT BE RELIED UPON BY ANY THIRD PARTY. TO THE FULLEST EXTENT PERMITTED BY LAW WESSEX ARCHAEOLOGY WILL NOT BE LIABLE BY REASON OF BREACH OF CONTRACT NEGLIGENCE OR OTHERWISE FOR ANY LOSS OR DAMAGE (WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OCCASIONED TO ANY PERSON ACTING OR OMITTING TO ACT OR REFRAINING FROM ACTING IN RELIANCE UPON THE MATERIAL CONTAINED IN THIS REPORT ARISING FROM OR CONNECTED WITH ANY ERROR OR OMISSION IN THE MATERIAL CONTAINED IN THE REPORT. LOSS OR DAMAGE AS REFERRED TO ABOVE SHALL BE DEEMED TO INCLUDE, BUT IS NOT LIMITED TO, ANY LOSS OF PROFITS OR ANTICIPATED PROFITS DAMAGE TO REPUTATION OR GOODWILL LOSS OF BUSINESS OR ANTICIPATED BUSINESS DAMAGES COSTS EXPENSES INCURRED OR PAYABLE TO ANY THIRD PARTY (IN ALL CASES WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OR ANY OTHER DIRECT INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE

QUALITY ASSURANCE

| | | | | | |
|---------------------------|--------------------|----------------|--|----------------------|--|
| SITE CODE | 71184/71185 | ACCESSION CODE | | CLIENT CODE | |
| PLANNING APPLICATION REF. | | NGR | | 575782 168104 | |

| VERSION | STATUS* | PREPARED BY | APPROVED BY | APPROVER'S SIGNATURE | DATE | FILE |
|-----------------------|---------|-------------|-------------|----------------------|------|---|
| 71184.03/ 71185.03 | E | JS | | | | X:\PROJECTS\71185\WB REPORT\71184-5 REP 01.DOC |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

* I= INTERNAL DRAFT E= EXTERNAL DRAFT F= FINAL

DYNAMIC BUS FACILITY CHATHAM, MEDWAY, KENT

Updated Archaeological Watching Brief Report: Monitoring of the Services Diversion Trench Footprint, Underpinning of the White House Foundations and General Ground Reduction Below 1m

Contents

| | | |
|-----------|---|-----------|
| 1 | INTRODUCTION | 1 |
| 1.1 | Project Background | 1 |
| 1.2 | Site Location, Topography and Geology | 2 |
| 2 | ARCHAEOLOGICAL AND HISTORICAL BACKGROUND | 2 |
| 3 | AIMS AND OBJECTIVES | 7 |
| 4 | METHODOLOGY | 8 |
| 4.1 | Introduction..... | 8 |
| 4.2 | Fieldwork | 8 |
| 4.3 | Recording | 9 |
| 4.4 | Health and Safety..... | 9 |
| 5 | RESULTS | 9 |
| 5.1 | Introduction..... | 9 |
| 5.2 | Stratigraphic Sequence | 9 |
| 5.3 | Archaeological Features..... | 10 |
| 6 | FINDS | 11 |
| 7 | ENVIRONMENTAL | 11 |
| 8 | DISCUSSION | 11 |
| 9 | ARCHIVE..... | 11 |
| 9.1 | Preparation and Deposition | 11 |
| 9.2 | Archive | 12 |
| 9.3 | Copyright | 12 |
| 9.4 | Security Copy | 12 |
| 10 | REFERENCES | 12 |
| | APPENDIX 1: CONTEXT SUMMARY | 14 |

LIST OF FIGURES

| | |
|--------------------|--|
| Figure 1 | Site location plan with service trench and proposed bus facility |
| Figure 2 | Detail of the watching brief area |
| Figure 3 | Plates 1-4 |
| Figure 4 | Plates 5-8 |
| Figure 5 | Plates 9-13 |
| Front Cover | General shot of the water tanks area |
| Back Cover | Site shot showing made ground layers |

DYNAMIC BUS FACILITY CHATHAM, MEDWAY, KENT

Updated Archaeological Watching Brief Report: Monitoring of the Services Diversion Trench Footprint, Underpinning of the White House Foundations and General Ground Reduction Below 1m

Summary

Wessex Archaeology was commissioned by Medway Renaissance to undertake an archaeological watching brief during groundwork for the construction of a service trench and other associated works at the Dynamic Bus Facility development, Chatham, Medway, Kent, centred on National Grid Reference 575782 168104 (hereafter, 'the Site').

The watching brief in the service trench area comprised archaeological monitoring of topsoil strip to the south-east of the White House, the excavation of new soakaways to the south of the White House, the excavation of a trench for services in the north part of the Site and the excavation of shafts for the pumping station to the north of the service trench. The works undertaken within the southern part of the service trench were not monitored, because, as a result of a change in the design, the excavation did not exceed 1m below the current ground surface. Previous work undertaken by Wessex Archaeology (WA 2009 and 2010a) proved that in this area the modern made ground deposits exceed 1.25m in depth.

Thick deposits of made ground were recorded across the Site and reached a depth of up to 5.25m below ground level, where waterlogged alluvial deposits were exposed. The made ground deposits are thought to have been associated with the historic land reclamation and subsequent land levelling, which was documented by the historic evidence. It is likely that the alluvial layers relate to marshland recorded prior to the 19th century development of the area.

The 19th century White House was built in an area of reclaimed land and subsequent landscaping and no features or deposits predating the construction of the building were recorded. The brick foundations of the White House were constructed in the English bond.

The water tanks and the culvert recorded immediately to the south-east of the White House are thought to have been a part of the water management system for the White House. Although the exact date of their construction is unknown, it appears they were used for a relatively short period during the late 19th and early 20th century and came into disuse by the mid 20th century.

No features pre-dating the 19th century land reclamation and building construction were recovered and no datable material was retrieved from the alluvial deposits underlying the made ground layers.

The watching brief was conducted during July and August 2010 and in January and February 2011.

**DYNAMIC BUS FACILITY
CHATHAM, MEDWAY, KENT**

**Updated Archaeological Watching Brief Report:
Monitoring of the Services Diversion Trench Footprint,
Underpinning of the White House Foundations and General
Ground Reduction Below 1m**

Acknowledgements

The project was commissioned by Medway Renaissance and Wessex Archaeology would like to thank David Lerew in this regard. The assistance of Ben Found, the Archaeological Advisor to Medway Council, who monitored the fieldwork, is also appreciated. The advice of Peter Kendall of English Heritage is also gratefully acknowledged.

The fieldwork was undertaken by Katharine Barber, Daniel Jackson and Sarah Mounce. This report was compiled by Daniel Jackson and Julia Sulikowska. The illustrations were prepared by Ken Lymer. The project was managed on behalf of Wessex Archaeology by Richard Greatorex, who also edited this report.

DYNAMIC BUS FACILITY CHATHAM, MEDWAY, KENT

Updated Archaeological Watching Brief Report: Monitoring of the Services Diversion Trench Footprint, Underpinning of the White House Foundations and General Ground Reduction Below 1m

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Wessex Archaeology (WA) was commissioned by Medway Renaissance (the client) to undertake an archaeological watching brief during groundwork for the construction of a service trench and other associated enabling and construction works, which included the underpinning of the White House foundations at the Dynamic Bus Facility Development, Chatham, Medway, Kent (hereafter, 'the Site'), centred on National Grid Reference (NGR) 575782 168104 (Figure 1).
- 1.1.2 The design scheme (issued November 2009) comprises the introduction of a new road system, including a new branch of Globe Lane and a slight realignment of the existing (historic) Globe Lane, the construction of thirteen dynamic bus stands, serviced by free standing platform buildings with associated seating and information boards and a detached information centre to the immediate south of the bus stands. The services diversion trench, which is also included in the design, curves around the westernmost bus stand on approximately north-east to south-west alignment. The White House, which will be, after refurbishment, retained, is located immediately to the north of the services diversion trench (**Figure 1**).
- 1.1.3 The watching brief was part of a programme of archaeological works, which also included monitoring of geotechnical investigations (WA 2010a) and a standing building survey (WA 2010b) undertaken in advance of the development, and a borehole survey (report pending) undertaken during the early weeks of the construction phase.
- 1.1.4 A *Written Scheme of Investigation* was prepared by Wessex Archaeology (WA 2010c) detailing the watching brief strategy, techniques and methods to be employed during the fieldwork. It was submitted for approval to Kent County Council prior to the commencement of the fieldwork.
- 1.1.5 This is an updated version of the report. The previous version, comprising only the results of the watching brief on the services diversion trench, was produced in January 2011 (WA 2011).
- 1.1.6 The watching brief was conducted in July and August 2010 and in January and February 2011.

1.2 Site Location, Topography and Geology

- 1.2.1 The Site is located within the centre of Chatham, Medway, Kent, which lies on the south-east bank of the River Medway, to the south-east of the town of Rochester and to the west of the town of Gillingham (**Figure 1**).
- 1.2.2 The Site comprises an irregular parcel of land occupying an area of approximately 1.16 hectares and encompassing the alignment of Globe Lane and open and landscaped land to the west. The north-eastern extent of the Site is bounded by The Brook and Dock Road. The Site extends west of Globe Lane, encompassing an area occupied by part of the Library and car park along with two detached 19th century buildings set amongst trees and open space.
- 1.2.3 The Site is situated within a generally flat parcel of land and lies at approximately 5m above Ordnance Datum (aOD). The Site sits within a narrow valley, where a stream (The Brook) once drained into the adjacent River Medway. High ground comprising Upper Chalk bedrock is situated to the south-west and immediately to the north-east. The underlying geology of the Site comprises (Holocene) alluvium (British Geological Survey, Sheet 272).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Prehistoric settlement (100,000BC - AD43)

- 2.1.1 Little evidence of prehistoric activity is recorded within the immediate environs of the Site. However, the rich and varied natural resources of the valley of the River Medway and its marshy, floodplain environment, would have been very attractive to prehistoric cultures.
- 2.1.2 A series of geotechnical bore holes (WA 2010a) identified potentially important environmental sequences surviving below the made ground, comprising of alluvium and peat deposits. It is possible that some of the peat deposits may date to the Late Mesolithic or Early Neolithic periods.
- 2.1.3 During Neolithic period, it is likely that the River Medway would have seen much activity as a means of communication and transport as well as for food purposes.
- 2.1.4 The earliest evidence for settlement activity in the vicinity of the Site comes from near to Highsted Wood, where an excavation trench found pottery sherds dating to the Bronze Age and Iron Age.
- 2.1.5 It is likely that by the later prehistoric period the Thames and Medway would have seen regular boat traffic to and from the Continent. It is therefore possible that wrecks of the Bronze Age and later periods may be found in the sediments of the riverbed or sealed within the alluvium of the riverside margins (Wessex Archaeology 2007).

2.2 Romano-British settlement (AD 43-410)

- 2.2.1 The nearby town of Rochester originated as the important Roman town of Durobrivae (the fort at the bridges, VCH 1932) and the main Roman road between Rochester and Canterbury runs to the south-west of the Site. Evidence for Roman activity comes from several sites in the vicinity, with

the main evidence for settlement coming from the foundations of a building with painted wall plaster, pottery and coins dating to the first century AD. Elsewhere, Roman pottery has been found during excavations near to Highsted Wood and evidence for Romano-British urn burials were discovered at the Brook Mission Hall. A Romano-British lead coffin was discovered on the opposite side of the River Medway in 1838.

- 2.2.2 The topographical position of the Site adjacent to the River Medway and the proximity of the Site to the important Roman town of Rochester could indicate that there is some potential for encountering maritime or other remains of the period. Although situated away from the Roman town, it is probable that the area was used for fishing and even possibly for salt production.

2.3 Saxon and Medieval settlement (AD410-1500)

- 2.3.1 The origins of Chatham appear to have begun on the high ground above the River Medway around the parish church of St Mary's. An early Anglo-Saxon burial ground was found nearby in the late 18th - early 19th centuries when a group of small tumuli situated on the western slope of the steep hill facing Rochester were disturbed during excavation of the Chatham lines defensive works. Excavation of these barrows unearthed inhumations accompanied by grave goods including swords, shield umbos, spearheads, brooches, beads glassware, pottery and Roman coins.

- 2.3.2 At a similar time to the development on the high ground, linear development was also taking place on the line of the Roman road leading out of Rochester as it followed the higher ground on the south-west side of the valley of the Brook (Kendall 2007). It is unlikely that there would have been any development of the ground currently occupied by the Site. The ground would at this time have comprised marshland which, with The Brook running through, would always have been wet and marginal, especially at the north-western extent of the valley where The Brook joined the River Medway.

- 2.3.3 By the medieval period Chatham consisted of two centres with a development around the church and a ribbon development situated along the road from Rochester. Access between the two centres was made possible via a causeway, which led over the low-lying boggy ground at the mouth of The Brook. This causeway appears to have served as a defence against flooding, becoming known as the Land Wall (ibid). The nature of such a large structure on a river margin that was often prone to flooding suggests that this was likely to be a man-made structure, which would have needed to have been maintained on a fairly regular basis.

- 2.3.4 The line of the Land Wall would appear to be represented by the present day Globe Lane with a mill likely present by the late medieval period, as shown in the earliest maps of Chatham. Despite the presence of the Land Wall and a mill, no archaeological evidence exists for medieval settlement activity in the vicinity, indicating that the land in the vicinity of the Site was still largely unusable marshland.

2.4 Post-medieval and modern settlement (AD 1500-present)

- 2.4.1 On the river side (north-west) of the Land Wall post-medieval maps indicate the presence of a Mill Pond with a painting of 1633 showing that the base of

the river valley was still undeveloped during the early 17th century. As well as the difficulty of development within a marshy area the lack of settlement may have been for health reasons. Several hot decades, which occurred during the 17th century, are recorded as affecting low-lying areas, which were accompanied by widespread outbreaks of malaria, known then as “marsh fever” or “ague” (Dobson 1997).

- 2.4.2 Evidence of settlement activity close to the Site is recorded away from the river valley, with a collection of 17th century rubbish and cess pits and an early 17th century house.
- 2.4.3 Maps of 1708 and 1719 give more detail of the Mill Pond and Land Wall and illustrate the growth of Chatham town with the expansion of the dockyard (Kendall 2007), with buildings clustered either side of the Mill Pond. The 1719 map reveals that the Mill Pond appears to have been capable of being filled both by The Brook and the tidal River Medway. A study of the two maps indicates that development extended to the north of the mill including the Gun Wharf and houses, although the base of the valley of The Brook (including The Paddock immediately east of the Site) still remained undeveloped and described as marsh. Development either side of the valley continued apace during this time with houses and industries surviving from the period.
- 2.4.4 In response to a perceived threat of a landward attack on Chatham, in 1756 a decision was made to fortify the dockyard with the creation of the Chatham Lines. This required the compulsory acquisition of most of the land and properties around the parish church of St Mary the Virgin and the demolition of many properties including the tide mill. This is likely to account for the absence of many late medieval and early post-medieval buildings which originally were present adjacent to the church. Such works had no direct impact on the Land Wall (now Globe Lane).
- 2.4.5 By the mid-late 18th century development had spread along either side of the higher slopes above The Brook and was only held in check by the boundary of the Government land ownership. A map of 1763 reveals that the Mill Pond had disappeared by this time with the site becoming mud flats.
- 2.4.6 By the end of the 18th century the area to the south-east of the Land Wall occupied by marshland had now been drained, with The Brook channelled into a series of narrow open canals which served as open sewers. As Chatham’s population swelled to 10,505 by 1801 the area became covered with low class housing and narrow alleyways. The growing population relied on the culverts and cess pits to deal with the ever increasing waste. The Land Wall and the recently constructed river wall had the effect of making the central area of Chatham like a cupped hand with little natural flow of water and frequent flooding (Brook pumping station website 2009).
- 2.4.7 In 1803 a decision was made to completely remodel the Chatham Lines. This re-fortification created Fort Amherst as it exists today and saw the Barrier Ditch built in its present form, with two roadways across it in place of the one that had existed to this date (Kendall 2007). Construction began on a new road to serve the garrison area, further away from the river on higher ground. Military Road, as it was named, defined the south-eastern extent of The Paddock east of the Site. A plan of 1804 shows the proposed works

and earlier plans dating to 1796 indicate that originally the Military Road was on a completely different alignment to the present arrangement.

- 2.4.8 By 1806 the proposed arrangement of 1803 had been implemented with the road to the south-east of The Paddock described as New Road. This work coincided with the work on the Chatham Lines, with supplies of brick and timber being brought in by ship adjacent to the Land Wall. A map of 1806 shows that the current shape of The Paddock had been established, with the area being used as a 'Timber Pound' before being transported to carpenters shops and sawpits located in the area presently occupied by the Town Hall. The work on the Chatham Lines included defensive works present or once present in the vicinity of the Site.
- 2.4.9 Following the work on the Chatham Lines it was considered that the existing Gun Wharf had outgrown its cramped site within the fortification. It was therefore decided to reclaim land from the river in the location of the former Mill Pond. A map of 1816 shows that the New Gun Wharf had been completed by this time, with a series of buildings possibly representing warehouses or storerooms constructed on the north-west side of Globe Lane adjacent to open land.
- 2.4.10 Chatham started to expand into the valley bottom during the early 19th century in addition to the valley sides. A number of houses, a brewery and two churches close to the Site date from the early 19th century. An Admiralty map of 1840 shows The Paddock with tree cover and assuming the same broad character with mature trees as it now retains. It is likely that The Paddock was by this date surplus to Board of Ordnance requirements and that the site was left for civilian use, most probably as grazing. A Board of Ordnance return for 1851 confirms that by that date The Paddock was leased out. To the south-east of The Paddock the developing town around The Brook was not the most pleasant place to live, with the Court Leet Papers from the beginning of the century showing an increasing concern with both the health of the town and the increasing pollution of the river that was killing off both the oyster and the fishing industry with the loss of estuarial fish (Brook pumping station website 2009). The young Charles Dickens lived at 18 The Brook between 1821 and 1823; he did not enjoy the experience.
- 2.4.11 By the late 19th century new fortifications (The Chatham Ring) made the Chatham Lines redundant, allowing for urban development where formerly encroachment by housing had been forbidden. The 1866 Ordnance Survey map reveals that Chatham was developing to the south-east of The Paddock, which at this time was known as The Shrubbery. Terraced housing accessed off 'Dark Lane' and 'Medway Street' is shown within the southern Site boundary at this date marking the limit of open ground formally occupied by New Gun Wharf and mudflats west of Globe Lane.
- 2.4.12 By the late 19th century the need to control building development adjacent to the now defunct Chatham Lines had been relaxed, with the appearance of significant and established new buildings including a school to the north-east of The Paddock. Other buildings established close to the Site during this period included the theatre, Chatham Sun Pier (which was constructed on the site of a pier dating back to the late 18th century) and a public house at 248 High Street.

- 2.4.13 The site of the future Town Hall was not occupied until 1899, appearing for the first time on the 1932 Ordnance Survey map. The Paddock is first named as such (as opposed to The Shrubbery) on the 1932 map. West of The Paddock and Globe Lane, the Site was occupied by a tramway, associated depot and the War Department Gun Wharf.
- 2.4.14 The White House, which remains extant, was first listed and mapped in the 1821 return of Ordnance Land and Buildings at Chatham as a brick dwelling occupied by the Clerk of the Cheque. During the 1940s, the White House was in use as the Ordnance Officers Quarters.
- 2.4.15 By 1901, the population of Chatham had expanded to 36,944. Early 20th century development within proximity of the Site continued with two banks, a Sailors Home and a statue of Lord Kitchener. With the increase in population came the inevitable increase in pollution, leading in 1911 to the establishment of the Drainage Committee under the chairmanship of Alderman E. A. Billingshurst. Together with the engineer Mr. W H Radford, these two men saw the creation of the Brook Low Level Pumping Station project through to its completion in 1929 (Brook pumping station website 2009).
- 2.4.16 Development occurred within The Paddock for the first time some time after 1932. The 1955 Ordnance Survey map reveals a complex of buildings at the south-western end of The Paddock including a restaurant, lavatories and the Imperial Forces Public House, with a car park situated to the north-east. The development was ringed by trees on the north-western side of The Paddock. The area west of Globe Lane is shown as blank at this date. It may be that the area was not mapped because of its military function.
- 2.4.17 Evidence of WWII military defences within the proximity of the Site, includes three pillboxes and a Spigot mortar emplacement.
- 2.4.18 The development within The Paddock was demolished and the present situation established during the early 1980s as part of the redevelopment of the south-east side of Military Road, which included the construction of Mountbatten House and the Pentagon Shopping Centre.

2.5 Development of the extant built environment

- 2.5.1 The urban morphology that remains recognisable today was developed in the first decade of the 19th century, as evidenced by a map of 1804 which shows the proposed layout of Military Road, parallel and to the north of Globe Lane, which ran along the Land Wall. It was this development, which had been implemented by 1806, which created the linear parcel of land now known as The Paddock, set between the parallel roads which also survive today. The function of the new road is clearly shown on a plan of 1806 which identifies it as the 'New road to the Lines and Fort Pitt', which were under construction at the time.
- 2.5.2 By 1816, the eastern frontage of this new road and the western frontage of Globe Lane had been developed, leaving The Paddock as a linear island of undeveloped open space down the centre, with clear visual connections to the open land adjacent to the Lines to the north, and outside the Old Gun Wharf to the north-west. Built development had also taken place on the land block to the south of The Paddock.

- 2.5.3 An Admiralty map of 1840 is the first to show The Paddock with tree cover, similar in character to that of areas to the north-east, later occupied by the former Town Hall and National Schools. The National Schools had been built by 1866, but retained much of the tree cover of their site, and by this date the tree covered island had been given the name of The Shrubbery.
- 2.5.4 By 1898, further schools buildings had been constructed on the north-east side of Church Hill, immediately to the north of The Shrubbery, and which extended up to the line of the fortifications.
- 2.5.5 The former Town Hall was constructed in 1899, on the last remaining undeveloped site to the north-east of The Shrubbery. This area of open space obviously formed a very significant element of the setting of this important civic building, though a postcard at the turn of the 19th/20th centuries shows that it was still let out by the War Department and used as pasture at this date.
- 2.5.6 In the second decade of the 20th century, the local authority developed a program to form areas of public open space in the town, through which they purchased the Shrubbery and laid it out as a small park, with new boundary treatments, serpentine paths and formal tree planting. It is probable that the name of this area of public open space was changed to The Paddock at this time, as it is shown by the latter name on the OS map of 1932, which also shows that the park was furnished with public lavatories at its southern end.
- 2.5.7 A view along Military Street dating to the early 20th century shows the visual prominence of the town hall at this date; partially closing the view, but allowing views to the military fortifications beyond. The mature trees of The Paddock provide a natural linear mirror to the terrace of commercial and residential properties on the east side of the road at this date.
- 2.5.8 The 1932 map also shows the built development of the New Gun Wharf at this date (which had been conspicuously omitted from earlier OS editions), with linear development along the Globe Lane frontage, and large War Department sheds behind, served by a tramway. The buildings on Gun Wharf included the Ordnance Officers Quarters, which is shown on a plan of 1816, and the smaller ordnance building to its south.
- 2.5.9 The 1955 map shows a large restaurant occupying much of the southern half of The Paddock, with other structures along its eastern side, and appears to indicate that the tree cover has been reduced to a line of trees along the western perimeter of the 'island'. The northern half of The Paddock was used for the temporary location of retail outlets during the major construction of the Pentagon Centre in the late 1970s, and these, together with the restaurant, were removed following the opening of the new shopping centre. The eastern side of The Paddock was remodelled at this time; reducing the width of Military Road, and radically changing the pattern of vehicle movement. The surviving character of the Paddock dates from this time. The late 20th century redevelopment of the area also included the construction of the multi-storey Mountbatten House to the south-east of The Paddock.

3 AIMS AND OBJECTIVES

- 3.1.1 The general aims of the watching brief were:

- To provide further information concerning the presence/absence, date, nature and extent of any buried archaeological remains;
- To investigate and record all archaeological features revealed during excavation and groundwork;
- To establish a broad phased plan of the archaeology revealed within the Service Trench;
- To investigate the function of structural remains and the activities taking place within and close to the Site;
- And to inform and provide information for any future mitigation that maybe required.

3.1.2 The specific aims of the watching brief were:

- To record any remains which might be associated with the bastion outworks of Chatham Dockyard;
- To record any remains which might be associated with New Gun Wharf;
- And to provide further information regarding the extent and nature of the area known as the Mill Pond.

4 METHODOLOGY

4.1 Introduction

4.1.1 All fieldwork was conducted in accordance with the methodology set out in the *Written Scheme of Investigation* (WA 2010c) and carried out in compliance with the standards outlined in the Institute for Archaeologists' *Standards Guidance for Archaeological Watching Briefs* (2008).

4.2 Fieldwork

4.2.1 The watching brief in the service trench area comprised archaeological monitoring of topsoil strip to the south-east of the White House, the excavation of new soakaways to the south of the White House, the excavation of a trench for services in the north part of the Site and the excavation of shafts for the pumping station to the north of the service trench (**Figure 2**). The works undertaken within the southern part of the service trench (**Figure 1**) were not monitored, because, as a result of a change in the design, the excavation did not exceed 1m below the current ground surface. Previous work undertaken by Wessex Archaeology (WA 2009 and 2010a) proved that in this area the modern made ground deposits exceed 1.25m in depth.

4.2.2 The fieldwork in the White House areas comprised monitoring of groundwork associated with the underpinning of the foundations (**Figure 2**).

4.2.3 All excavations were carried out using a 360° tracked mechanical excavator equipped with a toothless bucket (for topsoil stripping and trench excavation) or clamshell bucket (for shaft excavation) under archaeological supervision. Machining continued to the first recognizable archaeological horizon, the

underlying geological deposits or the construction level, whichever was encountered first.

4.2.4 The service trench was excavated to a maximum depth of 4.1m and the shaft was excavated to a depth of 6m. Therefore, due to health and safety constraints, the trenches were not entered and the recording was undertaken from ground surface.

4.2.5 The works associated with the underpinning of the foundations comprised the excavation of c.0.8m wide trenches on both the internal and the external sides of the White House walls, to a depth of approximately 0.5m below the level of the foundations.

4.3 Recording

4.3.1 All recording was undertaken using Wessex Archaeology's *pro forma* recording system. Site codes 71184 (service trench area) and 71185 (White House foundations) were issued for the investigations.

4.3.2 A photographic record, which contains digital images, was maintained throughout the investigation, illustrating both the detail of the excavated areas and the Site as a whole.

4.4 Health and Safety

4.4.1 All work was carried out in accordance with the Health and Safety at Work Act 1974, the Management of Health and Safety regulations 1992 and Health and Safety in Field Archaeology 1997, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time.

4.4.2 Prior to the commencement of the fieldwork a site-specific Risk Assessment was produced. All site staff involved in the works signed and complied with this document.

5 RESULTS

5.1 Introduction

5.1.1 The following section provides the summary of the information derived from the watching brief. The monitored areas are presented in detail in **Figure 2**. Detailed descriptions of the contexts (by area) are included in **Appendix 1: Context Summaries**.

5.2 Stratigraphic Sequence

5.2.1 Topsoil, tarmac or paving slabs overlay the made ground deposits across the monitored area (**Figure 3, Plate 1**). The topsoil **101**, situated within the south-west and extreme north of the observed service trench excavations, comprised dark brown silt/clay/loam with sparse sub-rounded pebbles.

5.2.2 A sequence of made ground layers was recorded across the Site (**109 – 128, 131 - 133, 135 and 136**). The made ground deposits, which comprised multiple layers of redeposited soil with building debris, redeposited chalk and building rubble with crushed red brick, were observed to the south of the White House (**Figure 3, Plate 2**) and during excavation of the pumping station chamber (**Figure 3, Plate 3**). The same layer is thought to have been present in the external trenches excavated for underpinning of the White

House foundations (layer **1002**, **Figure 5**, **Plate 9**). To the south of the pumping station, a layer of possible buried topsoil **134** was recorded (**Figure 3**, **Plate 4**). These layers are thought to be associated with the 19th century land reclamation and subsequent levelling. A similar made ground deposit (**1001**) was recorded inside the White House, beneath the floor level and is thought to have been formed during the construction of the building (**Figure 5**, **Plate 10**).

- 5.2.3 Finds observed within the deposits comprised brick and tile fragments, which were dated to the 19th and 20th centuries.
- 5.2.4 During the excavations for the installation of the pumping station, two layers of alluvium were observed to underlie made ground deposit **126**.
- 5.2.5 An orange brown sand/gravel deposit **127** was observed at a depth of 4.5m – 5.25m below ground level. It overlay a smooth black organic silt/clay alluvium **128** (**Figure 4**, **Plate 5**), recorded to the depth of 6m, at which the excavation ceased.

5.3 Archaeological Features

- 5.3.1 Two brick built water tanks, **103** and **108**, with an associated culvert **106** were discovered towards the north end of the service trench, immediately to the south-east of the White House (**Figure 2**).
- 5.3.2 Both tanks were constructed with red and yellow bricks bonded in alternating header and stretcher courses. The internal surface of both structures was coated with a layer of plaster and black tar or paint sealant. Tank **103** (**Figure 4**, **Plate 6**) was circular in plan and had an external surface diameter of c. 2.4m and an internal diameter of c. 1.76m.
- 5.3.3 A circular access shaft in the centre of tank **108** (**Figure 4**, **Plate 7**) had a diameter of c. 0.48m and the observed external surface diameter of the structure was c. 0.8m. A square stone wall was constructed around the access shaft likely to hold a manhole or other covering.
- 5.3.4 The tanks were filled with mid brown sand/silt loam deliberate backfill **140**, which contained abundant modern glass and metal artefacts, sparse animal bone and abundant brick dust and mortar inclusions.
- 5.3.5 Brick culvert **106** (**Figure 4**, **Plate 8**) was observed to run between the White House and the water tank **103**, at approximately southwest-northeast alignment. The culvert contained a lead pipe and was c. 0.23m wide. Another section of the pipe was observed outside the south-eastern wall of the White House (**Figure 5**, **Plate 11**).
- 5.3.6 The location of the water tanks suggests that they were associated with the White House, which indicates their construction date to the mid-19th to the early 20th century. The dating recovered from the deliberate backfills suggests that the features came into disuse by the mid 20th century.
- 5.3.7 The White House was built in an area of reclaimed land and subsequent landscaping and no features or deposits predating the construction of the building were recorded. The foundations of the White House were made of red bricks in alternating header and stretcher courses (English bond), differing from the Flemish bond used for the walls. Towards the base of the

foundations, a void the size of a single brick course surrounded narrow brick wall. The void is thought to have been left by a wooden beam, which had rotted away. The wooden beam and the narrow foundation wall overlay two further courses of brick (**Figure 5, Plate 12**). The base of the foundations extends beyond the face of the wall by 0.25m externally and 0.10m internally (**Figure 5, Plate 13**).

6 FINDS

- 6.1.1 A selection of modern glass bottles and several other items of modern date were retrieved from the deposits **104** and **140** filling in the water tanks. These finds were not retained.
- 6.1.2 A large amount of ceramic building material was observed in the made ground deposits, but none appeared to predate the mid 19th century and were not retained.

7 ENVIRONMENTAL

- 7.1.1 No features or deposits suitable for environmental sampling were identified during the watching brief.

8 DISCUSSION

- 8.1.1 Thick deposits of made ground were recorded across the Site and reached a depth of up to 5.25m below ground level, where waterlogged alluvial deposits were exposed. The made ground deposits are thought to have been associated with the historic land reclamation and subsequent land levelling, which was documented by the historic evidence. It is likely that the alluvial layers relate to marshland recorded prior to the 19th century development of the area.
- 8.1.2 The 19th century White House was built in an area of reclaimed land and subsequent landscaping and no features or deposits predating the construction of the building were recorded. The brick foundations of the White House were constructed in the English Bond.
- 8.1.3 The water tanks and the culvert recorded immediately to the south-east of the White House are thought to have formed part of the water management system for the White House. Although the exact date of their construction is unknown, it appears they were used for a relatively short period during the late 19th and early 20th century and came into disuse by the mid 20th century.
- 8.1.4 No features pre-dating the 19th century land reclamation and building construction were recovered and no datable material was retrieved from the alluvial deposits underlying the made ground layers.

9 ARCHIVE

9.1 Preparation and Deposition

- 9.1.1 The complete project archive will be prepared in accordance with Wessex Archaeology's *Guidelines for Archive Preparation*, the *Guidelines for the Preparation of Excavation Archives for Long-Term Storage* (Walker 1990) and the nationally recommended guidelines (SMA 1995). On completion of

the project, the archive will be deposited with an appropriate museum repository, to be agreed with Kent County Council.

9.2 Archive

9.2.1 The archive is currently stored at Wessex Archaeology's Rochester office under the project codes 71184 and 71185. All archive elements have been marked with the site code and a full index has been prepared.

9.2.2 The project archive comprises an A4 ring-bound file containing the following:

- 2 Context Index Sheets
- 7 Trench Record Sheets
- 12 Context Record Sheets
- 4 Photographic Records
- 4 sheets of Day Book
- A copy of the WSI

9.3 Copyright

9.3.1 The full copyright of the written/illustrative archive relating to the site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive license for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profit making, and conforms to the Copyright and Related Rights Regulations 2003.

9.4 Security Copy

9.4.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of microfilm. The master jackets and one diazo copy of the microfilm will be submitted to the National Monuments Record Centre (NMR) (English Heritage) in Swindon; a second diazo copy will be deposited with the paper records at the appropriate local museum, and a third diazo copy will be retained by Wessex Archaeology.

10 REFERENCES

British Geological Survey 1977: Drift, Sheet 272: Chatham, 1:50,000

Brook Pumping Station 2009: www.oldbrookpumping.co.uk/station.htm

Dobson, M. J. 1997: *Contours of Death and Disease in Early Modern England*, Cambridge University Press

English Heritage 1991: *Management of Archaeological Projects*. London, English Heritage

Institute for Archaeologists 2008: *Standards and Guidance for Archaeological Watching Briefs*

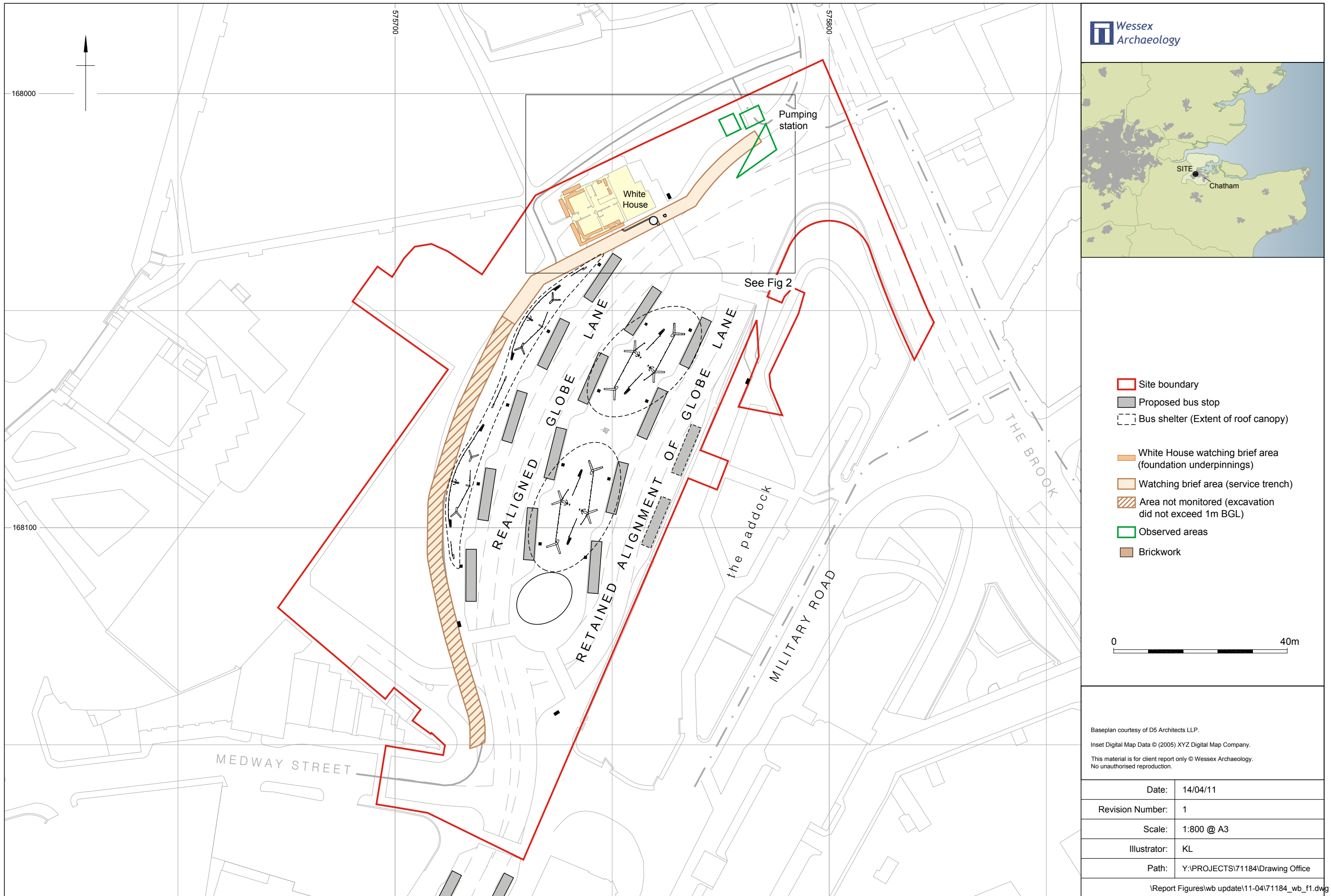
- Kendall, P. 2007: *The Evolution of The Paddock, Chatham, Medway, Kent*, unpublished report for English Heritage
- SMA 1995: *Towards an Accessible Archaeological Archive*. Society of Museum Archaeologists
- Victoria County History 1932: *Kent, Vol. III*
- WA 2007: *Strood Riverside, Geoarchaeological Watching brief and Walkover Survey*, Report ref. 66240.01
- WA 2009: *Dynamic Bus Facility, Chatham, Medway, Kent. Archaeological Impact Assessment*, Report ref. 71181.01
- WA 2010a: *Dynamic Bus Facility, Chatham, Medway, Kent. Archaeological Watching Brief Report on Geotechnical Investigations*, Report ref. 71182.01
- WA 2010b: *The White House and Riverside Rooms (Chatham Dynamic Bus Station), Chatham, Kent. Historic Building Record*, Report ref. 71183.01
- WA 2010c: *Dynamic Bus Facility, Chatham, Medway, Kent. Written Scheme of Investigation for a Programme of Archaeological Monitoring & Excavation of the Service Diversion Trench and Associated Enabling Works*, Report ref. 71184.01
- WA 2011: *Dynamic Bus Facility, Chatham, Medway, Kent. Report on Archaeological Watching Brief within the Footprint of the Services Diversion Trench*, Report ref. 71184.03
- Walker K. 1990: *Guidelines for the Preparation of Excavation Archives for Long-Term Storage*. UKIC Archaeology Section

APPENDIX 1: CONTEXT SUMMARY

| Context | Type | Description | Depth (m) Below Ground Level |
|---|-----------------------|---|------------------------------------|
| Water tanks area | | | |
| 101 | Topsoil/tarmac | Dark brown silty clay loam with occasional small sub-rounded stones topsoil (located to the north and far south). The central portion was covered with tarmac | 0.00-0.12 |
| 102 | Cut for water tank | Cut for water tank 103 , c. 2.4m in diameter, hard to identify as tank was constructed up against the edge of the cut | 0-2.5 |
| 103 | Brick water tank | Red and yellow brick water tank, alternating header and stretcher courses, bonded with light grey mortar with abundant very small coarse stone fragments. Internal face was covered with plaster and a black tar/paint sealant. | 0-2.5 |
| 104 | Deliberate backfill | Mid brown sandy silt loam with abundant brick dust and mortar fragment inclusions and common sub-angular and sub-rounded stones. Abundant modern artefacts, including glass bottles and tin cans. Fill of water tank 103 | 0-2.3 |
| 105 | Cut for brick culvert | Linear cut for brick culvert 106 aligned southwest-northeast, running between the White House and tank 103 | 0.2-0.5 |
| 106 | Brick culvert | Red and yellow brick culvert within 105 . Single lead pipe running down the centre | 0.2-0.5 |
| 107 | Secondary fill | Natural silting within the brick culvert 106 . Black fine sandy silt with sparse small sub-rounded stones | |
| 108 | Brick water tank | Red and yellow brick water tank, alternating header and stretcher courses, bonded with light grey mortar with abundant very small coarse stone fragments. Internal face was covered with plaster and a black tar/paint sealant. | 0-2.1 |
| 109 | Made ground | Mid yellowish brown sandy silt with common sub-rounded and sub-angular flints and stones | 0.12-0.3 |
| Area to the south of the White House | | | |
| 110 | Made ground | Rolled chalk layer | 0.3-0.4 |
| 111 | Made ground | Mid yellowish brown sandy clay loam with abundant small to medium sub-rounded flints | 0.4-0.5 |
| 112 | Made ground | Abundant crushed red brick and moderate sub-angular flints and stones. Compacted | 0.5-0.8 |
| 113 | Made ground | Mid orangey brown sandy clay loam with common sub-rounded flints mixed with chalk concentrations in places | 0.8-1.0 |
| 114 | Made ground | Light greyish brown sandy clay with chalk | 1.0-1.2 |
| 115 | Made ground | Mid reddish brown sandy clay loam with abundant red brick fragments and small sub-angular stones | 1.2-1.45 |
| 116 | Made ground | Light yellowish brown clay with abundant chalk fragments | 1.45-1.65 |
| 117 | Made ground | Redeposited chalk with red brick fragments | 1.65-2.15 |
| 118 | Made ground | Light greyish brown sandy clay with sparse red brick fragments and flints, further towards the north this context also has abundant red tile incl. | 2.15-2.45 |
| 119 | Made ground | Redeposited chalk with sparse red brick fragments | 2.45-2.75 |

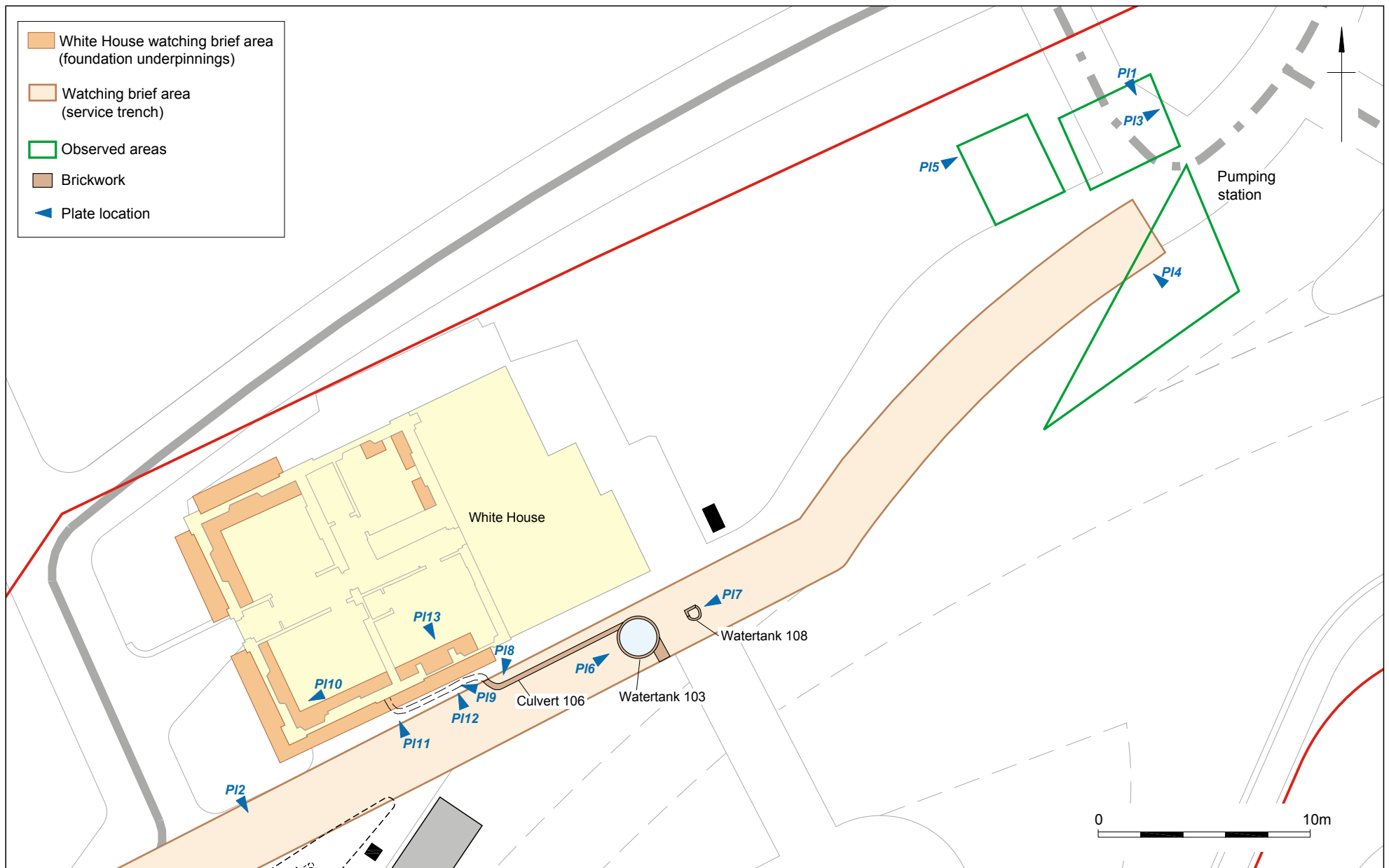
| | | | |
|---|---------------------|--|-----------|
| 120 | Made ground | Dark brown sandy clay with sparse red brick fragments and small lumps of chalk | 2.75-2.95 |
| 121 | Made ground | Redeposited chalk – thin layer with occasional red brick fragments | 2.95-3.05 |
| 122 | Made ground | Dark greyish brown sandy clay with abundant chalk fragments and chalk flecks and sparse flint nodules | 3.05-3.30 |
| 123 | Made ground | Dark greyish black sandy clay with abundant chalk flecks and sparse small fragments of red brick | 3.3-3.7 |
| 124 | Made ground | Greyish yellow sandy clay with sparse red brick fragments and sparse small flint nodules | 3.7-4.1 |
| 125 | Made ground | Light whitish grey clay | 4.10+ |
| Pumping station – shaft excavation | | | |
| 126 | Made ground | Dark brown silty clay loam, with sparse decayed brick, clay pipe fragments. Contained whole shells and shell fragments. Damp deposit (waterlogged?) | 3.0-4.5 |
| 127 | Alluvium | Orangey brown sandy gravels, comprising moderate sub-rounded pebbles of various sizes and sparse shell fragments. Contained charcoal fragments and preserved natural wood. Pockets of smooth dense silty clay. Organic smell | 4.5-5.25 |
| 128 | Alluvium | Smooth black organic silty clay, highly compacted, with strong organic smell, natural wood fragments preserved within | 5.25-6.0+ |
| Pumping station – other works | | | |
| 129 | Topsoil/tarmac | Same as 101 | 0-0.12 |
| 130 | Subsoil | Light greyish brown silty clay loam with common sub-rounded and sub-angular stones, chalk fragments and flints and sparse CBM and pottery | 0.12-0.39 |
| 131 | Made ground | Abundant small chalk fragments within a light yellowish brown silty sand matrix | 0.39-0.51 |
| 132 | Made ground | Compacted chalk with occasional CBM | 0.51-0.7 |
| 133 | Made ground | Light yellow sandy clay loam with abundant chalk fragments, moderate flint nodules and CBM | 0.7-1.38 |
| 134 | Buried topsoil | Light brown silty clay with common chalk fragments and sparse flints. | 1.38-1.65 |
| 135 | Made ground | Abundant chalk with occasional CBM and lenses of light brown yellow soft silty clay | 1.65-2.88 |
| 136 | Made ground | Made Ground – Mid brown soft silty clay with common CBM, occasional pot, flint nodules, chalk fragments and shell. Similar to (126) | 2.88-3.65 |
| 137 | Cut of pit | A lens visible in made ground | |
| 138 | Fill of pit | A lens visible in made ground | |
| Water tanks area | | | |
| 139 | Cut for water tank | Circular cut for tank 108 . Approximately 1.75m in diameter. | 0-2.1 |
| 140 | Deliberate backfill | Mid brown sandy silt loam with abundant brick dust and mortar fragments and common stones. Contained modern artefacts. Fill of 108 | 0-1.9 |
| White House foundations area | | | |
| 1001 | Made ground | Mid yellowish brown sandy silt with abundant post medieval/modern CBM, flint nodules and chalk lumps. Packed. Likely formed during the construction of White House – internal made ground | 0-1.4 |

| | | | |
|-------------|-------------|---|--------|
| 1002 | Made ground | Mid yellowish brown sandy silt with abundant post medieval/modern CBM, flint nodules and chalk lumps. Packed. Likely result of landscaping in the vicinity of White House – external made ground. Probably same as 113 | 0-0.75 |
|-------------|-------------|---|--------|



Site location plan with service trench and proposed bus facility

Figure 1



| | | | |
|--|--|--|---------------------------|
| <p>Wessex Archaeology</p> <p>Baseplan courtesy of D5 Architects LLP. This material is for client report only © Wessex Archaeology. No unauthorised reproduction.</p> | <p>Site boundary</p> | <p>Date: 14/04/11</p> | <p>Revision Number: 1</p> |
| | <p>Proposed bus stop</p> | <p>Scale: 1:250 @ A4</p> | <p>Illustrator: KL</p> |
| | <p>Bus shelter (Extent of roof canopy)</p> | <p>Path: Y:\PROJECTS\71184\DO\Report Figures\wb update\11-04\71184_wb_f1.dwg</p> | |

Detail of the watching brief area

Figure 2



Plate 1: Stratigraphic sequence showing topsoil and made ground deposits



Plate 2: South-east facing section of trench showing made ground layers



Plate 3: North-east facing section of value chamber excavation



Plate 4: West facing section showing possible buried topsoil



Plate 5: View of alluvium 128 in pumping station shaft



Plate 6: Water tank 103, view from east



Plate 7: Water tank 108, view from east



Plate 8: Brick culvert 106, view from south-east



Plate 9: The White House foundations, showing made ground layer 1002, view from east



Plate 10: South internal corner of White House, showing made ground layer 1001, view from north-east



Plate 11: Metal pipe, which corresponds with culvert 106, view from south-east



Plate 12: The White House foundations – external face, view from south-east



Plate 13: The White House foundations – internal face, view from north-west



WESSEX ARCHAEOLOGY LIMITED.

Registered Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk

Regional offices in **Edinburgh, Rochester and Sheffield**

For more information visit www.wessexarch.co.uk

