

Archaeological Evaluation Report Wandle Riverside, Goat Road, Beddington Corner, London Borough of Sutton

> NGR: 527950 166850 (TQ 27950 66850)

Planning Ref: C2013/68191

ASE Project No: 7500 Site Code: MGR 16

ASE Report No: 2016330 OASIS id: archaeol6-259700

lan Hogg

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# By Ian Hogg With contributions by Luke Barber, Isa Benedetti-Whitton, Susan Chandler, Anna Doherty and Karine Le Hégarat

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#### **Abstract**

Archaeology South-East was commissioned by CgMs Consulting to undertake an archaeological evaluation at Wandle Riverside, Goat Road, Beddington Corner, London Borough of Sutton. The evaluation comprised 17 machine excavated trenches. QUEST undertook a programme of geoarchaeological monitoring of the evaluation (QUEST 2016, Appendix 2).

The natural Wandle Gravels were recorded at between 20.88m and 22.43m aOD. The gravels undulated significantly suggesting the presence of braided channels from the adjacent River Wandle. The gravels were overlain by alluvium across much of the site; in some higher areas, the gravels were overlain by a buried topsoil of late post medieval date. The trenches were sealed by modern made ground and a concrete slab. Localised but significant truncation had occurred where previous buildings had stood. Excavation could not extend beyond the top of the alluvium in the south of the site due to the high water table combined with the presence of contamination.

The evaluation found evidence of a post-medieval skinning mill known to have existed in the north-west of the site from cartographic sources. The remains comprised heavily truncated brick walls and floors as well as brick lined drains. A lined channel is also likely to be associated with the mill. The bricks from these features appeared to be of a slightly earlier date which suggests either the reuse of earlier building materials or the continued use of an earlier building. Historic maps suggest that the remains relate to a building depicted on early 19<sup>th</sup> century maps; it remains unclear whether this building had earlier origins.

A probable system of drainage ditches was also recorded in the north of site, these features did not contained secure dating evidence but were found in associated with a series of postholes dated to the 17<sup>th</sup> to 19<sup>th</sup> centuries. It is unclear whether these features were associated with the nearby structural remains but historic mapping suggests that the cut features are earlier.

The only feature recorded in the southern part of the site was a section of wattle fencing acting as a wall to a probable channel. This feature could not be fully excavated due to the water table but is likely to be of late post-medieval date.

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#### 1.0 INTRODUCTION

# 1.1 Site Background

- 1.1.1 Archaeology South-East (ASE) was commissioned by CgMs Consulting Ltd to undertake an archaeological evaluation at Wandle Riverside, Goat Road, Beddington Corner, London Borough of Sutton (NGR: TQ 27950 66850).
- 1.1.2 The site is an irregular parcel of land bisected by the River Wandle with a small stream also running east. The site lies within an Area of Archaeology Priority as designated by Sutton Council.
- 1.1.3 The evaluation initially comprised 18 trenches each measuring 30m x 2m in plan. Subsequently three trenches were shortened and one trench remained unexcavated due to on site constraints.

# 1.2 Geology and Topography

- 1.2.1 Geologically, the site is mapped as lying within an area of alluvium. Site-specific geotechnical information has demonstrated c.0.5-1.55m thicknesses of made ground across the site, together with alluvial clay containing peat inclusions, with gravels beneath (QUEST 2016, Appendix 2; PCA 2016). Past industrial development of the site led to contamination within the made ground deposits, the contamination included asbestos, hydro-carbons and arsenic (RSK 2016).
- 1.2.2 The site is broadly level at c.21.5-23.5m AOD.

# 1.3 Planning Background

- 1.3.1 Planning permission (ref: C2013/68191) has been granted for redevelopment of the site with the following condition for archaeology attached:
  - (22) No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme for investigation which has been submitted to and approved in writing by Local Planning Authority. The development shall only take place in accordance with the detailed scheme pursuant to this condition.
  - Reason: To ensure compliance with policy DM4 of the Site Development Policies DPD.
- 1.3.2 An archaeological Desk-Based Assessment (DBA) was prepared in support of the application (CgMs 2013). It indicated a potential for the later prehistoric, Post Medieval and Modern periods, primarily associated with the course of the River Wandle running through the western part of the site.
- 1.3.3 Archaeological monitoring of nine geotechnical site investigation test pits revealed extensive made ground deposits with occasional post-medieval and modern finds. This made ground was typically overlying alluvial deposits of sands, silt, and clay, with excavation, in most instances, continuing through the alluvium down to the underlying gravel terrace. The geology was

consistent as predicted and described by the British Geological Survey. Despite the comparatively limited nature of these initial investigations, the watching brief suggests that even with (probable) extensive modern truncation, the potential remains for surviving areas of *in situ* post-medieval archaeology. The potential for prehistoric remains within the alluvium or at the gravel horizon could not be definitively ascertained within the scope of these investigations, although these lower deposits generally survived with limited truncation (PCA 2016).

- 1.3.4 Separate geoarchaeological investigations were undertaken by QUEST for assessment on this front; they found Late Devensian Gravels lying between 20.6m and 21.8m aOD; overlain in places by up to 1.5m of generally coarse-grained (sand-rich) alluvium, and made ground. Made ground directly overlay the gravel in places, indicating that the gravel surfaces there may be truncated. The varying height of the gravels was suggested to indicate possible braided channels of the River Wandle. No organic-rich horizons or peat, or evidence for former land surfaces/soil formation was recorded during the monitoring.
- 1.3.5 Having considered these results the Greater London Archaeology Advisory Service (GLAAS), part of Historic England that advises the London Borough of Sutton on its archaeological obligations, recommended that an archaeological evaluation be undertaken.
- 1.3.6 Accordingly, an Archaeological Written Scheme of Investigation (CgMs 2016) was prepared prior to the commencement of this phase of works, this document set out the methodology for the evaluation. All works were carried out in accordance with this document and with the ClfA standards and guidance (ClfA 2014a, b and c) and the Greater London Archaeology Advisory Service (GLAAS) Standards for Archaeological Work (Historic England 2015).

#### 1.4 Scope of Report

1.4.1 This report details the results of the archaeological evaluation carried out on the site between the 17th July and the 2nd August. It has been prepared in accordance with the Written Scheme of Investigation (CgMs 2016). The work was carried out by Ian Hogg (Senior Archaeologist), Nathalie Gonzales and Steve White (Archaeologists) Tom Rugg, Johnny Gardner, Chloe Ward and James Best (Assistant Archaeologists). The fieldwork was managed by Andy Leonard and Paul Mason, the post-excavation work by Jim Stevenson and Andy Margetts.

#### 2.0 ARCHAEOLOGICAL BACKGROUND

- 2.1 The following background has been paraphrased from the Desk-Based Assessment (CgMs 2013) and the WSI (CgMs 2016).
- 2.2 In terms of local designations, the site lies within an Area of Archaeological Priority as designated by the London Borough of Sutton, associated with the River Wandle.
- 2.3 Previous below ground archaeological desk based assessment (CgMs 2013) has indicated a potential for the later prehistoric, post-medieval and modern periods, primarily associated with the course of the River Wandle running through the western part of the site.
- 2.4 Archaeological monitoring of nine geotechnical site investigation test pits revealed extensive made ground deposits with occasional post-medieval and modern finds. This made ground was typically overlying alluvial deposits of sands, silt, and clay, with excavation, in most instances, continuing through the alluvium down to the underlying gravel terrace. The geology was consistently as predicted and described by the British Geological Survey. Despite the comparatively limited nature of these initial investigations, the watching brief suggests that even with (probable) extensive modern truncation, the potential remains for surviving areas of *in situ* post-medieval archaeology. The potential for prehistoric remains within the alluvium or at the gravel horizon could not be definitively ascertained within the scope of these investigations, although these lower deposits generally survived with limited truncation. Separate geoarchaeological investigations have been undertaken by QUEST for assessment on this front (PCA 2016).
- 2.5 Appropriate geoarchaeological monitoring of site investigations revealed that the sequence at the site consists of the Late Devensian Wandle Gravel, whose surface lies at between 20.6 and 21.8m OD, overlain in places by up to 1.5m of generally coarse-grained (sand-rich) alluvium, and made ground. Made ground directly overlies the gravel in places, indicating that the gravel surfaces here may be truncated. In the absence of any organic-rich horizons or peat (such as that recorded elsewhere in the Wandle Valley), or evidence for former land surfaces/soil formation at the site, no further environmental archaeological investigations are recommended, and the archaeological potential may be low (QUEST 2016, Appendix 2).

#### 2.3 Project Aims and Objectives

- 2.3.1 The principle research objective was to establish whether any archaeological sites exist in the area, with particular regard to any which are of sufficient importance to require preservation *in situ*.
- 2.3.2 The evaluation aimed to determine, as far as is reasonably possible, the location, form, extent, date, character, condition, significance and quality of any surviving archaeological remains, irrespective of period, liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains were potentially threatened was studied, and attention was given to sites and remains of all periods (inclusive of evidence of past environments).
- 2.3.3 The evaluation sought to clarify the nature and extent of existing disturbance and intrusions and hence assess the degree of archaeological survival of buried deposits and any surviving structures of archaeological significance.
- 2.3.4 The relevant research agenda for the site comprises *A research framework* for London Archaeology prepared by the Museum of London and Historic England (2002). Framework Objectives with the potential to be relevant to this site have been summarised below:

Prehistoric – Early Roman: P2 Palaeolithic: gathering baseline information, establishing a chronology, informing research and developing relevant models. P3 Palaeolithic-Mesolithic: gathering baseline information, understanding the locality and its evolution. P4 Mesolithic-Neolithic: understanding the transition, reconstructing the environment, understanding settlement and economic development and patterns, and the influence of the landscape upon settlement and the creation of monuments; developing a pottery typology. P5 Bronze Age-Iron Age: habitation and utilisation of the Thames Valley. P6 Late Iron Age-early Roman: assessing the relationship of London with the rest of the southeast, agricultural intensification, settlement patterns and roads.

Saxon: S1 transitions from Late Roman to Early Saxon; reviewing chronologies and regional relationships. S2 identifying rural, agricultural land use; determining the impact on subsequent development with reference to Continental examples. S3 relating settlement to water understanding migration patterns, and the origin of rural settlement. S4 understanding social and economic relating to (urban) development and the emergence of the medieval city; the influence of Roman buildings, discrete settlement foci, ceramic dating, and the role of the Vikings. S5 understanding building techniques and construction; woodland management and timber supply; social and economic relationship with buildings; sunken floored buildings. S6 understanding cult and belief; the Middle Saxons; the indigenous population; interaction of kingdoms in the region; use of scientific techniques; diet; the role of women and children; differences in distribution of material culture. S7 understanding agricultural practice; fishing; town and country regarding food production and management; interaction of kingdoms the region; transport; the economy; manufacturing; production

specialisation. S8 understanding the development of burhs; the church; rulership and administration.

Medieval: M1 understanding urban development, in comparison with elsewhere in the UK and in Europe; complementing archaeological work with documentary research. M2 understanding human interaction with the environment; establishing baseline chronologies. M3 understanding social structure and complementing archaeological work with documentary research; health; urban regeneration; burial practices; ethnicity; disease. M4 understanding religious foundations, ethnicity and socio-economic roles of religious foundations. M5 understanding the Norman Conquest; the origin of government; socio-economics regarding housing; development of areas of London; private/civic enterprise, urbanism and infrastructure; rural development; impact of the Black Death; understanding the emerging city. M6 synthesising breeding programmes and wildlife management, strategies and effects; understanding the development of specialist areas; challenge/complement historical sources; understanding patterns of consumption.

London After 1500 L1 instigating corroborative research with other historic disciplines to elucidate a framework for future research. L2 understanding developing building design, and socio-economic relations; how London related to its hinterland: the effect of royal palaces: government buildings: developing infrastructure; the development of suburbs and recreational spaces. L3 how archaeology contributes to understand social, economic. ethnic or religious aspects of different neighbourhoods, including sections of society with no history. L4 understanding human physical survival in London. L5 understanding London's defence system. L6 understanding the development of religious belief and related material culture. L7 understanding the history of leisure, links with trade and the economy. L8 understanding food production; London's growth and related environmental consequences. L9 understanding industry in London; poverty, social deprivation and disease. L10 understanding London as a distribution, financial and fashion centre; the adaptation of smaller towns within the London area; its continued world preeminence.

- 2.3.5 Site-specific research aims of the proposed archaeological exercise at the study site included the following:
  - 1 The exercise will seek to understand the context of the findings in relationship to the wider settlement pattern, landscape, economy and environment;
  - 2 The interpretation of locally distinctive or regionally/nationally significant archaeological features;
  - 3 How the site's topography has influenced past activity and settlement;
  - 4 To advance our knowledge of the archaeology of the region through the application of appropriate scientific dating techniques;

- 5 To understand the impact of development since the eighteenth century.
- 2.3.6 Where physical preservation was likely to be considered as a mitigation option, the primary factors affecting the present state of preservation and the direct and indirect effect of the proposed development were also considered.

#### 3.0 ARCHAEOLOGICAL METHODOLOGY

## 3.1 Evaluation Methodology

- 3.1.1 Originally 18 30m x 2m trenches were to be excavated, Trench 18 was not dug due to a building in its location, Trench 9 was shortened due to spatial constraints, the excavation of Trench 10 was partially abandoned due to rapid ingress of heavily contaminated water and Trench 15 was moved and shortened due to a culvert in this location (Figure 2). Where possible, trenches were excavated to the natural gravels; however, the high water table and the presence of contamination made this impossible in some trenches and so excavation ceased at the top of the alluvial deposits in these cases, where trench depth exceeded 1.20m, trenches were stepped for safe access.
- 3.1.2 All trenches were scanned using a cable avoidance tool prior to excavation. Mechanical excavation was undertaken under archaeological supervision in spits of no more than 0.25m to the top of archaeological deposits.
- 3.1.3 All deposits were recorded using ASE standard context sheets. Vertical sections were taken across features where necessary and a comprehensive photographic record taken.
- 3.1.4 Trenches were hand planned and tied in to the Ordnance Survey.
- 3.1.5 Spoil heaps and trial pit bases were scanned by eye for unstratified finds.
- 3.1.6 Trenches were backfilled using the machine bucket, no formal reinstatement was undertaken.

#### 3.2 Archive

3.2.1 The site archive is currently held at the offices of ASE and will be deposited at the LAARC in due course. The contents of the archive are tabulated below (Table 1).

Number of Contexts	118
No. of files/paper record	1
Plan and section sheets	17
Bulk Samples	0
Photographs	180 digital
Bulk finds	16 contexts
Registered finds	0
Environmental flots/residue	0

Table 1: Quantification of site archive

#### 4.0 RESULTS

## **4.1 Trench 1** (Figure 3)

Context	Туре	Interpretation	Length	Width	Depth	Height
			30.00		0.70-	22.41-
1/001	Layer	Made ground		2.00	0.80	22.45
			30.00	2.00	0.12-	21.55-
1/002	Layer	Alluvium			0.16	21.78
			30.00	2.00		21.47-
1/003	Layer	Natural			-	21.59
		Wall				
1/004	Masonry	foundation	3.70	0.22	0.05	21.71
		Foundation				
1/005	Cut	cut	3.70	0.22	0.05	21.71
1/006	Fill	Foundation fill	3.70	0.22	0.05	21.71
					0.25-	22.70-
1/007	Masonry	Concrete slab	30.00	2.00	0.50	22.91

Table 2: Trench 1 list of recorded contexts

- 4.1.1 Trench 1 was located in the north-west of the site; it was aligned east to west and measured 1.36m deep at the western end and 1.10m deep at the eastern end. Excavation ceased at the top of the alluvium throughout much of the trench and at the top of the natural gravel towards the western end.
- 4.1.2 The natural greyish orange gravels [1/003] were observed towards the western end of the trench at between 21.47m and 21.59m aOD. The gravels were overlain by pale brown grey clay alluvium [1/002] between 0.12m and 0.16m thick. The alluvium was cut by an L-shaped foundation trench [1/005]; it had vertical sides, a flat base and measured 3.70m in length, 0.22m in width and 0.05m in depth. The wall foundation itself [1/004] comprised unfrogged red bricks measuring 222mm x 104mm x 69mm, laid in header pattern and bonded with lime mortar; only two courses of the wall survived. The foundation fill [1/006] consisted of soft mid brown silt clay and did not contain any finds. The bricks from this feature were dated to the post-medieval period; historic mapping suggests that this feature is likely to be associated with the skinning mill known to have existed in this area during the 18th century and 19th centuries.
- 4.1.3 The wall foundation was overlain by loose, dark grey gravelly silt modern made ground [1/002] with inclusions of CBM and concrete; this deposit measured between 0.70m and 0.80m in thickness. The made ground was sealed by a concrete slab [1/007] between 0.25m and 0.50m in thickness.

#### 4.2 Trench 2

- 4.2.1 Trench 2 was located in the north-west of the site and was geographically the closest trench to the River Wandle and was aligned north to south. Excavation ceased at the alluvium with sondages excavated to the top of the natural gravels at either end of the trenches.
- 4.2.2 The natural Wandle Gravels [2/005] were observed at heights between 20.88m and 21.31m aOD. The gravels were overlain by dark grey silt clay alluvium [2/004] up to 1.00m thick; it was heavily truncated at the northern end and only 0.20m in thickness. The alluvium was sealed by modern rubbly silt made ground [2/002] between 0.60m and 1.45m thick. The made ground was sealed by a 0.20m thick concrete slab.
- 4.2.3 No archaeology was recorded in this trench. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report.

# **4.3 Trench 3** (Figure 4)

Context	Туре	Interpretation	Length	Width	Depth	Height
					0.40-	22.38-
3/001	Layer	Made ground	30.00	2.00	0.65	22.40
					0.20-	21.47-
3/002	Layer	Alluvium	30.00	2.00	0.40	21.98
						21.53-
3/003	Layer	Natural	30.00	2.00	-	21.68
3/004	Masonry	Floor	2.30	1.00	0.07	21.88
3/005	Masonry	Wall	1.50	0.22	0.07	21.92
		Foundation				
3/006	Cut	cut	1.50	0.22	0.07	21.59
3/007	Masonry	Drain	2.00	0.68	30	21.59
3/008	Masonry	Drain	2.10	0.20	0.20	21.53
3/009	Cut	Drain	2.10	0.30	0.20	21.58
3/010	Fill	Drain fill	2.00	0.50	0.28	21.48
3/011	Cut	Drain	2.00	1.60	0.30	21.58
3/012	Fill	Drain fill	2.00	0.50	0.28	21.48
3/013	Cut	Posthole	0.45	0.45	0.25	21.66
3/014	Fill	Fill, basal	0.45	0.45	0.25	21.66
3/015	Masonry	Drain	2.00	0.60	0.30	21.48
	_				0.65-	23.03-
3/016	Masonry	Concrete slab	30.00	2.00	0.70	23.10
3/017	Masonry	Drain	2.00	0.38	0.28	21.58

Table 3: Trench 3 list of recorded contexts

4.3.1 Trench 3 was located in the north-west of the site; it was aligned north to south and measured 1.70m deep at the northern end and 1.60m deep at the

- southern end. Excavation ceased at the top of the natural gravels at the southern end of the trench and at the top of the alluvium elsewhere.
- 4.3.2 The natural orange grey gravels [3/003] were observed between 21.53m and 21.68m aOD. The gravels were overlain by mid grevish brown silt clay alluvium [3/002] measuring between 0.20m and 0.40m in thickness. Towards the northern end of the trench, the alluvium was cut by a single posthole [3/013]; it was subcircular with steep sides and a concave base and measured 0.45m in diameter and 0.25m in depth. The posthole fill [3/014] comprised mid brown silt clay and did not contain any finds. A small L-shaped foundation trench [3/006] lav just to the north of the posthole. The foundation trench ran southeast to northwest before turning northeast; it had vertical sides and a flat base. The foundation trench measured 1.50m in length, 0.22m in width and 0.07m in depth. The wall foundation itself [3/005] was constructed from unfrogged red bricks measuring 225mm x 109mm x 68mm. The bricks were laid in stretcher patter and bonded with lime mortar. A partial section of brick floor [3/004] lay just to the north of the wall foundation and was on the same alignment. The floor was laid directly on the alluvium and was again constructed from red ceramic tile measuring 200mm x 200mm x 65mm in size and bonded with lime mortar.
- 4.3.3 The alluvium was also cut by a drainage trench [3/011], aligned east to west it had moderately sloping sides and a flat base; it measured 2.00m in length, 1.60m in width and 0.30m in depth. Within the cut lay two arched brick drains [3/007] and [3/015] divided by a low wall [3/017]. The wall [3/017] was constructed from unfrogged red brick measuring 226mm x 108mm x 67mm, laid in stretcher pattern and bonded with lime mortar; the wall measured 2.00m in length, 0.38m in width and 0.28m in height. The two arched drains [3/007] and [3/015] were both constructed from the same bricks as the wall each measured 2.00m in length, 0.60m in width and 0.30m in height. The drain fills [3/010] and [3/012] both consisted of dark grey black silt clay; [3/010] contained CBM as well as a single sherd of Redware of probable 18<sup>th</sup> century date.
- 4.3.3 The second smaller drain [3/009] on the same alignment lay immediately to the south of the larger drain. The drain cut was steep sided, flat based and measured 2.10m in length, 0.30m in width and 0.20m in depth. The drain cut contained a brick drain [3/008] constructed from unfrogged red brick laid in header patter and bonded with lime mortar; the bricks measured 224mm x 106mm x 66mm.
- 4.3.4 The bricks from the drains, wall foundation and floor were all of Tudor or early post-medieval date; the features were all on a similar alignment, also seen in the wall foundation in Trench 1. These features, despite the early date of the bricks are likely to be associated with the 18<sup>th</sup> or 19<sup>th</sup> century skinning mill which lay in this part of the site.
- 4.3.5 The features were sealed by mid grey rubbly silt modern made ground [3/001] between 0.40m and 0.65m in thickness. The made ground was overlain by a concrete slab [3/016] between 0.65m and 0.70m in thickness.

#### **4.4** Trench 4 (Figure 5)

Context	Туре	Interpretation	Length	Width	Depth	Height
					0.50-	22.81-
4/001	Layer	Made ground	30.00	2.00	0.60	22.93
	-				0.10-	22.21-
4/002	Layer	Alluvium	30.00	2.00	1.42	22.43
4/003	Layer	Natural	30.00	2.00	_	21.12- 22.43
4/004	Fill	Fill, basal	2.20	0.90	0.36	22.31
4/005	Cut	Ditch	2.20	0.90	0.36	22.31
4/006	Fill	Fill, basal	2.10	0.50	0.32	22.15
4/007	Cut	Ditch	2.10	0.50	0.32	22.15
4/008	Fill	Fill, basal	2.60	1.10	0.22	21.94
4/009	Cut	Ditch	2.60	1.10	0.22	21.94
4/010	Fill	Fill, basal	0.28	0.28	0.19	21.96
4/011	Cut	Posthole	0.28	0.28	0.19	21.96
4/012	Fill	Fill, basal	0.44	0.38	0.20	22.05
4/013	Cut	Posthole	0.44	0.38	0.20	22.05
4/014	Fill	Fill, basal	0.46	0.38	0.16	22.09
4/015	Cut	Posthole	0.46	0.38	0.16	22.09
4/016	Fill	Fill, basal	0.35	0.28	0.12	22.28
4/017	Cut	Posthole	0.35	0.28	0.12	22.28
					0.17-	23.10-
4/018	Masonry	Concrete slab	30.00	2.00	0.40	23.21
4/019	Fill	Channel	2.00	4.95	1.44	22.41
4/020	Cut	Channel	2.00	4.95	1.44	22.41
4/021	Masonry	Wall	0.10	0.36	0.89	22.64

Table 4: Trench 4 list of recorded contexts

- 4.4.1 Trench 4 was located in the north-west of the site; it was aligned north to south and measured 2.15m deep at the northern end and 0.95m deep at the southern end. Excavation ceased at the top of the natural gravels; a channel at the northern end of the trench and one in the centre of the trench were backfilled once recorded due to excessive depth.
- 4.4.2 The natural orange grey gravels [4/003] were observed between 21.12m at the northern end and 22.43m aOD at the southern end; the relatively steep slope of the gravel across the trench suggests it may lie within a channel. The gravels were overlain by mid greyish brown silt clay alluvium [4/002] between 0.10m thick at the southern end and 1.42m thick at the northern end. A smaller channel [4/019] was recorded towards the northern end of the trench which cut the alluvium; it was aligned east to west and measured 4.95m in width, 1.44m in depth. The southern side of the channel was formed by a truncated, unfrogged red brick wall which was only seen in section; the bricks measured 225mm x 108mm x 64mm in size and were laid in English bond

with lime mortar. The channel fill [4/020] comprised dark grey silt clay and

4.4.3 Towards the southern end of the trench the alluvium was cut by a series ditches and postholes. The southernmost linear [4/005] was aligned northeast to south-west and measured 2.20m in length, 0.90m in width and 0.36m in depth; it had steeply sloping sides and a flat base. The ditch fill [4/004] consisted of dark grey gravelly silt with no finds. The second linear [4/007] was aligned east to west with steep sides and a flat base; it measured 2.10m in length, 0.50m in width and 0.32m in depth, the fill [4/006] was very similar to [4/004] and contained no finds. The largest linear [4/009] was aligned south-east to north-west and had steeply sloping sides and a concave base; it measured 2.60m in length, 1.10m in width and 0.22m in depth. The ditch fill [4/008] again comprised dark grey gravelly silt and did not contain any finds.

contained flecks of CBM and concrete.

- 4.4.3 Four postholes were recorded within the trench [4/011], [4/013], [4/015] and [4/017]; all postholes were subcircular with steep sides and concave bases. The posthole fills [4/010], [4/012], [4/014] and [4/016] all consisted dark grey silt clay. The northernmost posthole [4/011] measured 0.28m in diameter and 0.19m in depth; the fill [4/010] did not contain any finds. The second posthole [4/013] was only partially recorded within the trench, it measured 0.44m in diameter and 0.20m in depth; the fill [4/012] contained a single piece of clay tobacco pipe of 17<sup>th</sup> century date. Posthole [4/015] measured 0.46m in diameter and 0.19m in depth; the fill [4/014] was again sterile. The last posthole [4/017] measured 0.35m in diameter and 0.12m in depth; the fill [4/016] did not contain any finds.
- 4.4.4 The features were sealed by mid grey rubbly silt modern made ground [4/001] 0.60m in thickness. The made ground was overlain by a concrete slab [4/018] between 0.17m and 0.40m in thickness.

## **4.5 Trench 5** (Figure 6)

Context	Туре	Interpretation	Length	Width	Depth	Height
						23.08-
5/001	Masonry	Concrete slab	30.00	2.00	0.20	23.17
					0.55-	22.88-
5/002	Layer	Made ground	30.00	2.00	0.63	22.97
		Buried soil			0.33-	22.33-
5/003	Layer	horizon	30.00	2.00	0.42	22.34
5/004	Layer	Alluvium	10.50	2.00	0.29	21.91
				2.00		21.81-
5/005	Layer	Natural	19.50		-	22.17
5/006	Fill	Fill, basal	2.10	1.10	0.19	21.9
5/007	Cut	Ditch	2.10	1.10	0.19	21.9
5/008	Fill	Fill	0.42	0.42	0.39	21.9
5/009	Cut	Posthole	0.42	0.42	0.39	21.9
5/010	Fill	Fill	0.45	0.20	0.26	21.91
5/011	Cut	Posthole	0.45	0.20	0.26	21.91
5/012	Timber	Post	0.09	0.09	0.16	21.81

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#### Table 5: Trench 5 list of recorded contexts

- 4.5.1 Trench 5 was located in the north of the site; it was aligned north-east to south-west and measured 1.30m deep at the south-western end and 1.52m deep at the north-eastern end. Excavation ceased at the top of the natural gravels except at the northern end where it stopped at the alluvium.
- 4.5.2 The natural orange grey gravels [5/005] were observed between 21.81m and 22.17m aOD. At the north-eastern end of the trench the gravels were overlain by mid grey clay alluvium [5/004] 0.29m thick. Towards the south-western end of the trench the gravels were cut by a linear gully [5/007] aligned north-east to south-west. The linear had gently sloping sides and a flat base; it measured 2.10m in length, 1.10m in width and 0.19m in depth. The single fill [5/006] comprised mid grey gravelly silt and contained fragments of undiagnostic CBM.
- 4.5.3 Two postholes were recorded close to the linear. The deeper posthole [5/009] was subcircular with vertical sides and a concave base; it measured 0.42m in diameter and 0.39m in depth. The fill [5/008] comprised dark brown silt clay and contained a sherd of 17<sup>th</sup>/18<sup>th</sup> century Red ware as well as a fragment of probable 19<sup>th</sup> century glass. The second posthole [5/011] was only partially recorded within the trench; it had steep sides and a concave base and measured 0.45m in diameter and 0.26m in depth. The posthole still contained a timber post [5/012], broken close to its base; the timber measured 160mm in height and 90mm in diameter; it appeared not to be waterlogged but simply unrotted. The fill [5/010] consisted of mid grey silt clay and appeared to have collapsed over the timber when it was broken to cover it; the fill did not contain any finds.
- 4.5.4 The features were sealed by dark grey clay silt buried topsoil [5/003] between 0.33m and 0.42m in thickness. The buried topsoil was sealed by mid grey rubbly silt modern made ground [5/002] between 0.55m and 0.63m in thickness. The made ground was overlain by a concrete slab [5/001] 0.20m in thickness.

## **4.6 Trench 7** (Figure 7)

Context	Туре	Interpretation	Length	Width	Depth	Height
					0.30-	23.11-
7/001	Masonry	Concrete slab	30.00	2.00	0.36	23.23
			30.00	2.00	0.27-	22.75-
7/002	Layer	Made ground			0.64	22.81
		Buried soil	30.00	2.00	0.46-	22.48-
7/003	Layer	horizon			0.72	22.59
7/004	Layer	Alluvium	4.60	2.00	0.06	21.87
				2.00		21.81-
7/005	Layer	Natural	30.00			22.18
7/006	Fill	Fill, basal	2.40	0.47	0.21	21.90
7/007	Cut	Ditch	2.40	0.47	0.21	21.90
7/008	Fill	Fill	0.75	0.75	0.30	21.88

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7/009	Cut	Posthole	0.75	0.75	0.30	21.88
7/010	Fill	Fill, basal	3.10	1.60	0.27	21.88
7/011	Cut	Ditch	3.10	1.60	0.27	21.88

Table 6: Trench 7 list of recorded contexts

- 4.6.1 Trench 7 was located in the north of the site: it was aligned east to west and measured 1.13m deep at the western end and 1.42m deep at the eastern end. Excavation ceased at the top of the natural gravels.
- The natural orange grey gravels [7/005] were observed between 21.81m and 22.18m aOD. At the eastern end of the trench the gravels were overlain by mid grey clay alluvium [7/004] 0.06m thick. Towards the western end of the trench, the natural gravels were cut by two linear features ([7/007] and [7/011]) and a posthole [7/009]. The western linear [7/007] was aligned northwest to south-east, it had steep sides and a flat base; the gully measured 2.40m in length, 0.47m in width and 0.21m in depth. The fill comprised dark brown silt clay [7/006] and contained two post-medieval nails.
- The second linear [7/011] ran roughly perpendicular to [7/007] and their junction suggests that they were contemporary. The second linear was larger, measuring 3.10m in length, 1.60m in width and 0.27m in depth; it had moderately sloping sides and a flat base. The fill [7/010] again comprised dark brown silt clay and contained two fragments of Roman CBM, very likely to be residual. The posthole [7/009] lay immediately to the west of linear [7/011] and appeared to partially cut it, however, it is very likely that they were associated. It was subcircular with moderately sloping sides and a concave base; it measured 0.75m in diameter and 0.30m in depth. The fill [7/008] again comprised dark brown silt clay and did not contain any finds.
- The features were sealed by dark grey clay silt buried topsoil [7/003] between 0.46m and 0.72m in thickness. The buried topsoil was sealed by mid grey rubbly silt modern made ground [7/002] between 0.27m and 0.64m in thickness. The made ground was overlain by a concrete slab [7/001] between 0.30m and 0.36m in thickness.

#### 4.7 Trenches 6 and 8

- 4.7.1 These two trenches both measured 30.00m x 2.00m in plan and displayed the same stratigraphic sequence. The trenches did not contain any archaeology.
- The natural Wandle Gravels [005] was overlain by mid yellow grey silt clay alluvium [004] which was darker towards the top. The alluvium was sealed by dark grey clay silt buried topsoil [003] which showed some alluvial characteristics and signs of modern disturbance. The buried topsoil was sealed by mixed grey rubbly silt modern made ground [002]; this was in turn overlain by a reinforced concrete slab [001]. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report.

#### 4.8 Trench 9

- 4.8.1 Trench 9 was located in the north-east of the site partially within a raised area of made ground. Excavation ceased at the top of the natural gravel in the north-east of the trench and the alluvium elsewhere.
- 4.8.2 The natural Wandle Gravels [9/006] were observed between 21.22m and 21.64m aOD. The gravels were overlain by pale grey silt clay alluvium [9/005]; it thickened in the centre of the south of the trench to at least 0.25m. The alluvium was sealed dark brown grey silt probable made ground [9/004] recorded at the south-western end of the trench; it measured at least 0.45m in thickness. This was almost certainly the same deposit seen in Trench 11 which may have lain within a depression or channel. The made ground was overlain by dark grey silt buried topsoil [9/003] between 0.50m and 0.75m in thickness, this deposit showed signs of modern disturbance.
- 4.8.3 The buried topsoil was overlain by a pale grey chalk levelling deposit [9/002] between 0.25m and 0.35m in thickness. The chalk was sealed by loose grey rubbly silt made ground [9/001] between 0.55m and 0.80m in thickness. No archaeology was recorded in this trench. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report.

#### 4.9 Trench 10

- 4.9.1 Trench 10 was located in the east of the site partially within a raised area of made ground. Excavation was abandoned at the eastern end when heavily contaminated water was reached at 1.00m below ground level. The remainder of the trench comprised two sondages to natural gravels as elsewhere perched water did not allow excavation.
- 4.9.2 The natural Wandle Gravels [10/005] were observed 21.52m and 21.71m aOD. The gravels were overlain by pale grey silt clay alluvium [10/004] which measured between 0.90m and 1.05m in thickness. The alluvium was sealed by loose grey rubbly silt modern made ground [10/003] 0.90m in thickness. At the western end of the trench, the made ground was overlain by a concrete slab [10/002] 0.20m thick. At the eastern end, a second made ground deposit was encountered [10/001] comprising heavily contaminated orange silt at least 1.00m thick.
- 4.9.3 No archaeology was recorded in this trench. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report.

#### 4.10 Trench 11

4.10.1 Trench 11 was located in the north-east of the site within a raised area of made ground. Excavation ceased at the top of the natural gravel in the northeast of the trench and when groundwater was encountered elsewhere.

- 4.10.2 The natural Wandle Gravels [11/006] were observed between 22.03m and 22.23m aOD. The gravels were overlain by a mixed dark orange grey rubbly silt modern made ground [11/003] which lay within a depression or channel; it was also recorded in Trench 9. The made ground was sealed by a pale grey chalk levelling deposit [11/002] between 0.25m and 0.38m in thickness. The chalk was sealed by loose grey rubbly silt made ground [11/001] between 0.80m and 1.00m in thickness.
- 4.10.3 No archaeology was recorded in this trench. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report.

#### 4.11 Trenches 12, 14 and 16

- 4.11.1 These three trenches all measured 30.00m x 2.00m in plan and displayed the same stratigraphic sequence. They were all located in the south of the site. Due to the high water table as well as the heavy contamination, these trenches were excavated to the top of the alluvial clay; no archaeology was recorded within them.
- 4.11.2 The dark grey silt clay alluvium [004] was sealed by mid brown rubble modern made ground [003]. The made ground was sealed by mixed grey rubbly silt modern made ground [002], this was in turn overlain by a reinforced concrete slab [001]. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report.

#### **4.12 Trench 13** (Figure 8)

Context	Туре	Interpretation	Length	Width	Depth	Height
					0.20-	
13/001	Masonry	Concrete slab	30.00	2.00	0.40	23.40
					0.25-	22.50-
13/002	Layer	Made ground	30.00	2.00	0.40	22.81
						22.31-
13/003	Layer	Alluvium	30.00	2.00	-	22.67
					0.34-	22.90-
13/004	Layer	Made ground	30.00	2.00	0.50	23.06
13/005	Fill	Field drain	2.00	0.10	0.10	22.47
		Field drain	2.00			
13/006	Cut	trench		0.20	0.20	22.47
13/007	Timber	Wattle fencing	2.00	0.04	0.25	22.31
13/008	Layer	Fluvial deposit	5.00	2.00	0.20	22.33

Table 7: Trench 13 list of recorded contexts.

- 4.12.1 Trench 13 was located in the south of the site. Excavation ceased at the top of the alluvium due to the high groundwater in this area.
- 4.12.2 The dark grey silt clay alluvium [13/003] was recorded between 22.31m and 22.67m aOD and was observed at the western and eastern ends of the trench. A wattle fence or channel wall [13/007] was recorded within the

trench; it measured 2.00m in length, 0.04m in width and at least 0.25m in height and was constructed from woven birch or willow branches. The fencing was partially overlain by a dark brown clay silt fluvial deposit [13/008], at least 0.20m thick. The fluvial deposit was cut a trench for a field drain [13/006] measuring 2.00m in length, 0.20m in width and 0.20m in depth. Within it lay a ceramic field drain [13/005] aligned north to south.

4.12.3 The field drain and alluvial deposit were overlain by dark grey silt made ground [13/002] with inclusions of late post-medieval and modern pottery, CBM, glass, metalwork and concrete; this deposit measured between 0.25m and 0.40m in thickness. The made ground was overlain by a second modern made ground deposit [13/004] comprising mid brown rubble between 0.34m and 0.50m thick. The made ground was sealed by a concrete slab [13/001] between 0.20m and 0.40m in thickness.

#### 4.13 Trenches 15 and 17

- 4.13.1 These two trenches were both located in the south-east of the site and displayed the same stratigraphic sequence. Due to the high water table, these trenches were excavated to the top of the alluvium. No archaeology was recorded within these trenches.
- 4.13.2 The dark grey silt clay alluvium [003] was sealed by mixed grey rubbly silt modern made ground [002]; this was in turn overlain by a reinforced concrete slab [001]. Context detail for the archaeologically negative trenches is listed in Appendix 1 at the back of this report. Representative sections for each of these trenches is shown on Figure 9.

#### 5.0 THE FINDS

#### 5.1 **Summary**

5.1.1 A small assemblage of finds was recovered during the evaluation at Wandle Valley Trading Estate, Sutton. All finds were washed and dried or air dried as appropriate. They were subsequently quantified by count and weight and were bagged by material and context (Table 8). All finds have been packed and stored following CIfA guidelines (2014a). No further conservation is required.

Context	Flint	Weight (g)	Pottery	Weight (g)	CBM	Weight (g)	Slag	Weight (g)	Iron	Weight (g)	Clay 1 obacco	Weight (g)	Fire Cracked Flint	Weight (g)	Glass	Weight (g)	Wood	Weight (g)
1/004					2	5744												
3/004					1	4212												
3/005					3	5010												
3/007					2	4773												
3/008					2	5729												
3/010			1	239											1	77	1	2
4/004					1	14												
4/006					5	62	2	44										
4/012											1	5						
5/006					3	2												
5/008			1	33											1	58		
7/006	1	1							5	32								
7/010					2	181												
13/002			7	311	1	27			2	81	2	5			11	52		
15/003			5	63											1	9		
16/003			3	22									1	52				
Total	1	1	17	668	22	25754	2	44	7	113	3	10	1	52	14	196	1	2

Table 8: Finds quantification

#### 5.2 The Flintwork by Karine Le Hégarat

Context [16/003] produced a fragment of burnt unworked flint weighing 53g and context [7/006] produced a bladelet weighing 2g. While the fragment of burnt flint is chronologically undiagnostic (and may not even be prehistoric), the bladelet clearly indicates a Mesolithic date. Given its width, the broken piece is likely to belong to the later part of the period. The proximal end is absent, but it displays parallel ridges on the dorsal face. It is made on a light brown flint and exhibits incipient traces of white surface discolouration.

# **5.3** The Prehistoric Pottery by Anna Doherty

5.3.1 A single sherd of residual later prehistoric pottery, weighing 6 grams, was found alongside post-medieval material in context [16/003]. The sherd is relatively well-fired with even dark surfaces. It contains moderately-sorted, sparse flint of 0.5-2.5mm in a silty matrix with sparse larger quartz grains of up to 0.5mm. The sherd is not closely datable within the 1<sup>st</sup> millennium BC but sandier fabrics with sparser quantities and finer grades of flint, like this one, are probably more typical of the Iron Age than Late Bronze Age.

# **5.4** The Post-Roman Pottery by Luke Barber

5.4.1 The evaluation recovered just 16 sherds of post-Roman pottery, weighing 660g, from one of five individually numbered contexts. The assemblage is summarised in Table 9.

Context	Fabric	Period	No/weight	Comments
3/010	Post-medieval	EPM/LPM	1/240g	Pipkin or handled lidded jar
	Redware			x1. Fresh. All over clear
				glaze
5/008	Post-medieval	EPM/LPM	1/34g	Uncertain form. All over
	Redware			clear glaze
13/002	Unglazed	LPM	3/116g	Flower pots x2 (bevelled
	earthenware			rim)
13/002	Red Border Ware	EPM/LPM	1/8g	Jar with everted rim. All
				over clear glaze
13/002	Staffordshire	EPM	1/28g	Dish (press moulded)
	Combed			
12/222	Slipware			
13/002	Pearlware	LPM	1/2g	Mug/measure (mocha
10/000	5 (1 )	. 5. 4	4/4-0	decoration). Pale/late
13/002	Refined	LPM	1/152g	Lidded paste pot base
	Whiteware			(Base di 74mm, 31mm tall.
4.7/2.22	5 (1 )	. 5. 4	4/40	'1' impressed on base)
15/003	Refined	LPM	1/18g	Preserve jar (plain sides
45/000	Whiteware	. 5.4	0/4.4	with string groove)
15/003	English Porcelain	LPM	3/14g	Plate
15/003	English	LPM	1/32g	Drain (fe wash, salt glazed)
40/000	Stoneware			
16/003	Refined	LPM	1/14g	Uncertain form (large
	Whiteware			vessel)
16/003	Red Border Ware	EPM/LPM	1/2g	Uncertain form (clear glaze
				internally). Small vessel

Table 9: Post-Roman pottery assemblage (EPM – Early Post-medieval c. 1550-1750; LPM – Late Post-medieval c. 1750 on).

5.4.2 The earliest pottery can be placed in a c. 1675/1700 to 1750 date range. Although Red Borderware spans the early and late post-medieval periods the form and finish of the sherds from [3/010] and [5/008] would suggest they

belong to this earliest phase. Both sherds are quite fresh. In addition the Staffordshire dish from [13/002] would also best fit into this date range though it could be an old or residual vessel in this deposit.

5.4.3 The majority of the pottery is of the 19<sup>th</sup> century. The presence of pearlware but no creamware would be in keeping with this and the collective group from [13/002] can be placed in the first half of the 19<sup>th</sup> century (with residual pieces) while that from context [15/003] clearly belongs to the end of the 19<sup>th</sup> or beginning of the 20<sup>th</sup> century. Overall the assemblages are too small to reliably comment on, but there is nothing that would suggest anything other than a domestic source.

# 5.5 The Ceramic Building Material by Isa Benedetti-Whitton

- 5.5.1 A small assemblage of nineteen pieces of ceramic building material (CBM) weighing 23,115g was hand-collected from ten evaluation contexts. The bulk of the material appeared to be of a Tudor or post-medieval date, although residual Roman material was found in context [7/010], and the CBM collected from contexts [4/004], [4/006] and [5/007] was too fragmentary to date. A piece of 19<sup>th</sup>-20<sup>th</sup> century machine-made, white glazed tile was recovered from context [13/002].
- 5.5.2 The CBM was primarily comprised of brick samples in typically Tudor fabrics, as defined by Museum of London Archaeology (see Table 10). Bricks in fabric MoL 3065 (and a slightly paler, silty variant) were the most common, with five examples collected overall from contexts [1/004], [3/007], and [3/008]. A single brick in MoL ?3042 was recovered from [3/005], which is also a common Tudor fabric type, but can date as late as c.1700. Another brick in more definite post-fire fabric 3034 was collected from [1/004].
- 5.5.3 The bricks, irrespective of fabric type, were all of similar size (222-235 x 105-110 x 58-65mm), although the forms of several 3065 bricks were slightly irregular. The traces of mortar were of a friable lime mortar, which is most likely to date before 1666, although outside of London can date into the 18<sup>th</sup> century.
- 5.5.4 An intact unglazed floor tile measuring 250mm<sup>2</sup> in a micaceous and sandy fabric was collected from [3/004]. Floor tiles of this type were used from the Tudor period until the early 19<sup>th</sup> century when they were superseded by machine made floor tiles.

Fabric	Description	
MoL 3034	Dark red, reddish purple fabric with burnt black ash, flint inclusions (up to 6mm) with varying amounts of quartz (up to 0.8mm). Common yellowish white silty bands in clay matrix. (Post-1666 fabric)	
MoL ?3042	Clay matrix characterised by yellow speckling. Reddish maroon clay inclusions give the fabric a slight lumpy texture. Occasional sandy lenses, otherwise few other inclusions, apart from scatter calcium carbonate (up to 1.5 mm) and quartz (up to 0.6mm) (Tudor-18 <sup>th</sup> century)	

MoL 3065	Very sandy fabric with frequent quartz (up to 0.8mm), occasional dark
	red iron oxide (up to 3.0mm) and white flint/shell(?) inclusions. (Tudor)

Table 10: CBM fabric descriptions for Wandle Riverside

# **5.6** The Clay Tobacco Pipe by Luke Barber

5.6.1 Just three stem fragments were recovered from the site. Context [4/012] produced a fresh 6g piece that can best be placed between c. 1675 and 1750. Context [13/002] produced two slightly abraded pieces (4g) that can be placed in a c. 1750-1900 date range.

# 5.7 The Glass by Luke Barber

5.7.1 Four contexts produced 16 pieces of glass. As with the pottery both early and late post-medieval material is present. Contexts [3/010] and [5/008] produced the former – both containing single shards from heavily corroded dark green wine bottles of onion or mallet form (78 and 58g respectively). The shard from [3/010] consists of part of the long neck with crudely applied collar. Context [13/002] contained 13 pieces of uncorroded window glass (52g) ranging between 1.4 and 2.6mm in thickness. Colourless, very pale green and aqua examples are present, but all are of probable 19<sup>th</sup>- century date. The final piece of glass consists of an 8g fragment of milk glass of uncertain form, but of 19<sup>th</sup>- to early 20<sup>th</sup>- century date (context [15/003]).

# 5.8 Miscellaneous Material by Luke Barber

5.8.1 Context [3/010], dated to between c. 1675/1700-1750, produced the remains of a 14mm diameter, 26mm long bottle cork. Context [4/006] contained a 38g piece of dense iron slag, though the process that formed it is uncertain.

# 5.9 The Bulk Metalwork by Susan Chandler

5.9.1 A total of 7 iron objects were recovered during the works on site, weighing a total of 113g. These objects were recovered from two contexts of probable post-medieval date. Context [7/006] contained five nails or nail fragments, all of which are heavily corroded, obscuring their forms; context [13/002] contained two objects, one which is possibly a file or awl with a triangular section, tapering to a pointed tang at one end and broken at the other. The second object is also heavily corroded making identification impossible.

#### 7.0 DISCUSSION AND CONCLUSIONS

## 7.1 Overview of stratigraphic sequence

- 7.1.1 Natural gravels were recorded in only in the northern part of the site due to the high water table and level of contamination in the south. Natural gravels were observed between 20.88m and 22.33m aOD. The gravels were overlain by alluvial clay across much of site. The levels of both the gravels and the alluvium varied greatly suggesting a series of braided streams may have run across site.
- 7.1.2 In the north-east of the site a buried topsoil was recorded, this deposit showed some alluvial characteristics but was dryer and less clayey than the alluvium. Modern made ground deposits were recorded across the site and were overlain by concrete slabs across the majority of trenches. Only in the north-east where the ground level had been raised significantly was the concrete absent.
- 7.1.3 Archaeological features were cut into the alluvial clay where it was present and into the underlying gravels elsewhere. Almost entirely confined to the north of the site and included, walls and floors, drains, ditches and postholes, all of post-medieval date despite containing some residual prehistoric and Roman material. The features could only be dated broadly finds ranging from the 16<sup>th</sup> to 19<sup>th</sup> centuries. Taken as a whole, a later date is likely when allied to cartographic evidence showing the presence of a skinning mill in this part of the site during the 18<sup>th</sup> and 19<sup>th</sup> centuries. It is unclear whether a mill already existed in this area which could account for the earlier date material.
- 7.1.4 The lack of features on the southern part of the site except for a single wattle fence suggest little activity in this area, however, given that the gravels were not observed there is the chance of archaeology underlying the upper part of the alluvium.

## 7.2 Deposit survival and existing impacts

- 7.2.1 The industrial nature of previous developments on site was found to have had an adverse impact on deposit survival with truncation from previous foundations and drains. Although the trenches avoided known contamination hotspots, perched water within drains and foundation cuts allowed contaminated material to enter the trenches at a relatively high level.
- 7.2.2 Despite these adverse impacts much of site showed a relatively undisturbed sequence with gravels overlain by alluvium and in the north east an intact, buried topsoil.

## 7.3 Discussion of archaeological remains by period

7.3.1 While no prehistoric features were observed on site, the presence of braided channels as suggested by QUEST (QUEST 2016, Appendix 2) is likely. The Wandle Gravels and the overlying alluvium undulated significantly (up to 1.31m just within Trench 4). The gravels are thought to be of Late Devensian (15,000-10,000 years BP) (QUEST 2016, Appendix 2) with the overlying

alluvium of a broad Holocene date. No land surfaces were encountered and the only definite channel was of post medieval date. Residual prehistoric and Roman finds were recorded within later features; these included a Mesolithic flint blade, a sherd of later prehistoric pottery and Roman CBM. Given the presence of the River Wandle and probable braided channels, which would have caused high mobility of material, it is unsurprising that earlier artefacts were present as residual finds on site.

- 7.3.2 All of the encountered features were of post-medieval date and almost all were located in the north of the site. These remains comprised probable drainage ditches as well as postholes and masonry. The ditches appeared to form a system of drains, probably to keep the land in a relatively dry state. These ditches were only present in the north of the site; they are notable for the lack of dateable material within the fills. The postholes appear almost exclusively in association with the ditches suggesting some form of structure(s) lay on the land being drained. The postholes contained finds ranging from the 17<sup>th</sup> to 19<sup>th</sup> centuries.
- 7.3.3 The masonry structures were recorded exclusively in the north-western corner of the site and all lay on a similar alignment. They comprised wall foundations as well as a fragment of tile floor. The best preserved structures were a series of drains, two of which were arched with brick; the bricks and tiles from these features were generally of Tudor or earlier post-medieval date although the site's location outside London could indicate a date as late as the 18<sup>th</sup> century. Historic mapping (CgMs 2013) shows a skinning mill in this area of the site during the 18<sup>th</sup> century; by 1840 a more detailed map shows building on a similar alignment and location to the structural remains (Figure 10) suggesting either the reuse of earlier materials or the continued use of an earlier building.
- 7.3.4 A truncated wall was encountered lining a channel within Trench 4; the use of masonry as a channel wall could indicate this feature was being utilised within the mill complex identified to the north. The precise alignment of the channel could not be ascertained within the trench but it appeared to run roughly west to east alignment.
- 7.3.5 The wattle fencing recorded within Trench 13 appears to have been used as a boundary to a channel as suggested by the presence of a fluvial deposit identified by QUEST (Dan Young, pers. comm.) adjacent to the fencing. This feature was relatively insubstantial and heavily truncated; it does not appear to be of great age as it was still intact above the alluvium within the base of the modern made ground.

# 7.4 Consideration of research aims

- 7.4.1 The evaluation has established that archaeological remains survived predominantly in the north of the site. While isolated truncation was recorded much of the site displayed reasonable levels of preservation.
- 7.4.2 While no prehistoric remains were recorded on site; the evaluation did confirm and add to the deposit model (QUEST 2016, Appendix 2). The undulations within the gravels and alluvium suggest braided channels existed

on the site; the gravels are likely to be of late Devensian date but lack of an established date for the alluvium makes any further conclusions about later prehistoric activity difficult. Residual prehistoric finds comprising a Mesolithic flint blade and later prehistoric pottery were found residually within a post-medieval ditch and the top of the alluvium respectively.

- 7.4.3 No Roman, Saxon or medieval features were encountered on the site, two fragments of Roman CBM were found residually within a later ditch. The lack of finds from these periods within the alluvium suggests that the site remained relatively undisturbed during these periods; it is likely that the locally high water table would have made most of the area very damp.
- 7.4.4 The vast majority of the encountered post-medieval remains were located in the north-west of the site; they included a system of drainage ditches, postholes, brick built drains and masonry floors and walls. The system of drainage ditches was not closely dated but the postholes which are likely to be associated, were dated to the 17<sup>th</sup> to 19<sup>th</sup> centuries. The ditches most likely represent an attempt to keep the land dry and usable.
- 7.4.5 The floors and wall foundation as well as the brick built drains all lay on a similar alignment; while the bricks from these features were dated to the 16<sup>th</sup> to 18<sup>th</sup> centuries; historic mapping suggests they originated as part of the skinning mill seen on 17<sup>th</sup> and 18<sup>th</sup> century maps. It is unclear whether the ditches and postholes were associated with the structural remains; the dissimilarity in the alignment of the structural features and the ditches make this unlikely; certainly the 1840 map (Figure 10) does not depict any land division on this alignment. A post-medieval channel also lay in the north-west of the site; and could have been associated with the mill.
- 7.4.6 The wattle fencing found in the south of the site is likely to have acted as a wall to a small channel identified by QUEST. While this feature was not accurately dated, the relatively good preservation despite being located at the surface of the alluvium would suggest a late date.
- 7.4.7 The post-medieval remains suggest attempts to utilise a marginal area of land through drainage. This appears to have been at least partially successful as the structural remains attest. Cartographic sources of the 18<sup>th</sup> and 19<sup>th</sup> centuries show the increased utilisation of the River Wandle (CgMs 2013) probable for both commerce and as source of power for the mills shown on these maps. The skinning mill probably represented by the structural remains on site was on of a number of such buildings along the river.

## 7.5 Potential impacts on archaeological remains

#### **Contamination Remediation**

7.5.1 The contamination remediation plan (RSK 2016) has been consulted regarding potential impacts upon the archaeology. While the majority of the site is only to be stripped to a maximum depth of 0.60m bgl, contamination hotspots in the north and the south will be completely removed down to the Wandle Gravels. This will certainly have an impact on any archaeological remains present in these areas, however, given that these areas were

intentionally avoided during the evaluation it is unclear what level of remains would be present.

7.5.2 The removal of a gas governor and associated piping in the north-west of the site is likely to have an impact on the remains of the probable mill found during this evaluation, the depth of the gas governor and piping remains unclear at the present time.

#### **Piling Plan**

- 7.5.3 A piling plan for the southern part of site was provided by Redrow and has been consulted; the piling plan for northern area has not yet been finalised and so the southern piling scheme has been used as a general template (Figure 11).
- 7.5.4 The piles themselves will be sleeved and will typically have a 0.96m deep ground beam at their surface. The piling plan for the southern portion of the site shows a relatively even distribution with some piles located close to the wattle fence found in Trench 13.
- 7.5.5 Across much of the site the ground beam will not extend to a sufficient depth to affect any remains; however, where remains were shallower such as in Trenches 3, 4 and 13 archaeological remains could be adversely affected.

#### 7.6 Conclusions

- 7.6.1 The evaluation confirmed the presence of probable braided channels as previously postulated (QUEST 2016, Appendix 2) within the Wandle Gravels and overlying alluvium. While residual prehistoric and Roman material was found, the earliest remains on site were post-medieval in date. The majority of the remains were located in the north-west of the site. A series of ditches formed a probable drainage system; while these were not well dated, a number of postholes very likely to be associated with the ditches, were dated to the 17<sup>th</sup> to 19<sup>th</sup> centuries.
- 7.6.2 Structural remains in the north-west included wall foundations, a tile floor and brick lined drains; they all lay on a similar alignment and were dated to the 16<sup>th</sup> to 18<sup>th</sup> centuries. Cartographic sources show a skinning mill in this part of the site during the 18<sup>th</sup> and 19<sup>th</sup> centuries and the remains were similarly aligned to the buildings on the maps. This could indicate the continued use of earlier buildings or the reuse of the bricks. A post-medieval channel also lay in the north-west of the site and is likely to be associated with the mill.
- 7.6.3 Due to the high water table and contamination, excavation ceased at the top of the alluvium in the southern part of site. The solitary feature recorded in the south of the site was a section of wattle fencing for a possible channel. This feature is likely to be of late post-medieval or modern date.
- 7.6.4 The features were sealed by a buried topsoil in dryer parts of the north of the site. Elsewhere, the alluvium was overlain by modern made ground and concrete slabs.

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7.6.5 In light of the limited piling plan and the contamination it seems likely that some degree of impact will occur to the archaeological remains; the extent of this impact will be clarified by further detailed methodologies for both the remediation and piling.

#### **BIBLIOGRAPHY**

CgMs 2013. Archaeological Desk Based Assessment – Wandle Valley Trading Estate, Goat Road, Beddington Corner, Sutton. CgMs Consulting unpublished report

CgMs 2016. Written Scheme of Investigation for an Archaeological Evaluation – Wandle Riverside, Goat Road, Beddington Corner, Sutton. CgMs Consulting unpublished report

ClfA 2014a. Standard and Guidance for the collection, documentation, conservation and research of archaeological materials

CIfA 2014b. Standard and Guidance for archaeological field evaluation (revised). Chartered Institute for Archaeologists

CIfA 2014c. Code of Conduct (revised). Chartered Institute for Archaeologists

Historic England 2015. Standards for Archaeological Work in Greater London

Museum of London 2002. A Research Framework for London Archaeology. London: MoLA

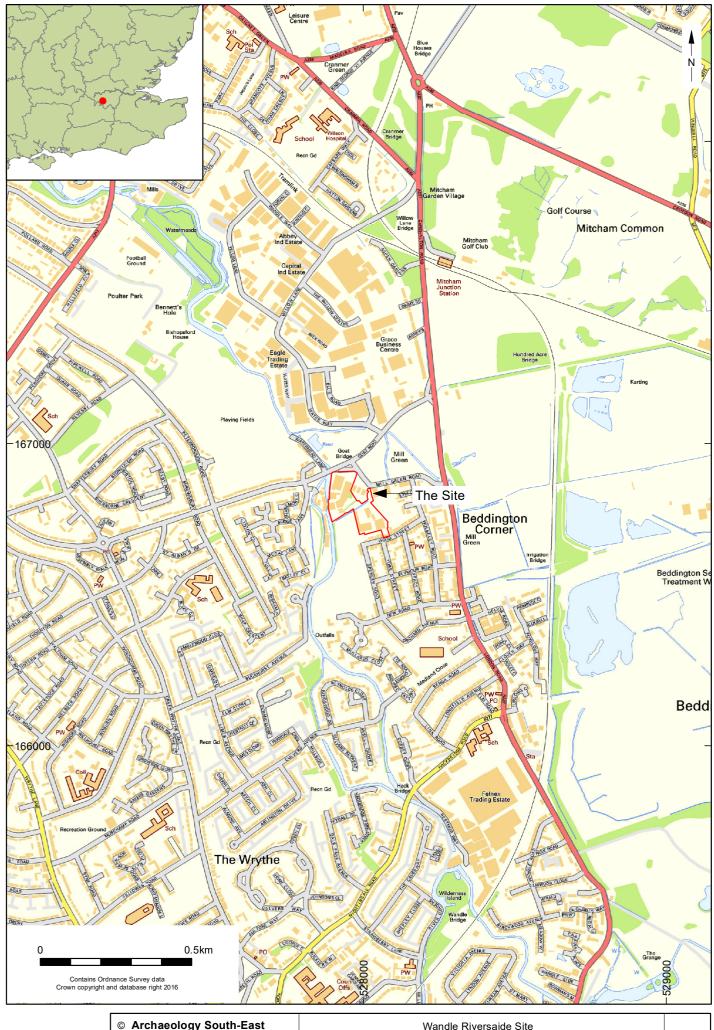
PCA 2016. Wandle Riverside, Goat Road Beddington Corner London Borough of Sutton Archaeological Watching Brief report. Pre-Construct Archaeology unpublished report

QUEST 2016. Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton Updated Geoarchaeological Deposit Model Report. QUEST unpublished report

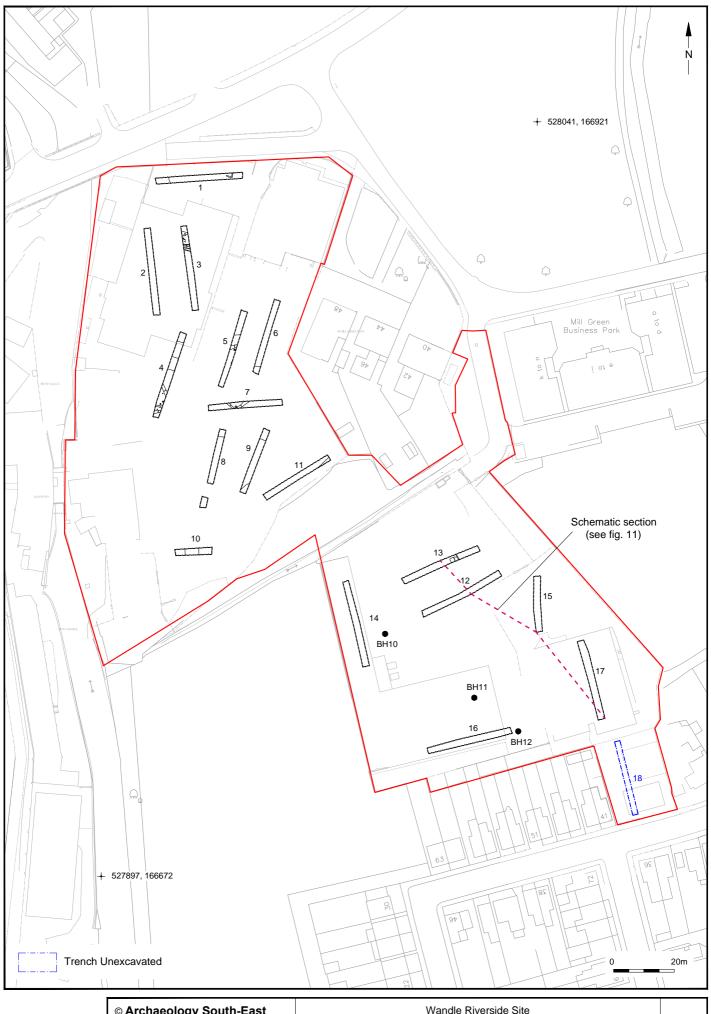
RSK 2016. Wandle Valley, Mitcham. Remedial Strategy Report. RSK unpublished report

#### **ACKNOWLEDGEMENTS**

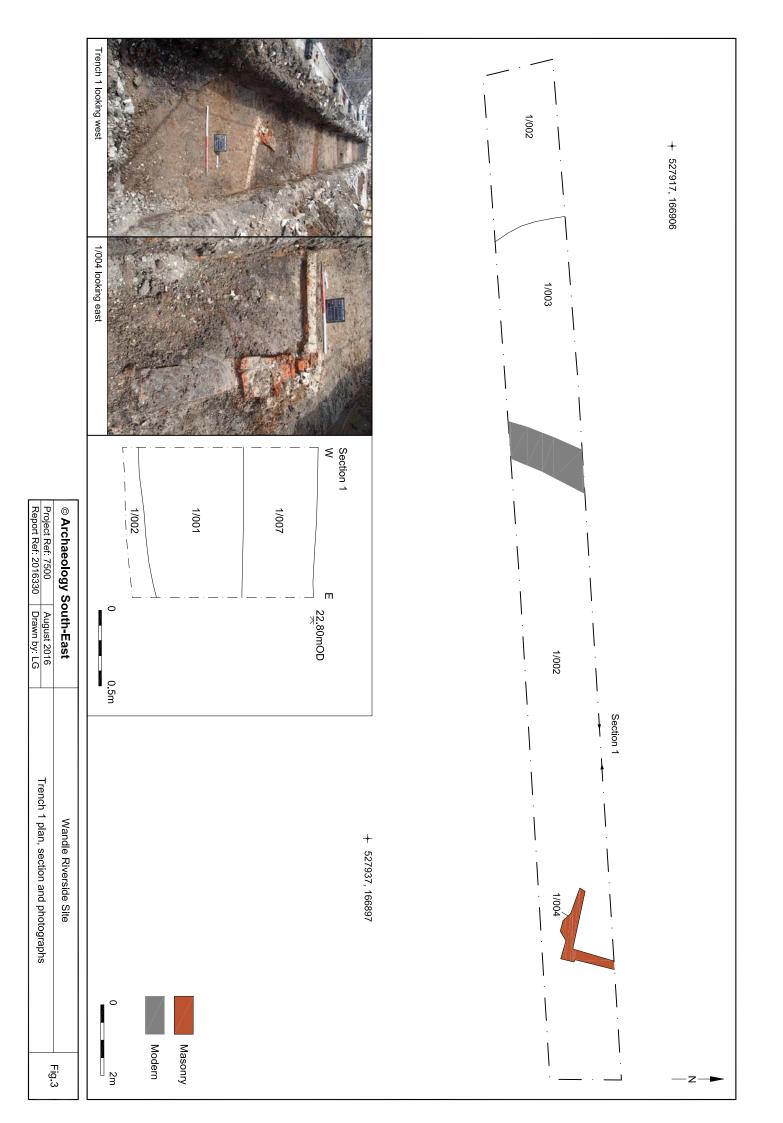
ASE would like to thank CgMs Consulting for commissioning the work and for their assistance throughout the project. Thanks are also due to Laura O'Gorman and Gill King of GLAAS for their guidance and monitoring. The excavation was directed by lan Hogg. The author would like to thank all archaeologists who worked on the excavations. Lauren Gibson who produced the figures for this report; Andy Leonard and Paul Mason managed the excavations and Jim Stevenson and Andy Margetts the post-excavation process.

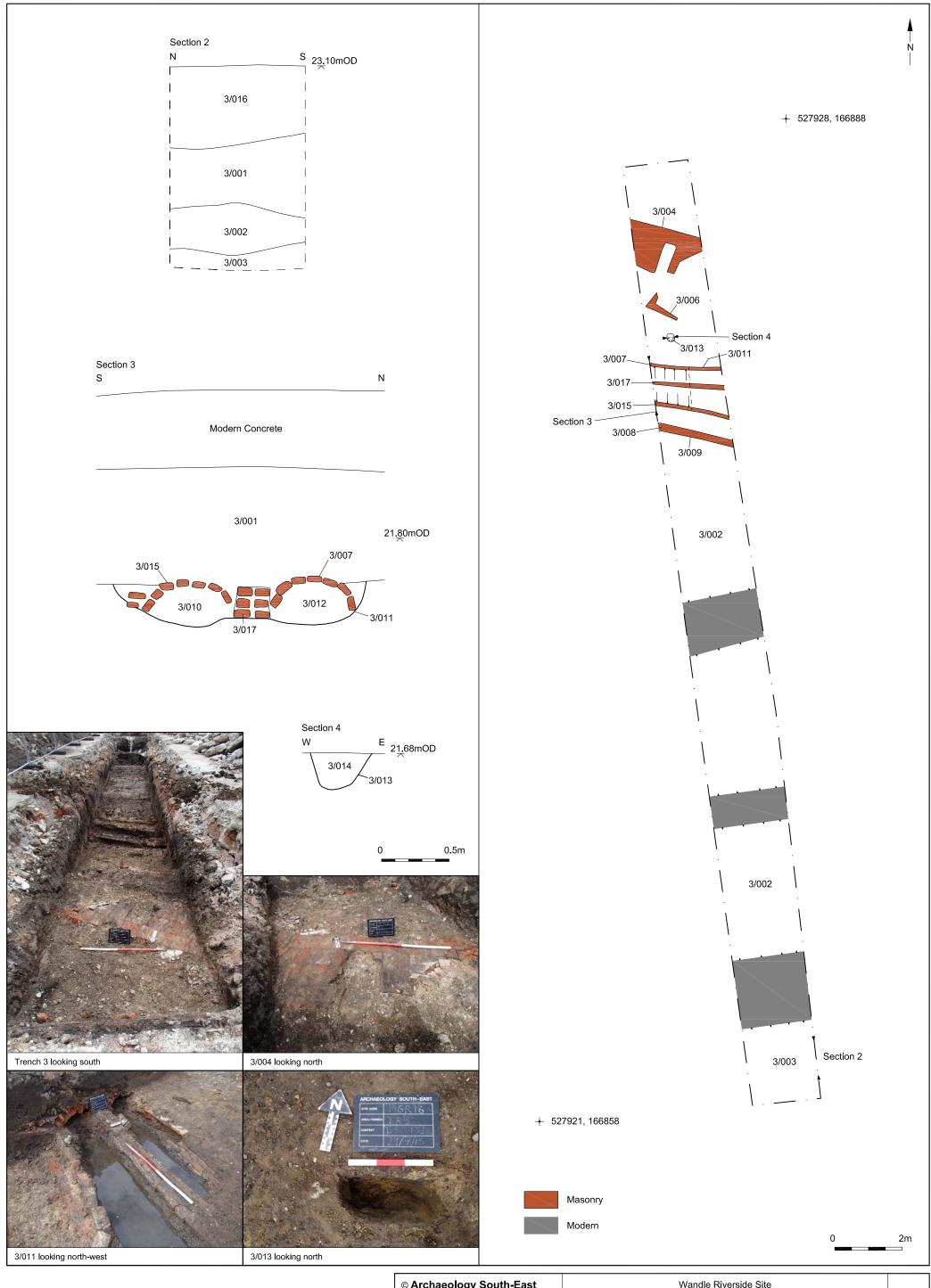


© Archaeology South-East		Wandle Riversaide Site	Fig. 1
Project Ref: 7500	August 2016	Site location	1 19. 1
Report Ref: 2016330	Drawn by: LG		

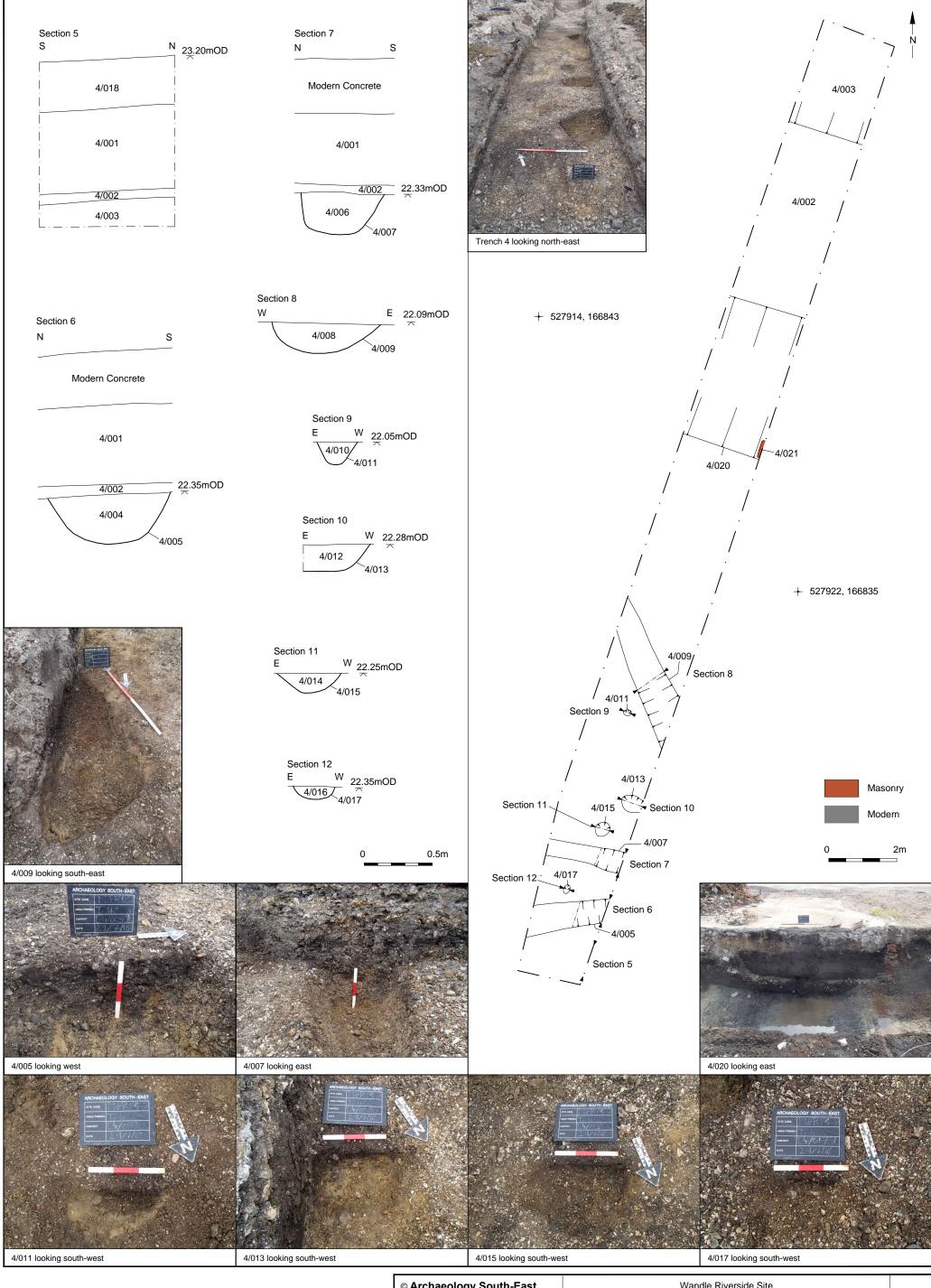


© Archaeology South-East		Wandle Riverside Site	F: 0
Project Ref: 7500	August 2016	Transh lassition Dlan	Fig.2
Report Ref: 2016330	Drawn by: LG	Trench location Plan	

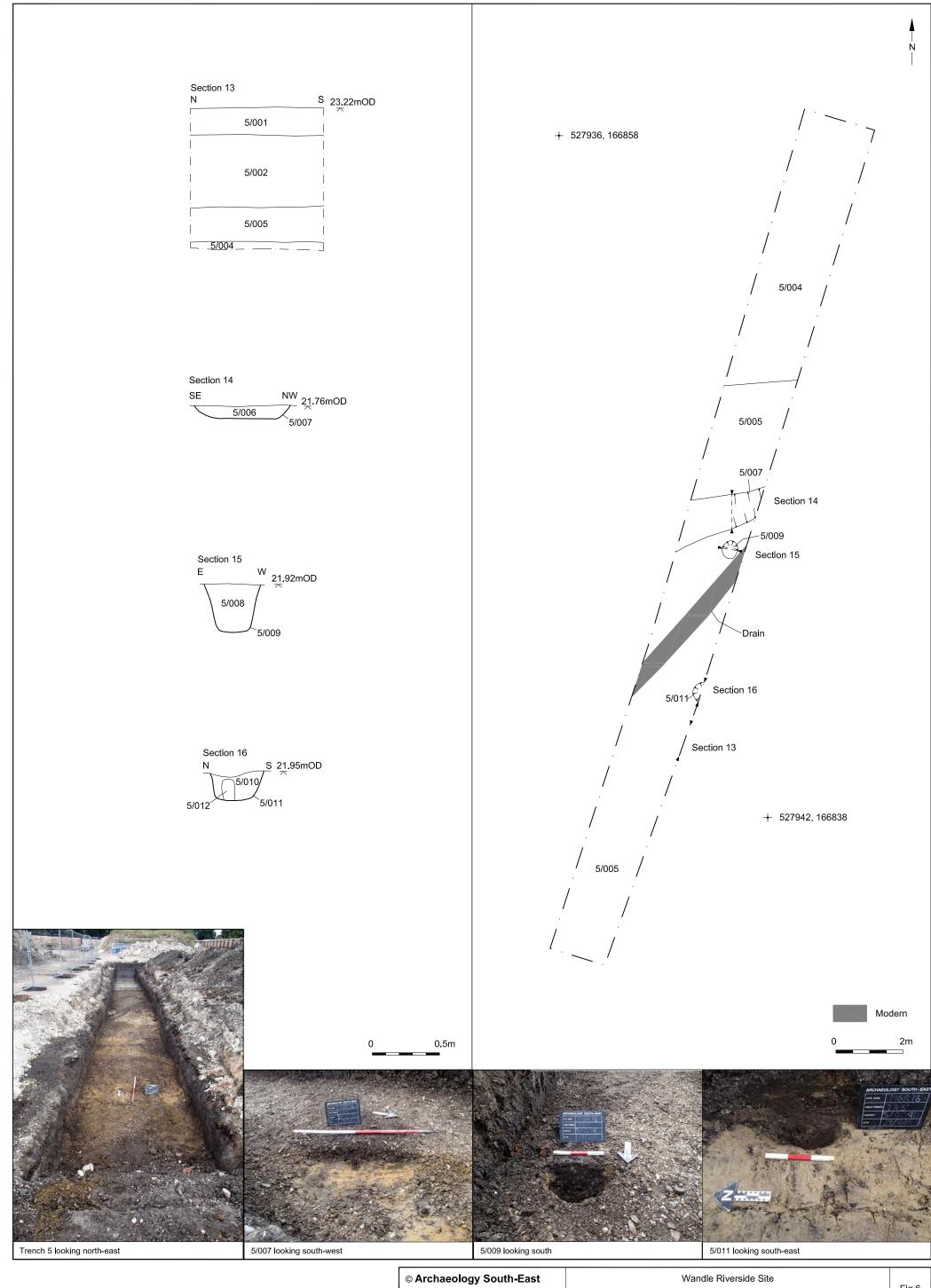




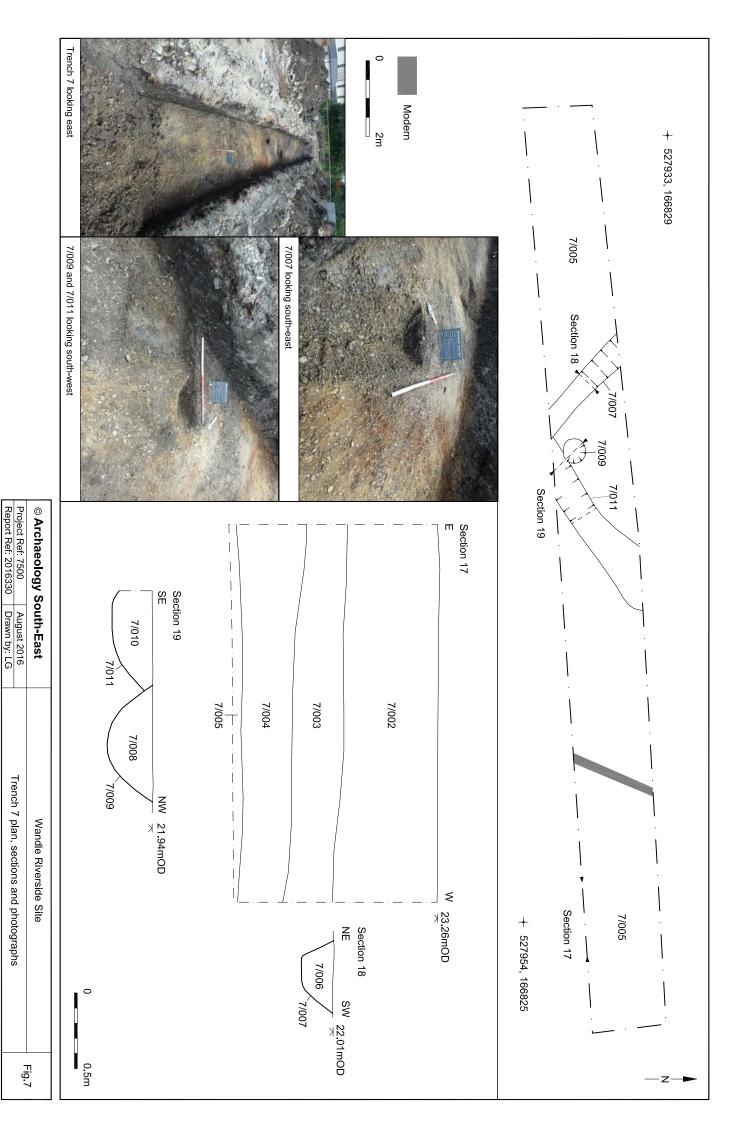
© Archaeology South-East		Wandle Riverside Site	Fig.4	l
Project Ref: 7500	August 2016	Trench 3 plan, sections and photographs	1 19.7	l
Report Ref: 2016330	Drawn by: LG	rrenon 3 plan, sections and photographs		

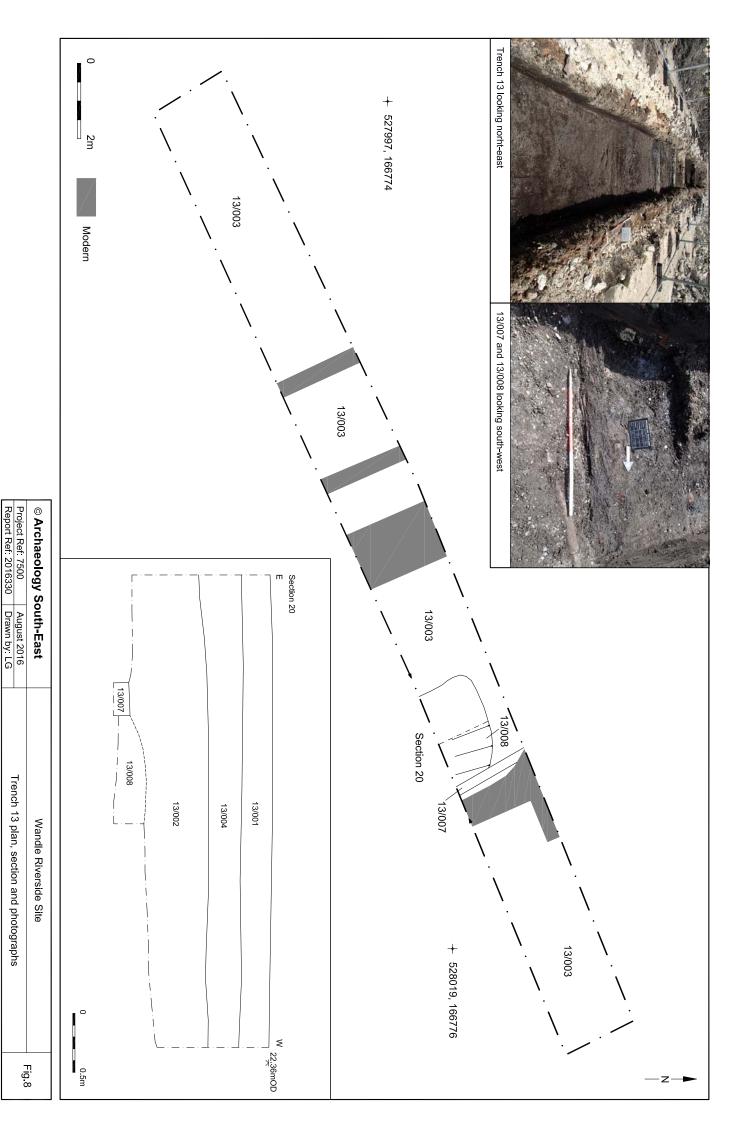


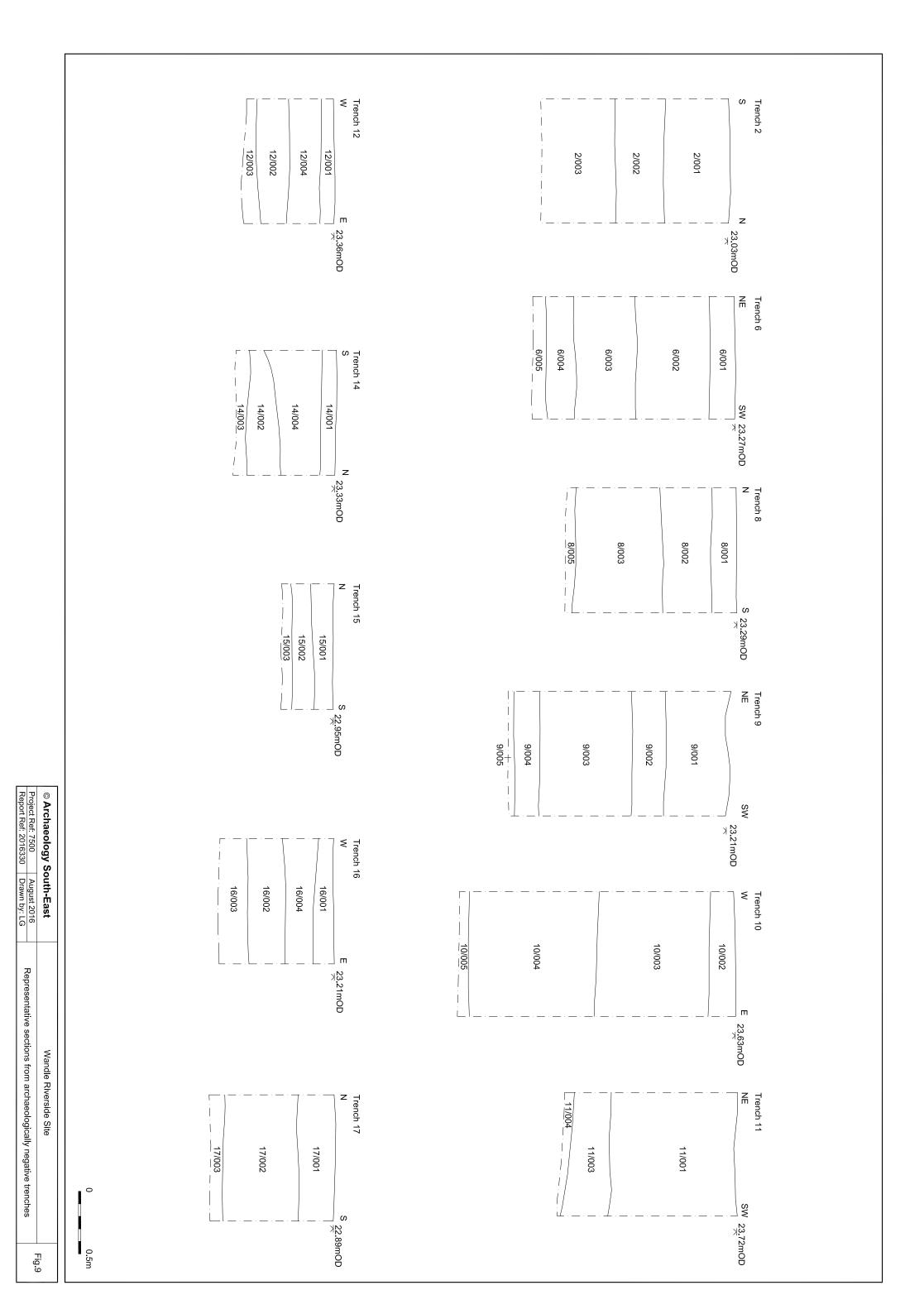
© Archaeology S	outh-East	Wandle Riverside Site		
Project Ref: 7500	August 2016	Trench 4 plan, sections and photographs	Fig.5	
Report Ref: 2016330	Drawn by: LG	Trendri 4 plant, sections and photographs		i



© Archaeology South-East		Wandle Riverside Site	Fig.6
Project Ref. 7500	August 2016	Trench 5 plan, sections and photographs	1 19.0
Report Ref: 2016330	Drawn by: LG	Trenon 5 plan, sections and photographs	

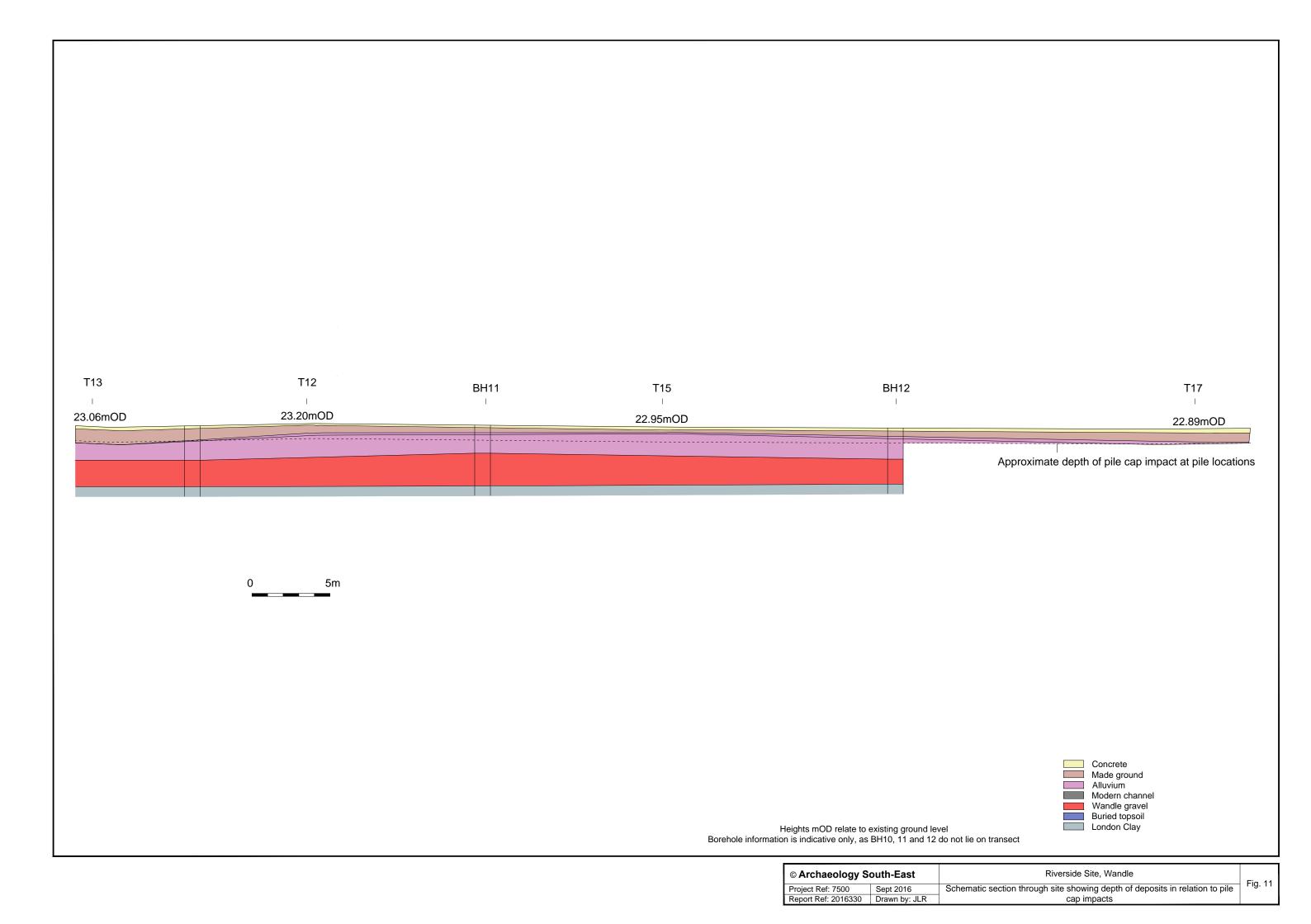








© Archaeology S	outh-East	Wandle Riverside Site	
Project Ref: 7500	August 2016	1840 Beddington and Wallington Tithe Map with trenches overlain	Fig.10
Report Ref: 2016330	Drawn by: LG	1040 beddington and wailington tittle wap with trenches overlain	



ASE Report No: 2016096

#### **HER Summary**

Site Code	MGR 16	MGR 16				
Identification Name and	Wandle Rive	erside, Beddi	ngton Corr	er, Goat Road		
Address						
County, District &/or	LB Sutton					
Borough						
OS Grid Refs.	TQ 27950 6	6850				
Geology	Wandle Gra	vels				
Arch. South-East	7500					
Project Number						
Type of Fieldwork	Eval.					
Type of Site	Deep					
	Urban					
Dates of Fieldwork	17-07-					
	2016 to					
	02-08-					
	2016					
Sponsor/Client		CgMs Consulting				
Project Manager	Andy Leonard					
Project Supervisor	Ian Hogg		_			
Period Summary						
			PM	Other		
				Modern		

The evaluation comprised 17 machine excavated trenches. The natural gravels undulated significantly suggesting the presence of braided channels of the adjacent River Wandle. The gravels were overlain by alluvium across much of the site; in some higher areas, the gravels were overlain by a buried topsoil of late post medieval date. Localised truncation had occurred where previous buildings had stood. Excavation ceased at the top of the alluvium in the south of the site due to the high water table combined with the presence of contamination.

The evaluation found evidence of a post-medieval skinning mill known to have existed in the north-west of the site from cartographic sources. The remains comprised brick walls and floors as well as brick lined drains. A channel in this area is also likely to be associated with the mill. The bricks from these features appeared to be of a slightly earlier date which suggests either the reuse of earlier building materials or the continued use of an earlier building.

A probable system of drainage ditches was also recorded in the north of site, these features did not contained secure dating evidence but were found in associated with a series of postholes dated to the 17<sup>th</sup> to 19<sup>th</sup> centuries. It is unclear whether these features were associated with the nearby structural remains.

The only feature recorded in the southern part of the site was a section of wattle fencing acting as a wall to a probable channel. This feature could not be fully excavated due to the water table but is likely to be of late post-medieval date.

#### **OASIS Form**

Printable version

OASIS ID: archaeol6-259700

Project details

Project name Wandle Riverside, Beddington Corner, Sutton

The evaluation comprised two 17 machine excavated trenches. The natural Wandle Gravels were recorded at between 20.88m and 22.43m aOD. The gravels undulated significantly suggesting the presence of braided channels of the adjacent River Wandle; . The gravels were overlain by alluvium across much of the site; in some higher areas, the gravels were overlain by a buried topsoil of late post medieval date. The trenches were sealed by modern made ground and a concrete slab. Localised but significant truncation had occurred where previous buildings had stood. Excavation could not extend beyond the top of the alluvium in the south of the site due to the high water table combined with the presence of contamination. The evaluation found evidence of a post-medieval skinning Short description from cartographic sources. The remains comprised heavily

of the project

mill known to have existed in the north-west of the site truncated brick walls and floors as well as brick lined drains. A channel is also likely to be associated with the mill. The bricks from these features appeared to be of a slightly earlier date which suggests either the reuse of earlier building materials or the continued use of an earlier building. A probable system of drainage ditches was also recorded in the north of site, these features did not contained secure dating evidence but were found in associated with a series of postholes dated to the 17th to 19th centuries. It is unclear whether these features were associated with the nearby structural remains. The only feature recorded in the southern part of the site was a section of wattle fencing acting as a wall to a probable channel. This feature could not be fully excavated due to the water table but is likely to be of late post-medieval date.

Project dates

Start: 17-07-2016 End: 02-08-2016

Previous/future

work

Yes / Not known

Any associated

project reference MGR 16 - Sitecode

codes

Any associated

project reference 7500 - Contracting Unit No.

codes

Type of project Field evaluation

Site status Area of Archaeological Importance (AAI)

Current Land use Vacant Land 3 - Despoiled land (contaminated derelict and

? ?brownfield? sites)

Monument type DRAINAGE DITCHES Post Medieval

Monument type POSTHOLES Post Medieval

Monument type FLOOR Post Medieval
Monument type WALLS Post Medieval
Monument type DRAINS Post Medieval

Monument type WATTLE FENCE Post Medieval

Significant Finds POTTERY Post Medieval

Significant Finds CBM Post Medieval Significant Finds GLASS Post Medieval

Methods & techniques

""Sample Trenches""

Development

type

Urban commercial (e.g. offices, shops, banks, etc.)

Development

type

Urban residential (e.g. flats, houses, etc.)

Prompt National Planning Policy Framework - NPPF

Position in the

planning process

After full determination (eg. As a condition)

Project location

Country England

GREATER LONDON SUTTON WALLINGTON AND

Site location BEDDINGTON Wandle Riverside, Goat Road,

**Beddington Corner** 

Postcode CR4 4HZ

Study area 2.1 Hectares

TQ 27950 66850 51.38574288295 -0.161025402097 51

Site coordinates 23 08 N 000 09 39 W Point

Height OD /

Depth

Min: 20.88m Max: 22.43m

**Project creators** 

Name of

Archaeology South-East

Project brief

Organisation

originator

**GLAAS** 

Project design

originator

ASE/CgMs

Project

director/manager

Andy Leonard/Jim Stevenson

Project

director/manager

Paul Mason

**Project** 

supervisor

Ian Hogg

Type of

sponsor/funding CgMs Consulting

body

Name of

sponsor/funding CgMs Consulting

body

Project archives

Physical Archive

recipient

LAARC

**Physical** 

Contents

"Animal Bones", "Ceramics", "Glass"

Digital Archive

recipient

**LAARC** 

**Digital Contents** 

"Stratigraphic", "Survey"

Digital Media

available

"Images raster / digital photography", "Survey"

Paper Archive

recipient

**LAARC** 

**Paper Contents** 

"Stratigraphic", "Survey"

Paper Media

"Context

available

sheet","Drawing","Plan","Report","Section","Survey "

Entered by

Ian Hogg (ian.hogg@ucl.ac.uk)

Entered on

23 August 2016

Appendix 1: Archaeologically negative trenches: List of recorded contexts

Trench	Context	Туре	Interpretation	Depth	Height
T2	2/001	Masonry	Concrete slab	0.20	23.11-23.12
T2	2/002	Layer	Made ground	0.60-1.45	22.91-21.92
T2	2/003	Layer	Alluvium	0.20-1.00	21.67-22.32
T2	2/004	Layer	Natural	-	20.88-21.32
T6	6/001	Masonry	Concrete slab	0.20	23.06-23.11
T6	6/002	Layer	Made ground	0.30-0.61	22.86-22.91
T6	6/003	Layer	Buried topsoil	0.45-0.60	22.25-22.61
T6	6/004	Layer	Alluvium	0.22-0.30	21.79-22.01
T6	6/005	Layer	Natural	-	21.32-21.57
T8	8/001	Masonry	Concrete slab	0.20	23.13-23.20
T8	8/002	Layer	Made ground	0.25-0.41	22.93-23.00
T8	8/003	Layer	Buried topsoil	0.41-0.70	22.52-22.75
T8	8/004	Layer	Alluvium	0.30-0.50	22.10-22.23
T8	8/005	Layer	Natural	-	21.77-21.94
Т9	9/001	Layer	Made ground	0.55-0.80	22.97-24.21
Т9	9/002	Layer	Levelling deposit	0.25-0.35	22.42-23.41
Т9	9/003	Layer	Buried topsoil	0.50-0.75	22.17-23.06
Т9	9/004	Layer	Made ground	0.45	22.56
Т9	9/005	Layer	Alluvium	0.20-0.25	21.42-21.80
Т9	9/006	Layer	Natural	-	21.22-21.64
T10	10/001	Layer	Made ground	1.00	24.43
T10	10/002	Masonry	Concrete slab	0.20	23.71
T10	10/003	Layer	Made ground	0.90	23.51
T10	10/004	Layer	Alluvium	0.90-1.05	22.61
T10	10/005	Layer	Natural	-	21.52-21.71
T11	11/001	Layer	Made ground	0.80-1.00	23.58-24.26
T11	11/002	Layer	Levelling deposit	0.30	23.46
T11	11/003	Layer	Made ground	0.35-0.38	22.58-23.16
T11	11/004	Layer	Natural	-	22.03-22.23
T12	12/001	Masonry or other construction	Concrete slab	0.10-0.15	23.32
T12	12/002	Layer	Made ground	0.10-0.40	23.17-23.22
T12	12/003	Layer	Alluvium		22.84-22.96
T12	12/004	Layer	Made ground	0.26-0.40	22.70-22.77
T14	14/001	Masonry	Concrete slab	0.11-0.20	23.40
T14	14/002	Layer	Made ground	0.28-0.48	22.87-22.98
T14	14/003	Layer	Alluvium	-	22.50-22.75
T14	14/004	Layer	Made ground	0.28-0.42	23.20-23.29
T15	15/001	Masonry	Concrete slab	0.18-0.45	23.17
T15	15/002	Layer	Made ground	0.16-0.50	22.72-22.99

Archaeology South-East Eval: Wandle Riverside, Beddington Corner, Goat Road, LB Sutton ASE Report No: 2016096

Trench	Context	Туре	Interpretation	Depth	Height
T15	15/003	Layer	Alluvium	1	22.27-22.87
T16	16/001	Masonry	Concrete slab	0.10-0.18	23.38
T16	16/002	Layer	Made ground	0.34	23.23
T16	16/003	Layer	Alluvium	1	22.18-22.90
T16	16/004	Layer	Made ground	0.28-1.10	23.20-23.28
T17	17/001	Masonry	Concrete slab	0.30	23.10
T17	17/002	Layer	Made ground	0.30-0.60	22.80
T17	17/003	Layer	Alluvium	-	22.20-22.51

### Appendix 2: QUEST Updated Geoarchaeological Deposit Model Report



QUEST QUATERNARY SCIENTIFIC

WANDLE TRADING ESTATE, GOAT ROAD, BEDDINGTON CORNER,

LONDON BOROUGH OF SUTTON

Updated Geoarchaeological Deposit Model Report

**NGR**: TQ 279 668

Site Code: GRD16

Date: 12<sup>th</sup> August 2016

Written by: D.S. Young

**QUEST**, School of Archaeology, Geography and Environmental Science, Whiteknights, University of Reading, RG6 6AB

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University of Reading 2016



#### **DOCUMENT HISTORY:**

REVISION	DATE	PREPARED	SIGNED	APPROVED	SIGNED	REASON
		BY		BY		<b>FOR ISSUE</b>
V1	14/04/16	Dan		Rob Batchelor		First edition
v2	12/08/16	Young Dan		Rob		Updated
V-	12/00/10	Young		Batchelor		deposit model

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#### 1. NON-TECHNICAL SUMMARY

A programme of geoarchaeological deposit modelling was carried out by Quaternary Scientific in connection with the proposed redevelopment of land at Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton. The aims of the geoarchaeological investigations at the site were: (1) to clarify the nature of the sub-surface stratigraphy across the site, in particular to elucidate the size and orientation of a possible palaeochannel traversing the site; and (2) to clarify the nature, depth, extent and date of any alluvium and peat deposits. In order to achieve these aims, a programme of geoarchaeological monitoring and deposit modelling was carried out. The deposit model incorporated the geotechnical borehole descriptions, records from those boreholes monitored in the field, and selected sedimentary sequences arising from archaeological investigations at the site.

The results of the investigations revealed that the sequence at the site consists of the Late Devensian Wandle Gravel, whose surface lies at between 20.6 and 22.48m OD, overlain in places by up to 1.5m of generally coarse-grained (sand-rich) Alluvium, and Made Ground. Made Ground directly overlies the Gravel in places, indicating that the Gravel surfaces here may be truncated. In the absence of any organic-rich horizons or peat (such as that recorded elsewhere in the Wandle Valley), or evidence for former land surfaces/soil formation at the site, no further environmental archaeological investigations were recommended.

#### 2. INTRODUCTION

#### 2.1 Planning condition

Planning permission (ref: C2013/68191) has been granted for the residential redevelopment of the site, with the following condition for archaeology attached:

(22) No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme for investigation which has been submitted to and approved in writing by Local Planning Authority. The development shall only take place in accordance with the detailed scheme pursuant to this condition.

Reason: To ensure compliance with policy DM4 of the Site Development Policies DPD.

#### 2.2 Site context

This report summarises the findings arising out of the geoarchaeological monitoring and deposit modelling undertaken by Quaternary Scientific (University of Reading) in connection with the proposed development of land at Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton (NGR centred on: TQ 279 668; site code: GRD16; Figures 1 & 2). Quaternary Scientific were commissioned by CgMs Consulting Ltd to undertake the geoarchaeological investigations. This updated report includes the results of a revised deposit model, following the addition of information from archaeological trenches excavated by Archaeology South East.

The outline of the site is markedly irregular, and was formerly occupied by now demolished industrial and commercial premises and associated hard standings. Map evidence indicates that the commercial development of the site commenced in the mid-19th century (CqMs, 2011). The site is located to the east of the River Wandle, which is a right bank tributary of the River Thames and is confluent with the Thames in Wandsworth about 9 km downstream from the present site. The ground level at the site is at about 23.0m OD, but this level reflects the presence of Made Ground, probably across most of the site and resting on natural sediments between 21.0m and 22.5m OD. It is not known to what extent, if at all, the natural sediments were truncated prior to the artificial raising of the ground level. The British Geological Survey (BGS) (1:50,000 Sheet 270 South London 1998) shows the site underlain by the Alluvium of the River Wandle which on the west side of the floodplain abuts the bedrock London Clay and on the east side abuts a narrow strip of Terrace Deposits assigned by the BGS to the Taplow Gravel of Wolstonian age. On its east side the Taplow Gravel abuts a more extensive and extensively quarried spread of Terrace Deposits assigned by the BGS to the Hackney Gravel of probable Middle Pleistocene age. These Terrace Deposits have also been described by Peake (1982), who regarded all the terrace deposits to the east of the Wandle as forming a single terrace, her Mitcham Terrace which she considered to be of Devensian age.

Five geotechnical boreholes forming a transect approximately NW to SE across the two areas of the site on the east side of the Wandle (CgMs, 2011), show a rather consistent sequence of sediments underlying the floodplain. peaty clay, up to ca. 1.0m thick was recorded in all five

boreholes, overlain in the most northerly borehole, closest to the Wandle, by orange-brown silty clay, but everywhere else directly overlain by Made Ground. In four of the five boreholes, the peaty clay rests directly on gravel at levels between *ca.* 20.0m and *ca.* 21.5m OD. In the remaining borehole nearly 2.0m of grey-brown silty clay intervened between the peaty clay and the gravel.

#### 2.3 Palaeoenvironmental and archaeological significance

The existing records therefore indicate some variation in the height of the Gravel surface, and the type, thickness and age of the subsequent Holocene deposits. Such variations are significant as they represent different environmental conditions that would have existed in a given location. For example: (1) the varying surface of the Gravel may represent the location of former channels and bars; (2) the presence of 'peaty clay' may represent former terrestrial or semi-terrestrial land-surfaces, and (3) the silty clay Alluvium represent periods of inundation/flooding by estuarine or fluvial waters. Thus by studying the sub-surface stratigraphy across the site in greater detail, it will be possible to build an understanding of the former landscapes and environmental changes that took place across space and time.

Organic-rich sediments (in particular peat) also have high potential to provide a detailed reconstruction of past environments on both the wetland and dryland from the Mesolithic to Late Bronze Age periods. In particular, there is the potential to increase knowledge and understanding of the interactions between human activity, vegetation succession and climate in this area of the Wandle Valley. Significant vegetation changes include the Mesolithic/Neolithic decline of elm woodland, the Neolithic colonisation and decline of yew woodland; the Late Neolithic/Early Bronze Age growth of elm on peat, and the general decline of wetland and dryland woodland during the Bronze Age. Such investigations are carried out through the assessment/analysis of palaeoecological remains (e.g. pollen, plant macrofossils & insects) and radiocarbon dating. So called palaeoenvironmental reconstructions have been carried out in this general area of the Wandle Valley at Ravensbury Park (Halsey & Scaife, 2009), 57 Windsor Avenue (Halsey, 2006) and 118-120 Christchurch Road (Young & Batchelor, 2015; see Figure 1).

Finally, areas of high gravel topography, soils and peat represent potential areas that might have been utilised or even occupied by prehistoric people, evidence of which may be preserved in the archaeological (e.g. features and structure) and palaeoenvironmental record (e.g. changes in vegetation composition). Finds of Palaeolithic date within a one kilometre radius of the study site include a 'few flint flakes' at 64 Culvers Avenue, ca. 900m to the southwest (CgMs, 2011), located on the surface of the Hackney Gravel terrace underlying the site (MLO4469, TQ 2767 6587). Elsewhere, possible, residual Mesolithic flintwork was identified within silt that formed part of a migrating river which is thought to have formerly flowed through the site, east of London Road to the east of the study site (MLO63517-8, TQ 2874 6646). An assemblage of Mesolithic flintwork was also identified at the Middleton Road site to the west (MLO64317, TQ2770 6660) (CgMs, 2011).

#### 2.4 Aims and objectives

Further stratigraphic records are required to enhance our understanding of the sub-surface stratigraphy of the Wandle Trading Estate site, and for any further assessment/analysis of the deposits (if necessary). Six significant research aims were thus proposed within the geoarchaeological Written Scheme of Investigation for the site (Batchelor *et al.*, 2016), as follows:

- 1. To clarify the nature of the sub-surface stratigraphy across the site;
- 2. To determine the depth, extent and character of the any peat horizons recorded at the site;
- 3. To investigate whether the geoarchaeological records contain any evidence for natural and/or anthropogenic changes to the landscape (wetland and dryland) throughout the duration of the geoarchaeological sequence;
- 4. To establish whether the geoarchaeological records provide evidence for prehistoric and historic occupation locally to the site;
- 5. To establish evidence and possible causes for changes in woodland composition on the wetland and dryland surfaces during the different periods of peat formation;
- 6. To integrate the new geoarchaeological records with previous geotechnical records from the site to produce a site-wide deposit model of the main stratigraphic horizons.

The content of this report achieves the first two of these aims, and considers the potential of addressing aims 3 to 6 through laboratory-based assessment and analysis. The following objectives were carried out in order to address aims 1 & 2:

- 1. To monitor four selected geotechnical borehole sequences across the site (Figure 2);
- 2. To utilise the stratigraphic data from the new and existing geotechnical and archaeological records to produce a deposit model of the major depositional units across the site.

#### 3. METHODS

#### Field investigations and lithostratigraphic descriptions

A total of four cable percussion boreholes (BH6, BH7A, BH9 and BH12) were monitored at the site in March 2016 (Figure 2) by Quaternary Scientific. The lithostratigraphy of the core samples was described in the field using standard procedures for recording unconsolidated sediment and organic sediments, noting the physical properties (colour), composition (gravel, sand, clay, silt and organic matter) and inclusions (e.g. artefacts) (Tröels-Smith, 1955). The procedure involved: (1) cleaning the sample using a scalpel; (2) recording the physical properties, most notably colour using a Munsell Soil Colour Chart; (3) recording the composition; gravel (Grana glareosa; Gg), fine sand (Grana arenosa; Ga), silt (Argilla granosa; Ag) and clay (Argilla steatoides); (4) recording the degree of peat humification and (5) recording the unit boundaries e.g. sharp or diffuse. The results of the lithostratigraphic descriptions of the monitored boreholes are displayed in Tables 2 to 5.

Two visits to the site were made in July and August 2016 to observe archaeological trenches put down by Archaeology South East. Relevant stratigraphic data arising from these excavations were included in a revised deposit model for the site (see below). Due to issues with contamination and high water tables, in practice this information was limited to measurements for the surface of the alluvium, and in places, the gravel.

#### **Deposit modelling**

The deposit model was based on a review of 22 borehole and test pit records, of which four were monitored in the field by Quaternary Scientific, and 37 stratigraphic sequences from selected sections within the archaeological trenches (Figure 2; Table 1). Sedimentary units were classified into four groupings: (1) London Clay, (2) Gravel; (3) Alluvium; and (4) Made Ground. The classified data for groups 1-4 were then input into a database with the RockWorks 16 geological utilities software. Models of surface height (using a nearest neighbour routine) were generated for the Gravel and Alluvium (Figures 3 and 4). Thickness of the Alluvium and Made Ground (Figures 5 and 6) was also modelled (also using a nearest neighbour routine). Because the sequences are not uniformly distributed over the area of investigation, the reliability of the models generated using RockWorks is variable. In general, reliability improves from outlying areas where the models are largely supported by scattered archival records towards the core area of commissioned boreholes/trenches. Because of the 'smoothing' effect of the modelling procedure, the modelled levels of stratigraphic contacts may differ slightly from the levels recorded in borehole logs and section drawings.

As a consequence of this the modelling procedure has been manually adjusted so that only those areas for which sufficient stratigraphic data is present will be modelled. In order to achieve this, a maximum distance cut-off filter equivalent to a 50m radius around each record is applied to all deposit models. In addition, it is important to recognise that multiple sets of sedimentary sequences are represented, put down at different times and recorded using different descriptive terms and subject to differing technical constraints in terms of recorded detail including the exact levels of the stratigraphic boundaries. Of the records used in the deposit model, the cores from the boreholes monitored and recorded by Quaternary Scientific (BH6, BH7A, BH9 and BH12) represent the most detailed record of the sediment sequences.

Table 1: Spatial attributes for those records used in the deposit model, Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton.

Borehole number	Easting	Northing	Height (m OD)	Top of Alluvium (m bgl)	Top of Gravel (m bgl)	Top of London Clay (m bgl)
Geotechni	ical borehole/test ¡	pit data			<u> </u>	
BH1	527918.656	166901.19	22.898	-	1.9	3.5
BH2	527950.251	166876.615	23.003	-	2	3.9
BH3	527914.93	166848.892	23.07	1.9	2.4	3.7
BH4	527944.959	166850.411	23.106	-	1.6	3.8
BH5	527893.619	166821.248	23.79	-	-	-
BH5A	527899.591	166812.295	23.323	-	1.5	3.8
BH6	527956.268	166807.552	23.817	2.5	3.2	4
BH7A	527896.996	166795.949	23.199	-	2.4	3.8
BH8	527912.29	166764.618	23.821	-	2.5	3.9
ВН9	527990.392	166786.227	23.452	1.2	2.7	3.5
BH10	527990.555	166751.932	23.476	-	2.2	3.9
BH11	528019.991	166730.576	23.512	-	1.8	3.9
BH12	528034.461	166719.519	23.385	-	2	3.6
TP2	527907.75	166860.683	22.976	-	2.3	-
TP3	527929.973	166805.765	23.104	1	1.9	-
TP4	527944.349	166786.364	23.993	1.6	2.15	-
TP5A	527964.777	166804.405	23.64	2.2	-	-
TP6	527982.168	166775.139	23.422	1.6	1.7	-
TP7	528039.427	166768.273	23.141	1.6	1.9	-
TP8	528023.074	166753.05	23.341	0.6	1.6	-
TP9	528010.02	166724.155	23.441	-	-	-
TP10	528063.092	166736.458	23.222	-	1.4	-
Archaeolo	gical trench data (s	selected trench a	reas; C = ce	ntre of trench, N/S/E	E/W = end of trench	n)
TR1-C	527922	166901	22.76	-	21.47	-
TR1-W	527915	166901	22.87	21.76	-	-
TR1-E	527943	166903	22.69	21.78	-	-
	1	i .	1	1	1	1

Borehole number	Easting	Northing	Height (m OD)	Top of Alluvium (m bgl)	Top of Gravel (m bgl)	Top of London Clay (m bgl)
TR2-S	527928	166858	23.09	-	21.32	-
TR2-N	527923	166886	22.93	-	20.88	-
TR2-C	527927	166871	21.1	19.8	-	-
TR3-S	527915	166857	23.09	21.72	-	-
TR3-C	527914	166869	23.12	21.46	-	-
TR4-N	527923	166850	23.1	-	21.8	-
TR4-S	527914	166823	23.23	-	22.43	-
TR5-N	527943	166858	23.06	21.37	-	-
TR5-S	527935	166834	23.31	-	22.17	-
TR6-N	527955	166861	22.96	-	21.32	-
TR6-S	527948	166838	23.3	21.9	-	-
TR7-W	527923	166825	23.22	-	22.18	-
TR7-C	527941	166826	23.14	-	21.81	-
TR8-N	527936	166819	23.3	-	21.94	-
TR8-C	527934	166810	23.09	22.05	-	-
TR8-S	527929	166794	23.17	-	21.77	-
TR9-N	527950	166819	23.07	-	21.64	-
TR9-C	527945	166805	23.76	22	-	-
TR11-N	527972	166809	23.62	-	22.03	-
TR11-S	527989	166796	24.16	-	-	-
TR10-W	527921	166778	23.49	-	21.52	-
TR10-E	527932	166778	23.78	-	-	-
TR13-E	528020	166780	23.11	22.53	-	-
TR13-W	527997	166769	23.19	22.76	-	-
TR14-N	527977	166768	23.33	22.75	-	-
TR14-S	527984	166741	23.4	22.74	-	-
TR12-E	528027	166772	23.21	22.84	-	-

Borehole number	Easting	Northing	Height (m OD)	Top of Alluvium (m bgl)	Top of Gravel (m bgl)	Top of London Clay (m bgl)
TR12-W	528003	166758	23.42	-	-	-
TR15-N	528041	166770	23.08	-	-	-
TR15-S	528041	166753	22.97	22.54	-	-
TR17-N	528055	166748	23.14	22.51	-	-
TR17-S	528061	166724	22.87	22.44	-	-
TR16-E	528031	166719	23.38	22.6	-	-
TR16-W	528005	166712	23.27	22.5	-	-

# 4. RESULTS AND INTERPRETATION OF THE LITHOSTRATIGRAPHIC DESCRIPTIONS AND DEPOSIT MODELLING

The geoarchaeological and archaeological investigations (Tables 2 to 5) have permitted a programme of deposit modelling of the surface elevation and thickness of each of the major stratigraphic units (Figures 3 to 6). Overlying the bedrock London Clay, the basal unit at the site is a horizon of sand and gravel, considered to represent the Late Devensian (15,000 to 10,000 years before present) Wandle Gravel, deposited within a high energy braided river environment and equivalent to the Shepperton Gravel of the Lower Thames Valley. The surface of the Gravel lies at between 20.6 (BH3, BH6 and TP2) and 22.48m OD (TR10-E). The Gravel surface generally rises towards the southeast (away from the River Wandle, and towards the Wolstonian Taplow Gravel terrace recorded to east of the site), where it generally lies at above ca. 21.5m OD (Figure 3). Areas of higher Gravel rising to ca. 21.9m OD are also recorded towards the centre of the site however, in the southern end of Trenches 4 and 5 and the eastern end of Trench 10. Towards the north of the site and the River, it is generally recorded at between ca. 20.6 and 21.5m OD. Although the amplitude of the Gravel surface at the site is limited (maximum of 1.6m), the topography of the Gravel surface is typical of that in a braided river system, with small, elevated gravel 'islands' separated by a network of shallow, intervening channels.

In ten of the 22 borehole records (BH3, BH6, BH7A, BH9, TP3-TP8) and in parts of 13 of the 17 archaeological trenches (TR1, TR2, TR3, TR5, TR6, TR8, TR9, TR12, TR13, TR14, TR15, TR16 and TR17) the Gravel is overlain by predominantly sand-rich, but in places silty or clayey Alluvium, typical of deposition under low- to moderate-energy fluvial conditions. In general, the Alluvium is recorded in areas of lower Gravel topography, indicating that such deposits accumulated predominately within the minor channel features. The Alluvium is recorded to a level of between 22.7 (TP8) and 20.9m OD (BH7A) (Figure 4), variations in its surface generally reflecting variable extents of truncation by the overlying Made Ground. Greater thicknesses of Alluvium are present towards the southeast of the site, where between *ca.* 0.6 and 1.5m is recorded (Figure 5); towards the north, thicknesses of less than 0.8m are present.

Overlying the Alluvium, and the Gravel where no Alluvium is recorded, is a horizon of Made Ground, generally between 0.5 and 2.5m thick (Figure 6). In general the Made Ground is thickest in the northern area of the site, probably as a result of the lower Gravel surfaces recorded here. Given that Made Ground directly overlies the Gravel in selected sequences, it should be noted that in these records it is unclear whether the level recorded represents a 'natural' or truncated level.

## 5. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The aims of the geoarchaeological investigations at the Wandle Trading Estate site were: (1) to clarify the nature of the sub-surface stratigraphy across the site, in particular to elucidate the size and orientation of a possible palaeochannel traversing the site; and (2) to clarify the nature, depth,

extent and date of any alluvium and peat deposits. In order to achieve these aims, a programme of geoarchaeological monitoring and deposit modelling was carried out, incorporating the geotechnical borehole descriptions and records from those boreholes monitored in the field, and observations from 17 archaeological trenches.

The sequence recorded at the site consists of the Late Devensian Wandle Gravel to a level of between 20.6 and 22.48m OD, overlain in places by up to 1.5m of generally coarse-grained (sandrich) Alluvium, and Made Ground. Made Ground directly overlies the Gravel in places, indicating that the Gravel surfaces here may be truncated. Elsewhere in the Wandle Valley, approximately 1.5km to the northwest and downstream of the River Wandle, the Gravel surface was recorded at between ca. 15.8 and 15.9m OD at Ravensbury Park (Halsey & Scaife, 2009) and at between 16.1 and 17.05m OD at Dover House (Ward, 2006). Approximately 3km to the north at the 57 Windsor Avenue site (Halsey, 2006) the Gravel surface was recorded at between 11 and 11.94m OD, whilst at 118-120 Christchurch Road (Young & Batchelor, 2015) it was recorded at between 10.21m OD and 9.94m OD. At these sites, an organic horizon was recorded at the base of the alluvial sequence, which at 118-120 Christchurch Road was radiocarbon dated to the early Mesolithic (11,325-11,235 to at least 10,745-10,590 cal BP). These dates were consistent (albeit slightly earlier) with those at the Streatham House (see Figure 1; Saxby, 1991), Ravensbury Park and 57 Windsor Avenue sites, where accumulation of the peat/peaty clay began at 10,438-11,069, 10,277-10,567 and 10,271-10,558 cal BP respectively. No organic-rich or peaty horizons were recorded within any of the sequences at the present site.

In the absence of any organic-rich horizons or peat at the site, no further environmental archaeological investigations are recommended. In addition, given the absence of evidence for any former land surfaces or soil formation at the site (and the archaeological investigations already carried out at the site), the archaeological potential of the site is considered to be low.

#### 6. REFERENCES

CgMs (2011) Archaeological desk-Based Assessment: Wandle Trading Estate, Goat Road, Beddington Corner, Sutton. CgMs Unpublished DBA, December 2011.

Halsey, C.J. (2006) Geoarchaeological report on borehole survey and trench monitoring, 57 Windsor Avenue. *MoLAS Unpublished Report for LP Archaeology Ltd.* 

Halsey, C.J. and Scaife, R. (2009) The Mesolithic Landscape in the Wandle Valley. *London Archaeologist* **191**: 191-196.

Saxby, D. (1991) An archaeological evaluation at Streatham House, Merton. DGLA Archive Report.

Tröels-Smith, J. (1955) Karakterisering af løse jordater (Characterisation of unconsolidated sediments), *Danm. Geol. Unders.*, *Ser IV* 3, 73.

Ward, N. (2006) Dover House, An archaeological evaluation report. MoLAS Unpublished Report.

Young, D.S. and Batchelor, C.R. (2015) 118-120 Christchurch Road, London Borough of Merton. Environmental Archaeological Assessment Report. *Quaternary Scientific (QUEST) Unpublished Report October 2015; Project Number 134/15.* 

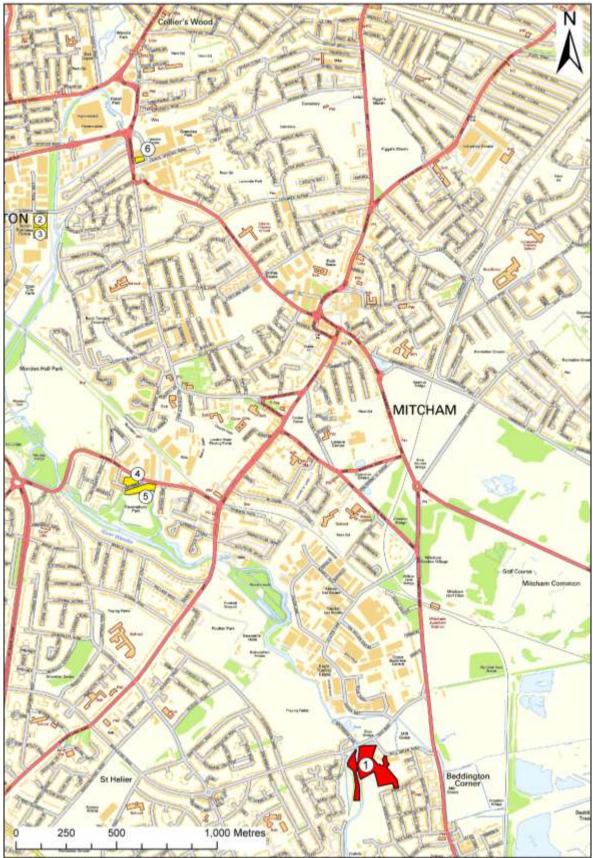


Figure 1: Location of (1) Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton; (2) Streatham House (Saxby, 1991); (3) Windsor Avenue (Halsey, 2006); (4) Dover House (Ward, 2006); (5) Ravenbury Park (Halsey & Scaife, 2009) and (6) 118-120 Christchurch Road, Colliers Wood (Young & Batchelor, 2015). Contains Ordnance Survey data @ Crown copyright and database right [2012]. Contains ordnance survey data @ Crown copyright and database right [2016].

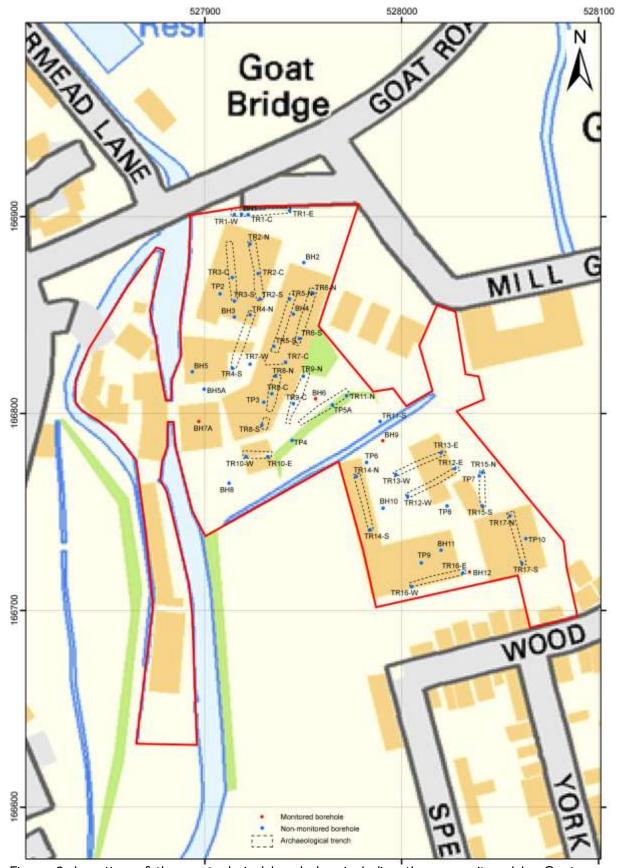


Figure 2: Location of the geotechnical boreholes, including those monitored by Quaternary Scientific (red), and archaeological trenches at the Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton.

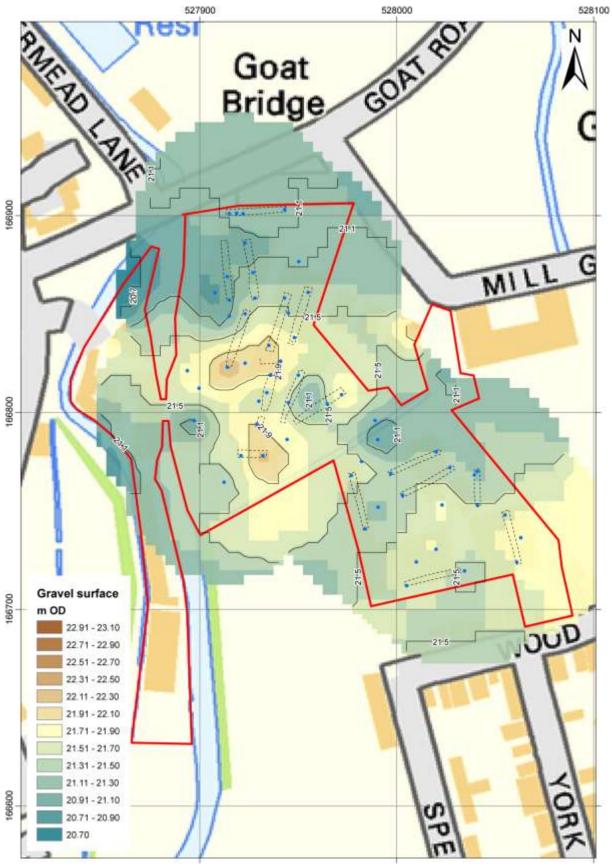


Figure 3: Surface of the Wandle Gravel (m OD) (site outline in red)

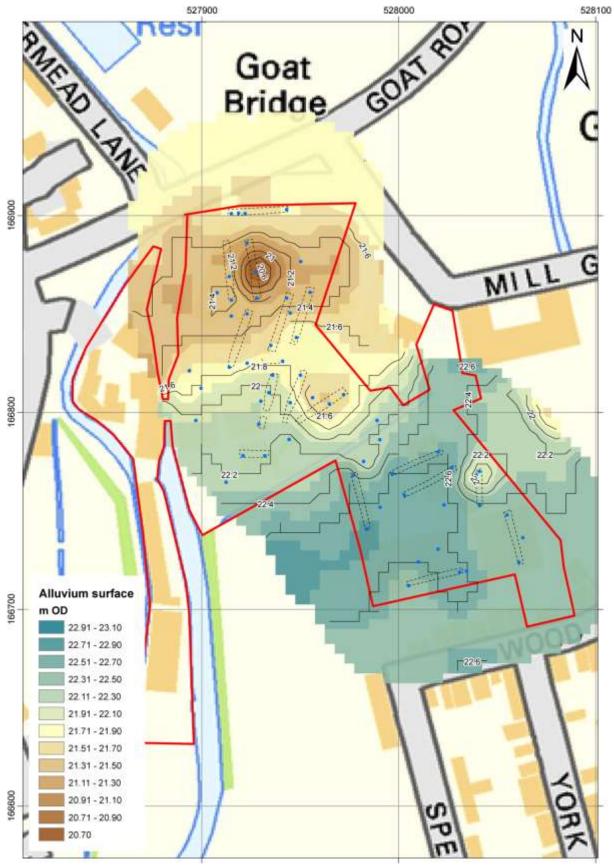


Figure 4: Surface of the Alluvium (m OD) (site outline in red)

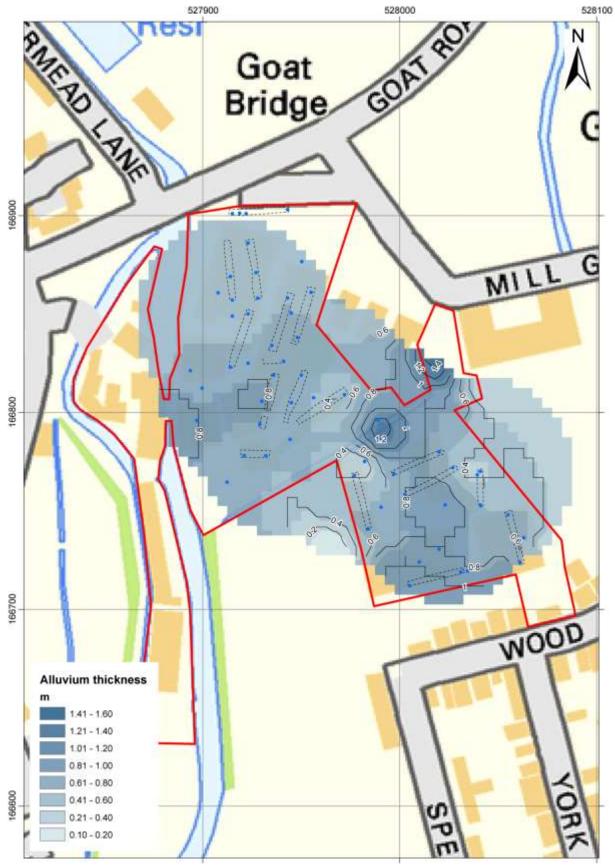


Figure 5: Thickness of Alluvium (m) (site outline in red)

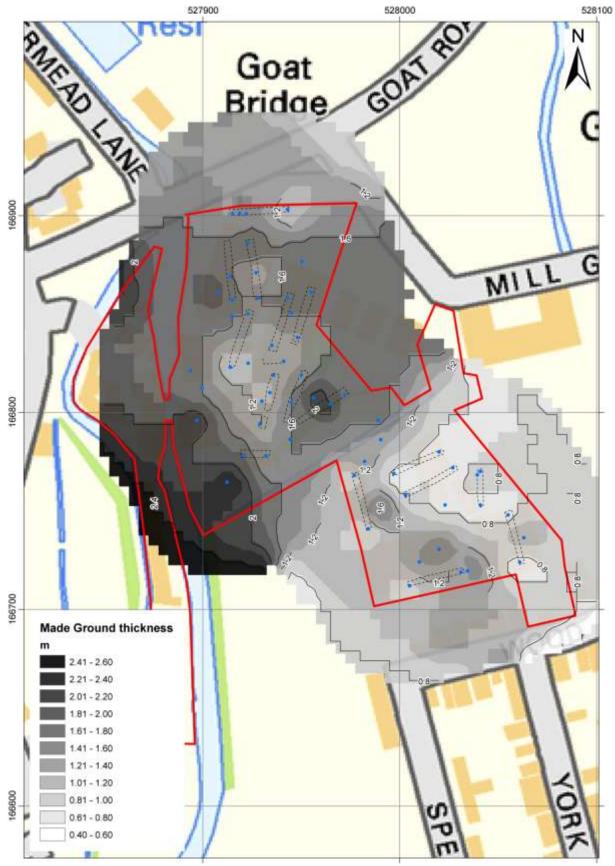


Figure 6: Thickness of Made Ground (m) (site outline in red)

Table 2: Lithostratigraphic description of borehole BH6, Wandle Trading Estate, Goat Road,

Beddington Corner, London Borough of Sutton.

Depth (m OD)	Depth (m bgs)	Description	Interpretation
23.82 to 21.32	0.00 to 2.50	Made Ground of gravel, brick and concrete rubble in black clayey silt matrix.	MADE GROUND
21.32 to 20.62	2.50 to 3.20	Ga3 Ag1 Gg+ Dh+; greenish grey silty sand with a trace of detrital herbaceous material and occasional gravel clasts. Sharp contact in to:	ALLUVIUM
20.62 to 19.82	3.20 to 4.00	Gg3 Ga1; sandy gravel. Gravel is flint, up to 60mm in diameter, angular to rounded.	GRAVEL

Table 3: Lithostratigraphic description of borehole BH7A, Wandle Trading Estate, Goat Road,

Beddington Corner, London Borough of Sutton.

Depth (m OD)	Depth (m	Description	Interpretation
	bgs)		
23.20 to 21.00	0.00 to 2.20	Made Ground of mortar, brick and concrete rubble in black sandy silt matrix.	MADE GROUND
21.00 to 20.80	2.20 to 2.40	Ga3 Ag1 Gg+; grey silty sand with occasional gravel clasts	ALLUVIUM
20.80 to 19.40	2.40 to 3.80	Gg3 Ga1; sandy gravel. Gravel is flint, up to 60mm in diameter, angular to rounded.	GRAVEL

Table 4: Lithostratigraphic description of borehole BH9, Wandle Trading Estate, Goat Road,

Beddington Corner, London Borough of Sutton.

Depth (m OD)	Depth (m bgs)	Description	Interpretation
23.45 to 23.15	0.00 to 0.30	Made Ground of gravel, brick and concrete rubble in black clayey silt matrix.	MADE GROUND
23.15 to 22.25	0.30 to 1.20	Made Ground of redeposited Alluvium (silty clay).	MADE GROUND
22.25 to 21.65	1.20 to 1.80	Ag2 As1 Sh1 Ga+ Dh+; dark brown organic clayey silt with traces of sand and detrital herbaceous material. Diffuse contact in to:	ALLUVIUM
21.65 to 20.75	1.80 to 2.70	Ag2 As2; dark grey silt and clay. Sharp contact in to:	ALLUVIUM
20.75 to 19.95	2.70 to 3.50	Gg3 Ga1; sandy gravel. Gravel is flint, up to 70mm in diameter, angular to rounded.	GRAVEL

Table 5: Lithostratigraphic description of borehole BH12, Wandle Trading Estate, Goat Road,

Beddington Corner, London Borough of Sutton.

Depth (m OD)	Depth (m bgs)	Description	Interpretation
23.39 to 22.19	0.00 to 1.20	Made Ground of gravel, brick and concrete rubble in black clayey silt matrix.	MADE GROUND
22.19 to 21.39	1.20 to 2.00	Made Ground of redeposited/disturbed sandy gravel and occasional brick fragments.	MADE GROUND
21.39 to 19.79	2.00 to 3.60	Gg3 Ga1; sandy gravel. Gravel is flint, up to 60mm in diameter, angular to rounded.	GRAVEL

#### 7. APPENDIX 1: OASIS FORM

#### OASIS ID: quaterna1-248325

**Project details** 

Project name Wandle Valley Trading Estate

the project

Short description of A programme of geoarchaeological deposit modelling was carried out by Quaternary Scientific in connection with the proposed redevelopment of land at Wandle Trading Estate, Goat Road, Beddington Corner, London Borough of Sutton. The aims of the geoarchaeological investigations at the site were: (1) to clarify the nature of the sub-surface stratigraphy across the site, in particular to elucidate the size and orientation of a possible palaeochannel traversing the site; and (2) to clarify the nature, depth, extent and date of any alluvium and peat deposits. In order to achieve these aims, a programme of geoarchaeological monitoring and deposit modelling was carried out, incorporating the geotechnical borehole descriptions and records from those boreholes monitored in the field. The results of the investigations revealed that the sequence at the site consists of the Late Devensian Wandle Gravel, whose surface lies at between 20.6 and 21.8m OD, overlain in places by up to 1.5m of generally coarse-grained (sandrich) Alluvium, and Made Ground. Made Ground directly overlies the Gravel in places, indicating that the Gravel surfaces here may be truncated. In the absence of any organic-rich horizons or peat (such as that recorded elsewhere in the Wandle Valley), or evidence for former land surfaces/soil formation at the site, no further environmental archaeological investigations are recommended.

Project dates Start: 01-02-2016 End: 14-04-2016

Previous/future No / No

work

Any associated GRD16 - Sitecode

project reference

codes

Type of project Environmental assessment Survey techniques Landscape

**Project location** 

Country England

Site location GREATER LONDON SUTTON WALLINGTON AND BEDDINGTON

Wandle Valley Trading Estate

Postcode CR4 4HZ

Site coordinates TQ 279 668 51.385304774503 -0.161761646613 51 23 07 N 000 09 42 W

Point

**Project creators** 

Name of Quaternary Scientific (QUEST)

Organisation

Project brief CgMs Consulting

originator

Project design D.S. Young

originator

Project C.R. Batchelor

director/manager

Project supervisor D.S. Young

Type of Developer

sponsor/funding

body

**Project archives** 

#### $Quaternary\,Scientific\,(QUEST)\,Unpublished\,Report\,April\,2016; Project\,Number\,009/12$

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