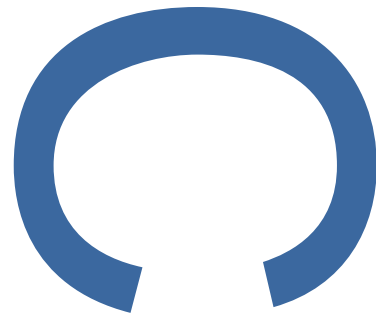
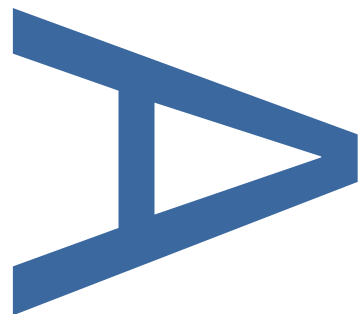


**Wasps FC Training Ground, Twyford  
Avenue, London**



**An Archaeological Watching Brief**



<b><i>Planning reference</i></b>	<b>195403FUL</b>		
<b><i>Local planning authority</i></b>	<b>London Borough of Ealing</b>		
<b><i>PCA report no.</i></b>	<b>R14638</b>	<b><i>Site Code</i></b>	<b>TYO21</b>
<b><i>PCA project no</i></b>	<b>K7094</b>	<b><i>Date</i></b>	<b>August 21</b>

**PRE-CONSTRUCT ARCHAEOLOGY LIMITED**

**[www.pre-construct.com](http://www.pre-construct.com)**

Project Information	
Site name	Wasps FC Training Ground, Twyford Avenue, London
Project type	An Archaeological Watching Brief
Site address	Wasps FC, Twyford Avenue London Borough of Ealing W3 9PX
NGR	TQ 19533 80620
Local planning authority	London Borough of Ealing
Planning reference	195403FUL
Commissioning client	RPS Group
Project dates	August 2021
Archive site code	TYO21

PCA Information			
PCA project code	K7094	PCA report number	R14638
PCA Project Manager	Helen Hawkins		
PCA office	London		
Address	Unit 54, Brockley Cross Business Centre, 96 Endwell Road, Brockley, London SE4 2PD		
Telephone	0207 358 8957		
E-mail	<a href="mailto:hhawkins@pre-construct.com">hhawkins@pre-construct.com</a>	Internet	<a href="http://www.pre-construct.com">www.pre-construct.com</a>

Quality Control		
Written by:	R Krason	
Graphics by:	MR	
Graphics checked by:	MR	
Project Manager approval:	HH	August 21
Reissued report version:	Rev 1 RPS comments	
Reason for reissue:		
Project Manager approval:		



## CONTENTS

1	ABSTRACT .....	2
2	INTRODUCTION.....	3
3	GEOLOGY AND TOPOGRAPHY .....	7
4	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND.....	8
5	METHODOLOGY .....	12
6	PHASED ARCHAEOLOGICAL SEQUENCE.....	14
7	PLATES.....	19
8	CONCLUSIONS .....	27
9	ACKNOWLEDGEMENTS .....	29
10	BIBLIOGRAPHY.....	30
11	APPENDIX 1: CONTEXT INDEX.....	31
12	APPENDIX 2: PHASED MATRIX.....	34
13	APPENDIX 3: POST-ROMAN POTTERY ASSESSMENT.....	35
14	APPENDIX 4: REVIEW OF CERAMIC BUILDING MATERIAL.....	39
15	APPENDIX 5: ASSESMENT OF THE CLAY TOBACCO PIPES.....	40
16	APPENDIX 6: GLASS .....	41
17	APPENDIX 7: ANIMAL BONE .....	42
18	APPENDIX 8: GEO-ARCHAEOLOGICAL WORKS.....	43
19	APPENDIX 9: FLINT REPORT .....	44
20	APPENDIX 10: OASIS FORM .....	48

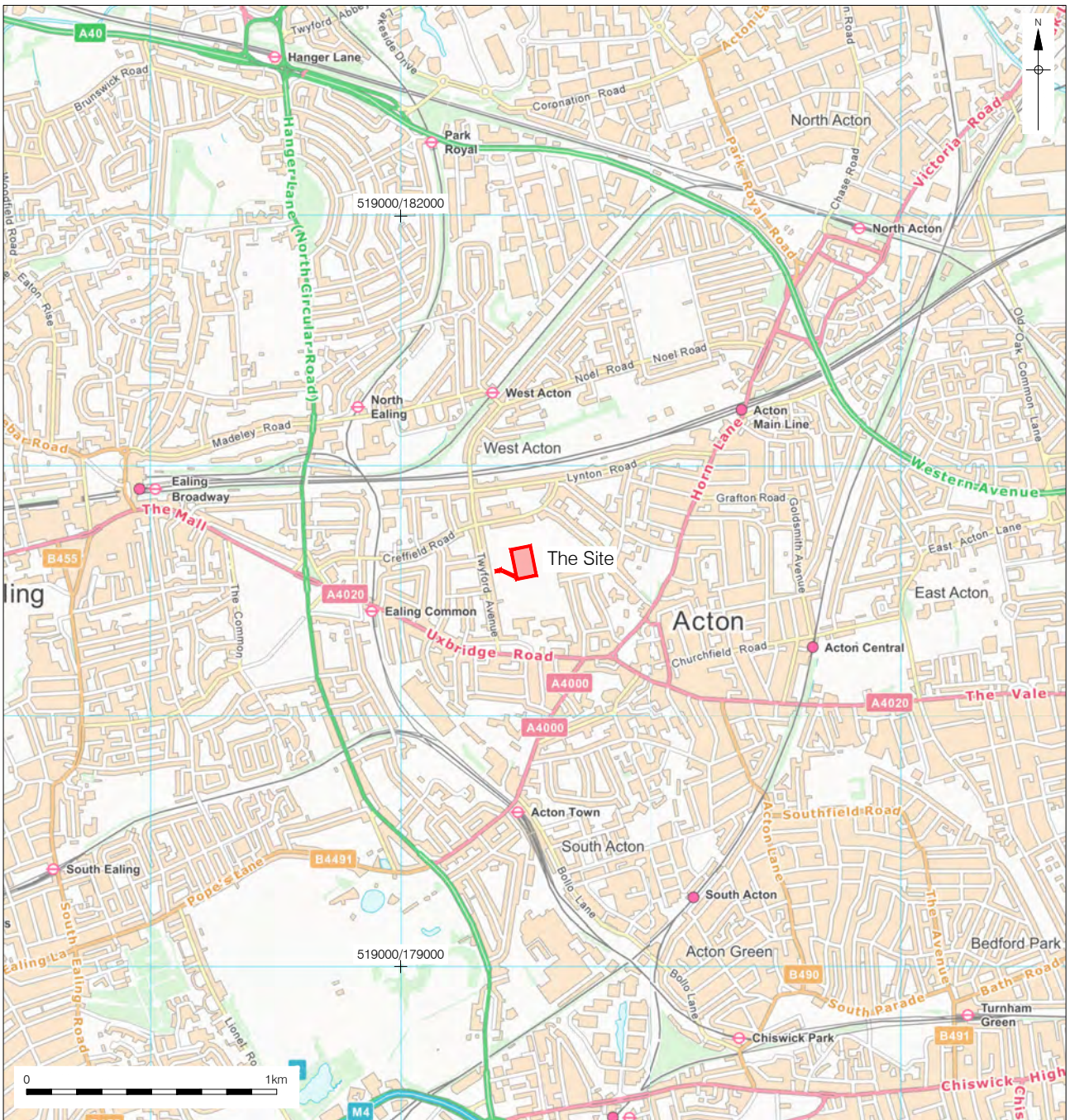
## **1 ABSTRACT**

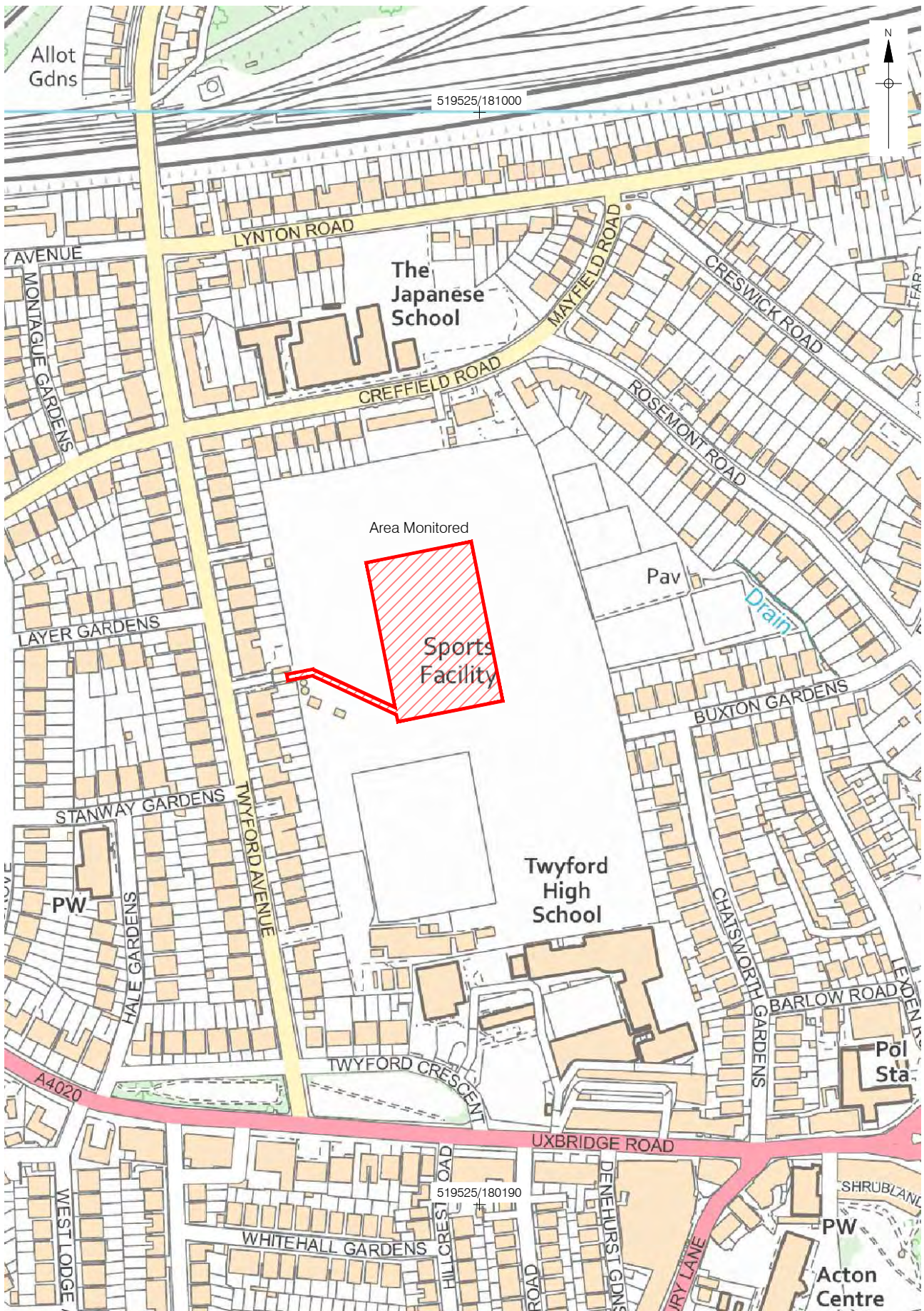
- 1.1 This report details the results of an archaeological watching brief undertaken by Pre-Construct Archaeology Limited on sports fields belonging to Wasps FC, located on Twyford Avenue within the London Borough of Ealing, W3 9PX. The site was centred at National Grid Reference TQ 19533 80620.
- 1.2 The work was carried out to satisfy the planning condition attached to planning permission (195403FUL) granted for the redevelopment of the grass rugby pitch into a World Rugby Compliant Third Generation Artificial Grass Pitch, with associated hard and soft landscaping, fencing, ancillary storage container, dugouts and floodlighting.
- 1.3 The monitoring exercise saw all relevant ground works monitored within the proposed pitch. These works included excavations to install new drainage, manholes, fencepost pits and four foundation pits for new rugby post bases.
- 1.4 The site had the potential for Palaeolithic and Mesolithic remains.
- 1.5 Natural gravels thought to belong to the Lynch Hill terrace gravels (Phase 1) were recorded at between 0.63 to 1.00m below ground level (bgl). The terrace gravels were sealed by natural brickearth thought to be part of the Langley Silts formation (Phase 2) which were seen as high as 0.10m bgl. The gravels did not appear to be reworked.
- 1.6 A possible north-west south-east running prehistoric ditch (Phase 3) and relict soil horizons containing burnt flint were recorded onsite. These were sealed by post-medieval subsoil and Modern made ground and topsoil.

## 2 INTRODUCTION

- 2.1 Pre-Construct Archaeology Ltd (PCA) carried out an archaeological watching brief on land belonging to Wasps FC, Twyford Avenue, W3 9PX. The site was in the London Borough of Ealing and was centred at National Grid Reference TQ 19533 80620.
- 2.2 The site was located within an Archaeological Priority Area as defined by the London Borough of Ealing, which comprised an area of underlying Lynch Hill terrace gravels in which previous Middle Palaeolithic and Mesolithic flintwork finds have been made.
- 2.3 An archaeological desk-based assessment was carried out for the site (RPS Group 2020). The DBA identified a moderate to high archaeological potential at the site for the Palaeolithic and Mesolithic periods, and a low potential for archaeological evidence dating to all other past periods of human activity. This concluded that if present, any significant remains would most likely be at great depth within the underlying river terrace gravels.
- 2.4 Planning permission had been gained for the redevelopment of the grass rugby pitch to provide World Rugby Compliant Third Generation Artificial Grass Pitches, with associated hard and soft landscaping, fencing, ancillary storage container, dugouts and floodlighting hours of operation.
- 2.5 The archaeological work comprised the monitoring and recording of works conducted to excavate four new goal post foundation pits, two new manhole chambers and three new lengths of drainage connecting these manholes to the mains connection of Twyford Avenue to the west of site (Figure 2).
- 2.6 The watching brief was conducted intermittently between 11<sup>th</sup> June 2021 and 23<sup>rd</sup> July 2021.
- 2.7 The works were supervised by Richard Krason, Omar Quadir, Pat Kavanagh and Duncan Field and the project was managed by Helen Hawkins, PCA. The work was commissioned by RPS Group.
- 2.8 All works were undertaken in accordance with the following documents:
- *Wasps FC Training Ground, Twyford Avenue, London: Written Scheme of Investigation for an Archaeological Watching Brief* (PCA 2021)
  - *Management of Research Projects in the Historic Environment* (MoRPHE) Historic England 2015
  - *Standard and guidance for an archaeological watching brief* (Chartered Institute for Archaeologists (CIfA 2014)
  - *Guidelines for Archaeological Projects in Greater London* (Historic England Greater London Archaeology Advisory Service HE GLAAS 2015)
  - *Fieldwork Induction Manual: Operations Manual*, Taylor, J & Brown, G. 2009, updated 2018, PCA

- 2.9 The completed archive comprising written, drawn and photographic records will be deposited with the Museum of London Archaeological Archive (LAA) identified by the unique site code TYO21.





0 200m

Ordnance Survey © Crown copyright 2021. All rights reserved. License number 100022432

© Pre-Construct Archaeology Ltd 2021

16/08/21 MR

Figure 2  
Detailed Site Location showing Area Monitored  
1:4,000 at A4



### **3 GEOLOGY AND TOPOGRAPHY**

- 3.1 The following background is taken from the desk based assessment (RPS 2020).
- 3.2 The solid geology of the London area is shown by the Institute of Geological Sciences (IGS 1979) as London Clay deposits forming the London Basin. Overlying the London Clay is a series of gravel terraces deposited during periods of glacial and inter-glacial conditions.
- 3.3 Further detail is provided by the British Geological Survey (BGS Online 2020), which shows the underlying bedrock geology at the site as London Clay Formation (Clay, Silt & Sand). The London Clay is overlain by Lynch Hill River terrace gravels (Sand & Gravel) across the southern half of the wider sports grounds within which the site is situated, whilst the BGS shows superficial deposits of Langley Silt (Clay & Silt) across the northern area of the wider sports grounds. The site is located at the interface between these Lynch Hill gravels and Langley Silt deposits.
- 3.4 This sequence was confirmed by soil trial pits across the wider sports grounds. Two of these trial pits were dug to a depth of circa 550mm immediately adjacent to the site's northern (TP 3) and southern (TP 4) boundaries, and recorded only topsoil and subsoil, indicating that the underlying gravels and silt deposits are at some depth underlying the site.
- 3.5 The results of Test Pit 4 (immediately upon the site's southern boundary indicated that the depths of underlying sand and gravel were getting deeper towards the south of the site. It was concluded that the soils across the northern third of the overall playing fields were formed in the underlying Langley Silt deposits, whilst the southern third of the playing fields is formed of soils which have developed in the underlying Lynch Hill Gravels. The central third of the site (including the site) was noted as an intergrade between these two areas with the soils gradually becoming less silt and clay dominated, to becoming sand dominated with gravel at depth towards the southern end of the playing fields.
- 3.6 The natural topography of the site comprised a gentle slope upwards in a north easterly direction. It is likely that the creation of the sports pitches led to an element of artificial levelling to ensure an even playing surface, and the site was generally level at c.28m Ordnance Datum (OD).
- 3.7 The nearest natural watercourse to the site is the River Thames, which is c.2.6km to the south at its nearest point at Kew Bridge.

## **4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

### **4.1 Archaeological Priority Area**

4.1.1 The site lies within an Archaeological Priority Area known as 'Creffield Road', which has been defined by the London Borough of Ealing. The GLHER describes this APA as an area of Lynch Hill terrace gravels in which previous Middle Palaeolithic and Mesolithic flintwork finds have been made, as well as an ancient stream bed.

### **4.2 Archaeological and Historical Potential**

4.2.1 The following background is summarised from an archaeological desk-based assessment produced for the site (RPS Group 2020) and taken from the Written Scheme of Investigation (Hawkins 2021).

### **4.3 Prehistoric**

4.3.1 Palaeolithic artefacts were first recorded from the Creffield Road area in 1884 by J.A. Brown, mainly during development at the corner of Creffield Road and Twyford Avenue c.160m northwest of the site. Brown identified a Palaeolithic surface c.1.8m below ground level (bgl) immediately below the underlying brickearth, with flintwork artefacts resting on the surface of the underlying gravels.

4.3.2 Artefacts found at this level were fresh, suggesting that they may have remained undisturbed. Two further horizons containing Palaeolithic artefacts at 2.44m bgl and 3.35-3.66m bgl were also identified. A number of HER records refer to further Palaeolithic flintwork finds within the area of Creffield Road c.150m-200m to the north and northwest of the site.

4.3.3 Throughout the southern and eastern areas of the Study Area, two handaxes are recorded at Buxton Gardens c.150m to the southeast of the site whilst two handaxes are recorded from Chatsworth Gardens c.200m to the south.

4.3.4 A further findspot of one handaxe and two flakes is recorded at Tring Avenue c.700m southwest of the site flint implements were found during the construction of the Derwentwater Estate c.700m southeast of the site, and a further flint 'lance head' is recorded at Mill Hill Road at the far southern extent of the Study Area. Prehistoric flintwork of uncertain date was found at Stuart Road in the area of the Derwentwater Estate.

4.3.5 A cut feature in the fill of a possible small river identified during work at Granville Gardens c.500m southwest of the site, contained a possible in situ flint assemblage and charcoal. The HER notes that these finds were dated to the Mesolithic period. Archaeological evaluation in the immediate vicinity of this site in 2009 identified 11 struck flints of probable Mesolithic date.

4.3.6 An assemblage of Mesolithic flintwork, comprising two cores and 12 flakes from a small pit on the south side of Creffield Road, recorded in an area c.230m north of the site on the

## GLHER.

- 4.3.7 Numerous finds of Early Prehistoric flintwork have been found within the nearby area, although these tend to have been found at depth associated with the underlying river terrace gravels. It is likely that the underlying geological sequence at the site similarly comprises a sequence of river terrace gravels which may be considered conducive to the survival of Early Prehistoric flintwork. However, a preliminary analysis of the underlying sequence and its associated potential for Palaeolithic/Mesolithic artefacts has been undertaken by Quaternary Scientific, which has concluded that more significant in situ flintwork artefacts would likely be located at great depth underlying the study site. It was considered possible that residual artefacts could be present within underlying reworked deposits, however these would comprise low significance finds without an association with their primary context. Therefore, whilst a moderate to high archaeological potential can be identified at the study site for the Palaeolithic and Mesolithic periods, it is more likely than any significant evidence would only be present at depth within the underlying river terrace gravels, with a potential for low significance residual artefacts within overlying reworked deposits.
- 4.3.8 No certain evidence is recorded for Neolithic activity within the Study Area on the GLHER. Flint implements were found in 1889 at Woodhurst Road c.700m east of the site, which were suggested could be of Neolithic date.
- 4.3.9 Evidence for Bronze Age and Iron Age activity is limited and comprised of a Bronze Age hearth identified at Creffield Road c.220m north of the site, an Iron Age coin of Cunobelinus (c.AD10-40) found on Creswick Road c.200m northeast of the site, and prehistoric pottery found in a possible pit also containing Saxon pottery at Acton High School c.700m to the south.
- 4.3.10 The area within which the site is situated likely comprised part of the Forest of Middlesex during the Later Prehistoric periods, which is unlikely to have provided a suitable location for settlement or occupation.
- 4.4 Roman
- 4.4.1 One Roman lamp and seven coins of Emperors Domitian to Severus (AD81-211) were found at the Springfield Estate c.750m northeast of the site, whilst a further coin of Constantine (AD306-337) was found at Gunnersbury Lane in an area c.550m to the south.
- 4.4.2 The nearest Roman routeway to the site is the projected course of the Roman road between London and Staines, located c.2km to the south.
- 4.5 Saxon and Medieval
- 4.5.1 The sole evidence for the Saxon period within the Study Area comprises pottery sherds which were found along with prehistoric pottery in a possible pit at Acton High School c.700m to the south of the site.

- 4.5.2 The name *Acton* likely has Saxon origins and translates as ‘Oak Town’, indicating that the settlement likely originated within a woodland clearing within the Forest of Middlesex. The settlement was part of the manor of Fulham at the time of the Domesday Survey of AD1086 and was first recorded itself in AD1181. By the 13<sup>th</sup> century the main area of settlement appears to have lain along Horn Lane c.400m east of the site. There was a church at Acton since at least AD1228, within the area c.550m southeast of the site.
- 4.5.3 Further medieval evidence recorded on the GLHER within the Study Area comprises three coins found at Creffield Road during archaeological works, within an area c.220m north of the site.
- 4.5.4 The historic settlement at Acton was likely situated within an area of forest, which was gradually subject to deforestation as the settlement and its agricultural and pastoral hinterland expanded. The site likely lay outside the area of settlement in an area of forest and later open land.
- 4.6 Post-Medieval
- 4.6.1 The earliest cartographic source available for the site is a 1700 Plan of Acton Parish where the site is likely located within an area labelled as *Diana Spring Field* which appears to have comprised pastoral land to the northwest of the historic centre of settlement. A road labelled as ‘Mill Lane’, a likely precursor to the current Twyford Avenue, is shown to the west of the site, and a mill which likely provides the name of ‘Mill Lane’ is shown to the south of the site at the junction of Mill Lane and the Uxbridge Road. The character of the site appears unchanged on maps dated 1741 and 1754.
- 4.6.2 An 1805 Plan of Acton Parish shows the site in more detail, within a single parcel of land to the northwest of Acton’s centre of settlement. The mill is no longer shown to the south.
- 4.6.3 The 1842 Acton Parish Tithe Map shows no change within the site and the associated Tithe Award describes the land parcel within which the site is situated as ‘The Park 1st and 2nd Paddock (Grass)’ (parcel 120). This land parcel is owned by the same owner (Elizabeth Wegg) as ‘The Elms’ mansion shown to the south (parcel 117), and the site most likely formed part of a paddock associated with this mansion.
- 4.6.4 A line of trees is shown on an east-west alignment through the site on the 1865 Ordnance Survey, although the majority of the site remains open land. This tree line was cleared by 1896 when the character of the surrounding area was altered as a result of urban expansion. Bacon’s 1888 map of London may indicate that the site was planned for development as it shows a number of possible residential streets laid out east-west through the area of the now Twyford Avenue Sports Ground.
- 4.6.5 Twyford Avenue Sports ground has been in use for sports since 1899, when the ground was leased to the Mill Hill cricket club. It was established as a private sports ground from 1921 when the Gas Light and Coke Company purchased the land, and erected various facilities for tennis, cricket, bowls and football. Two small structures are shown at the

western edge of the site on the 1914 Ordnance Survey which likely relate to the use of the site by the Mill Hill cricket club. These structures had been cleared by 1934 and a pavilion was constructed to the west of the Site. The character of the site as part of the sports ground is confirmed on a 1945 aerial photograph, and the site remains generally unchanged on the surface to the present day, by which point floodlights had been installed around the site and through the central north-south axis.

## 5 METHODOLOGY

- 5.1 Prior to the arrival onsite by the archaeologist and in accordance with the planning condition the area of the pitch was machine excavated and levelled using a bulldozer to a maximum depth of 0.30m bgl. This area measured c112.5m north-south and 71m east-west.
- 5.2 The scope of the watching brief was to monitor any “localised area of deeper excavations” (Hawkins 2021) this included the perimeter fencing, proposed new drainage and associated manholes which impacted below 550mm in depth.
- 5.3 All levels taken on site used a (bgl) or below ground level height measurement, this was taken where possible from the top of the topsoil. The only place this did not happen was within the four goal post pits, the bgl measurement here was taken from the top of the tarmac which formed the underlay for the new synthetic pitch.
- 5.4 The monitored works were given the following heading and their scopes and methods are discussed below.
- Pitch 1: The works here consisted of the monitoring of a c 115m long drainage gully, excavated along the western side of Pitch 1, this reached a maximum depth of 0.80m bgl to at the southern end and 0.50m in the north.
  - Manhole 1: At the southern end of the drainage gully running along the western end of Pitch 1, a pit measuring 1.80m by 1.80m was excavated to a depth of 1.50m bgl. This was to install a new manhole inspection chamber.
  - Drainage run between Manhole 1 and 2: This was a narrow 0.40cm wide c74m long narrow trench dug from Manhole 1 to the north-west to a depth of 1.50m.
  - Manhole 2 was located at the end of the second drainage run, it measured 2.40m by 1.80m and was excavated to a depth of 2m bgl.
  - Drainage Run between Manhole 2 and mains connection: This measured a further 14m due west, 0.40m wide and down to a maximum depth of 2m bgl. This connected Manhole 2 to a pre-existing drainage system to the west of site.
  - North-western and north-eastern goal post pits: This saw the excavation of two pits measuring 1m by 1m with a depth of 1.10m to facilitate the installation of the rugby goal post bases.
  - South-western and south-eastern goal post pits: This saw the excavation of two further pits measuring 1m by 1m with a depth of 1.10m to facilitate the installation of the rugby goal post bases.
  - Fencing. Along the periphery of the rugby pitch c. 138 hand dug post hole pits were excavated, these measured between 0.20 and 0.30m in diameter and were excavated down to a depth of no more than 0.50m bgl. These works were

monitored during excavation, and each posthole photographed but not planned or drawn as they were mostly within ground previously disturbed during the pitch installation.

- 5.5 During the works it was identified that there was a potential for prehistoric material dating to the Palaeolithic period to be present either in the overlying Langley silts or underlying gravels. As such targeted sieving was introduced where possible of deposits during the watching brief. A monolith sample was also taken from within the section of Manhole 1 (Appendix 7).
- 5.6 All below ground site works expected to go below 0.55m bgl were monitored by PCA's Archaeological Supervisor although the works themselves were led by the client's contractor.
- 5.7 All works were carried out in accordance with the agreed methodology, as set out in the site-specific Written Scheme of Investigation, (Hawkins 2021).
- 5.8 The machining required for the site works was undertaken using an excavator and driver provided by the client's contractor or by hand. The plant used a toothless ditching bucket to remove modern overburden under the supervision of an archaeologist.
- 5.9 Machine excavation continued until either significant archaeological strata or natural ground was exposed, or site formation level was reached.
- 5.10 Following the machine excavation, relevant faces of the stripped areas that required examination or recording were cleaned using appropriate hand tools. Where archaeology was identified, the investigation continued by hand, with cleaning, examination and recording both in plan and in section.
- 5.11 During the groundworks the archaeologist monitored excavation through all 'fill' and any other deposits to the level of the geological sub-strata. Records were made onto pro-forma context and planning sheets. Archaeological remains were recorded on site.
- 5.12 When archaeology was identified, archaeological excavation continued with work by 'pick and shovel'. Such techniques were used only for the removal of homogeneous and 'low grade' layers where it can reasonably be argued that more detailed attention would not produce information of value.
- 5.13 All archaeological features (stratigraphical layers, cuts, fills, structures) were excavated by hand tools and recorded in plan at 1:20 or in section at 1:10 or 1:20 using standard single context recording methods. Features were excavated to characterise their form, function and date. A full photographic record was also compiled.

## **6 PHASED ARCHAEOLOGICAL SEQUENCE**

### **6.1 Phase 1: Natural Gravels**

6.1.1 The earliest deposit that was encountered during the watching brief consisted of a firmly compacted, mid reddish brown mixed sand gravels. This was numbered as layers [6], [18], [14] [26] and [37] and presumably forming part of the Lynch Hill terrace gravel. The top of this deposit seemed to undulate between 0.80m to 1.00m bgl in height. In one location in section 1 layer [6] was recorded at 0.63m bgl and consisted of a more mixed silty clay gravels with a mid-orange colouring, though it was still assumed to be part of the Lynch Hill terraces.

### **6.2 Phase 2: Natural Langley Silts**

6.2.1 Overlying the gravels of Lynch Hill terraces was a stiff and firmly compacted, clayey silt, mid grey, orange in colour given the numbers; layers [7], [10], [13], [17], [25], [30], [33], [36], & [40]. This layer was identified as the Langley silts formation. Within the pitch area of monitored works an additional band numbered layers [5], [35] and [39] was recorded overlying the gravel. This new horizon was identified by being more mottled with a mid-grey, brown appearance though having the same compaction that of stiff and firm as the material below. The heights of the natural clean Langley silt seemed to suggest a shallow gradient down to the south or south-west from the north of the pitch with layer [10] being seen at 0.20m bgl and levels to the south and south-west being 0.44m bgl for layer [25] and 0.40m bgl for layer [13].

### **6.3 Phase 3: Prehistoric**

6.3.1 The first possible recognizable archaeological activity to be identified within the confines of the site was presumed to date to the prehistoric period. A thin band of firmly compacted, mid to light brownish grey clayey silt was identified and given the numbers [4], [8], [9] [27] and [34]. From within this deposit a mid-brownish red webbing effect could be identified and is thought to suggest old rooting or soil turning. Apart from layer [34] all layers saw burnt flint recovered and all had rare or occasional tiny charcoal flecking. The prehistoric horizon seems also to suggest a shallow decline to the south-west with horizon [9] being recorded at 0.20m bgl to the very north of site slowly decreasing to 0.34m in layer [8] (Plate 2) and 0.38m bgl in layer [27] to the very west. This layer was very thin having a maximum thickness of 0.16m and minimum of 0.10m, being thickest to the southern and west ends of site.

6.3.2 Cutting into layer [27] to the very west of site within the footprint of Manhole 2 was a possible north-west south-east running linear [24] (





Plate 4, Plate 5, Plate 6 & Plate 7). This measured some 1.80m in length continuing beyond the limits of excavations, 0.76m in width and 0.70m in depth at between 0.40m and 0.50m bgl. The linear had sides that broke sharply from where they could be seen, to continue with a moderately steep fall where they gradually flattened out to leave a flat and regular base which seemed to dip down deeper to the south-west. The linear contained three fills, the lowest was fill [23] at 0.90m bgl, which comprised of a soft and friable, light bluish grey silt measuring no more than 0.10m thick. Possible occasional well mixed charcoal flecking was seen within this deposit, but no dating was successfully recovered from any of [24] fills.

6.3.3 The second fill within linear [24] was fill [22], seen at c. 0.72m bgl, this consisted of a soft, friable dark brown silty clay with occasional charcoal flecking similar in size to that of fill [23] below. This fill was no more than 0.18m thick and is thought to be some form of organic infill into the linear.

6.3.4 The final sealing layer was [21] this consisted of a semi plastic but friable, mottled orange brown and mid grey, brown clayey silt. Occasional charcoal flecking was also seen though out this level, the flecks were tiny and well mixed within the deposit. At c. 0.40m bgl this fill [21] slowly blends into the underlying subsoil of [20] suggesting possible evidence of plough damage.

#### 6.4 **Phase 4: Post Medieval**

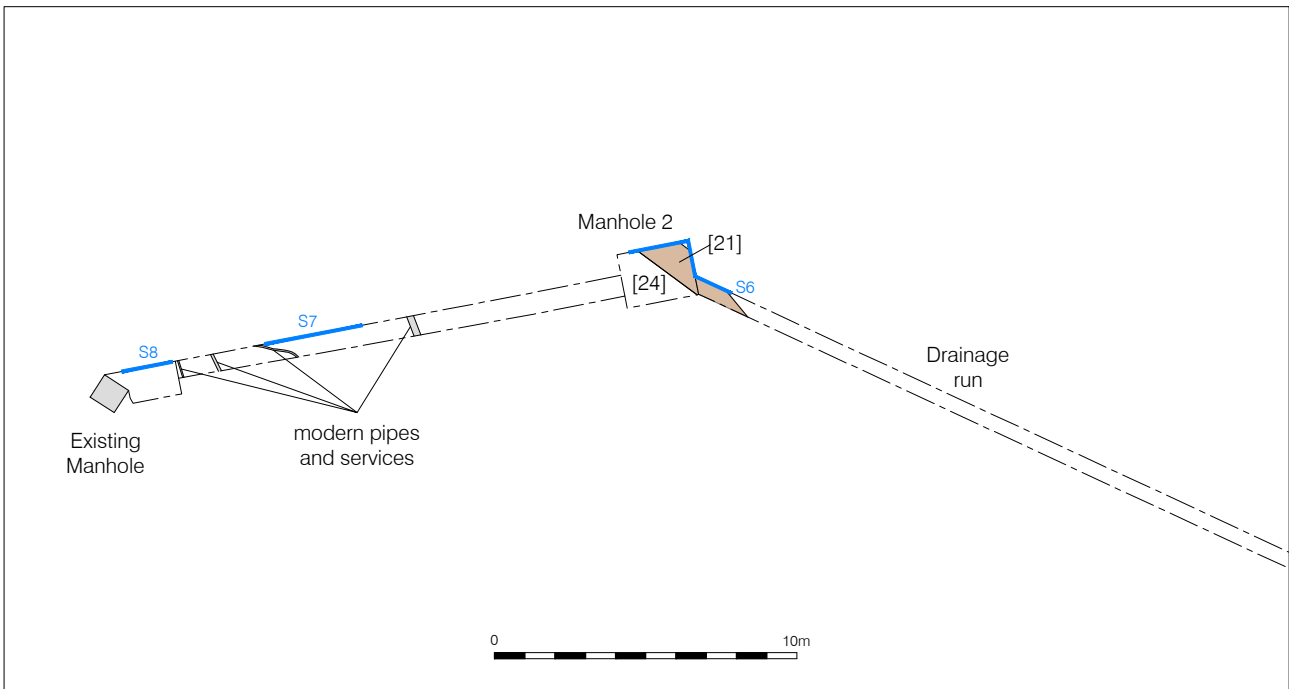
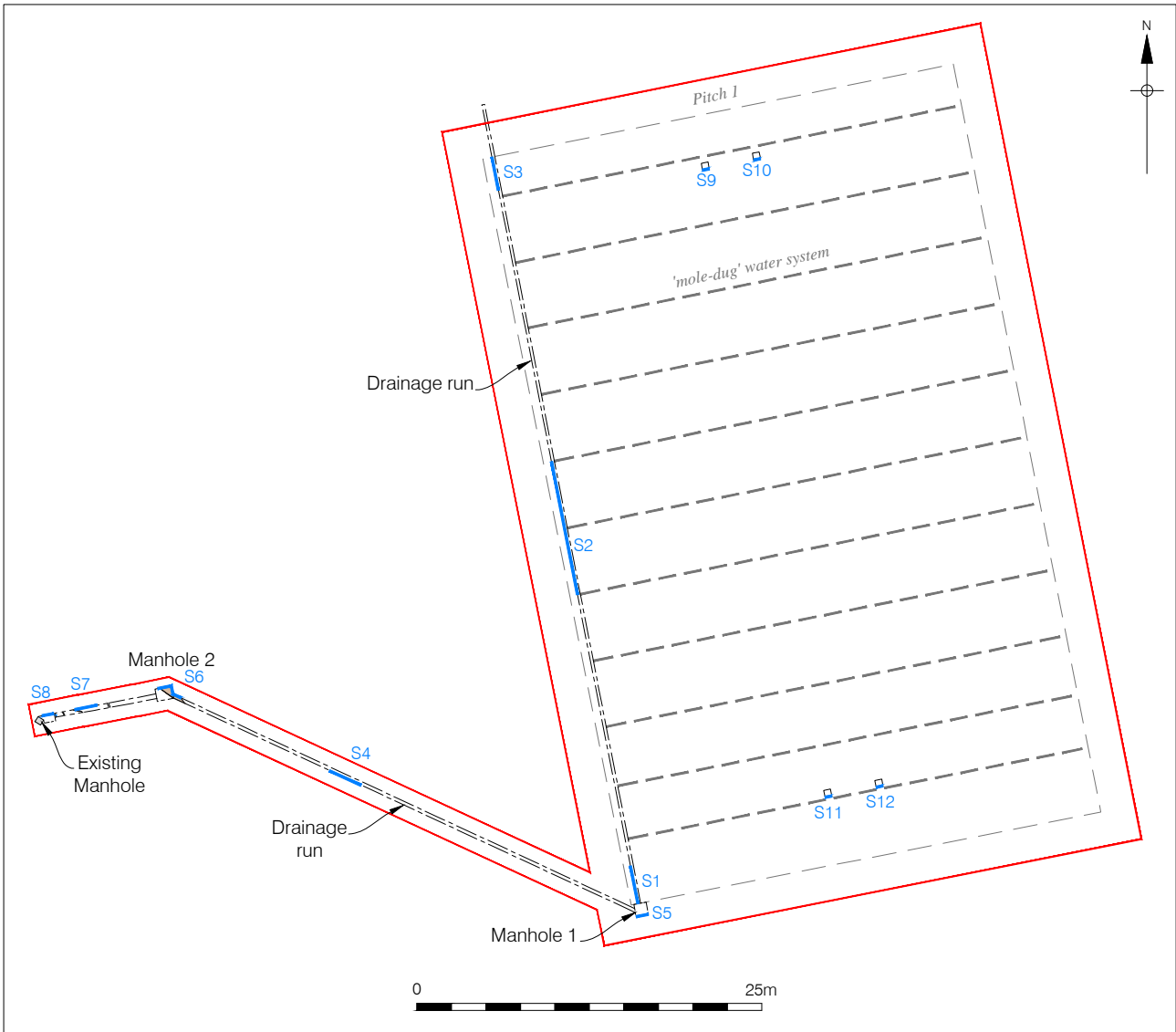
6.4.1 Above the prehistoric features and natural ground was a layer of subsoil which was 0.20m thick and c. 0.10m bgl. This layer was a stiff and friable mid orange grey or grey, brown with yellow hue clayey silt. In the northern area of Pitch 1 tiny charcoal flecking could also be seen within the subsoil. Dating recovered from the subsoil contained pottery dating to between AD1580 and 1700. Spot dates on other subsoil layers such as [20] and [12] located within the Manhole 2 works and the gully leading to it also gave similar spot dates for the pottery. From the landscaping and drainage works under Pitch 1, pottery, clay

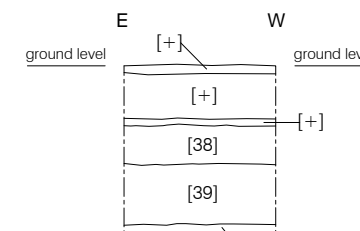
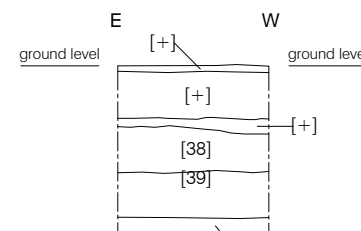
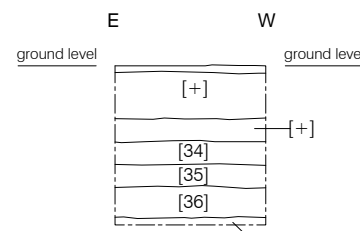
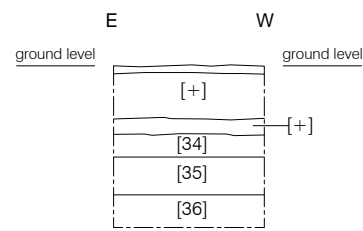
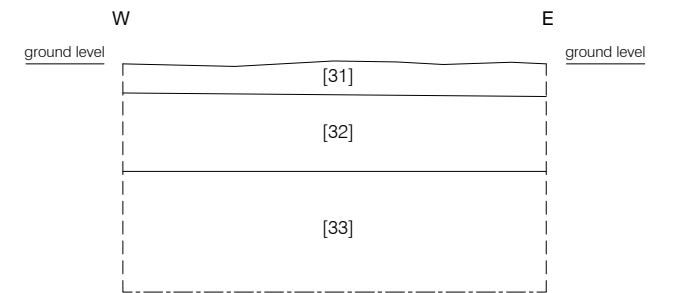
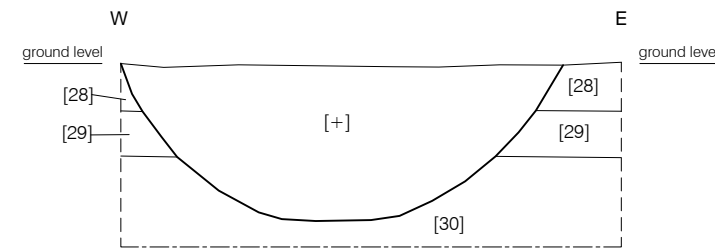
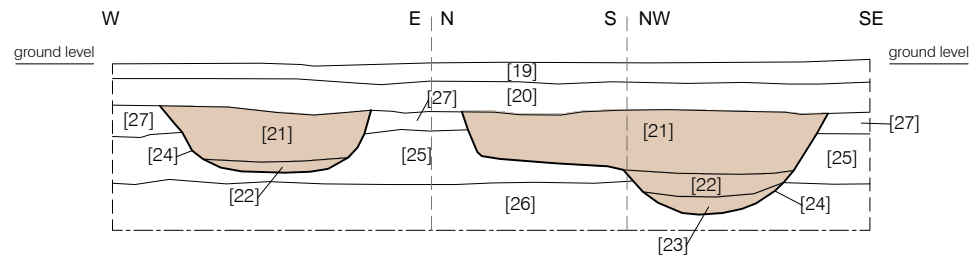
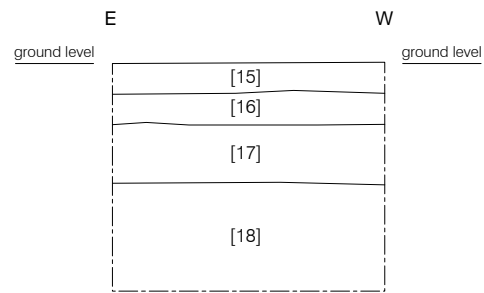
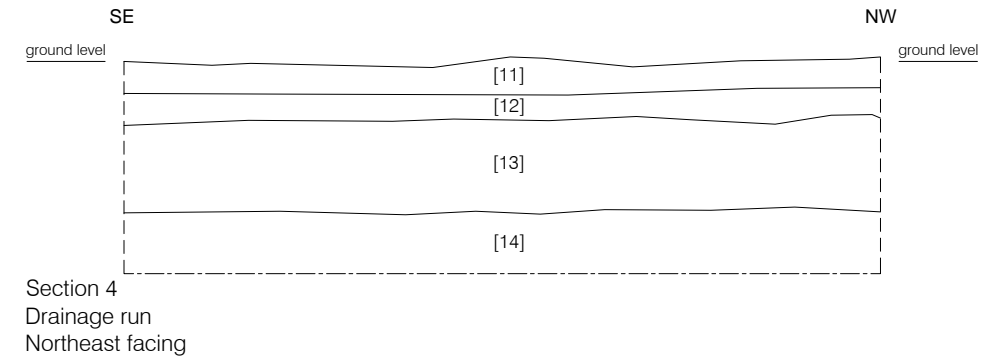
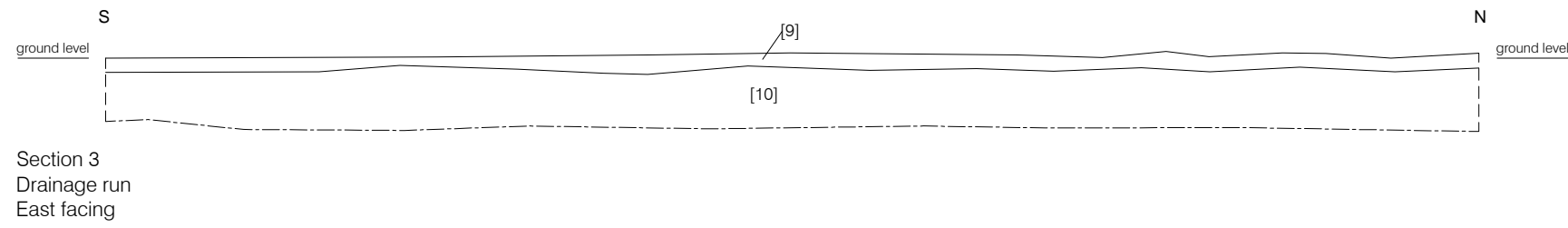
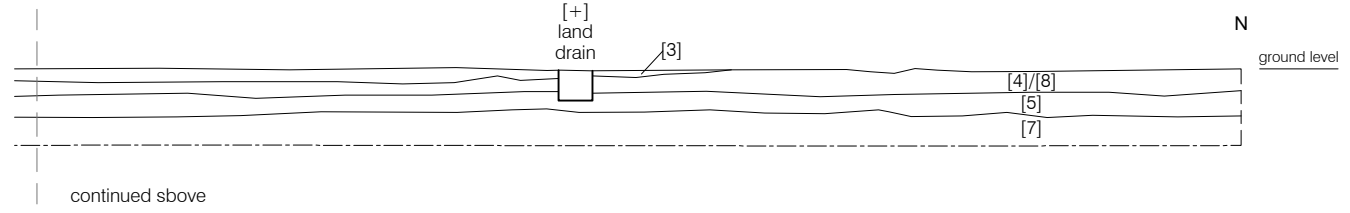
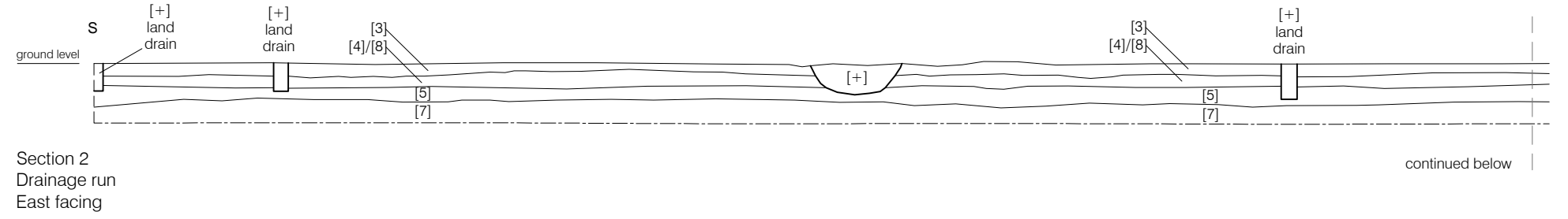
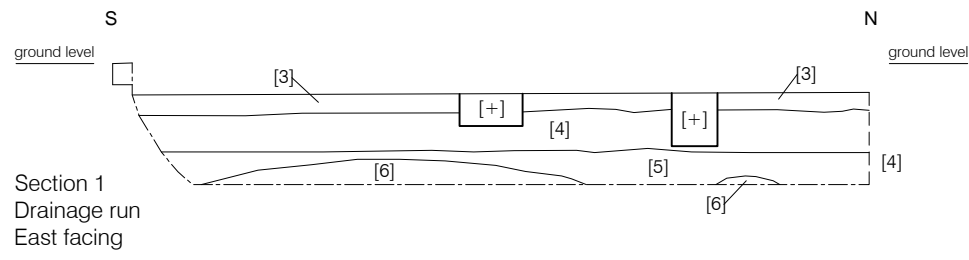
tobacco pipe, ceramic building material and bone was recovered, these all gave a date range of between AD1660 to 1900. No finds were recovered from either [16] (Manhole 1), [28] or [31] (Drainage Run between Manhole 2 and mains connection).

6.5 **Phase 5: Modern**

6.5.1 Cutting into the subsoil was a plethora of modern services, drains and pipes relating to the site's current function as a sports field. These modern features consisted of mole excavated drainage and trench dug drainage and service trenches with varied thicknesses and depths.

6.5.2 Overlying the entire site was a thick layer of grass lawn with an average thickness of 0.14m.





## 7 PLATES



*Plate 1: Layer [4] below matted material on surface, with underlying gravels [6] at the bottom of the trench, Section 1, looking west; 0.5m scale*



*Plate 2: Layer [8], light yellow grey relict soil, Section 2, west facing; scale 50cm*



*Plate 3: opposite face to Section 2, East facing, showing relict subsoil and underlying natural silts; no scale*



*Plate 4: Cut [24] (right of scale) within relict subsoil [27] (left of scale), view to northwest within Manhole 2; scale 0.5m*



*Plate 5: Cut [24] within Section 6, South face; Scale 0.50m*



*Plate 6: Cut 24, eastern edge with fills [21],[22] and [23], South facing; Scale 0.50m*



Plate 7: Cut [24] with redline superimposed to show cut on Section 6, View to north-east; Scale 0.50m





*Plate 8: North facing Section 9 within the north-western goal post; Scale 0.50m*



*Plate 9: North facing Section 10 within the north-eastern goal post, natural gravels [37] can be seen at the very bottom of the slot c1.10m bgl; Scale 0.50m*



*Plate 10: North facing Section 11 within the south-western goal post; Scale 0.50m*



*Plate 11: North facing Section 9 within the north-eastern goal post; Scale 0.50m*

## 8 CONCLUSIONS

- 8.1 The watching brief revealed that the level of natural gravels within the inner area of Wasps FC are higher than indicated by previous geotechnical works on the site. The natural underlying gravels of the Lynch Hill River terraces (Phase 1) were seen at between 0.60m to 1.00m bgl along the current site with a slow gradual decrease in height to the southwest.
- 8.2 It was also revealed that substantial deposits belonging to the Langley silts member (phase 2) overlay the Lynch Hill deposits and were up to 1.0m in thickness.
- 8.3 Within the uppermost layers of the Langley Silts sat a thin band of what is thought to be either relict plough soil or agricultural soil. Within this deposit numbered layers [4,8,9,27 & 34] both burnt and worked flints were recovered. This layer also contained charcoal flecking. Within the northern part of site within Pitch 1 this relict soil horizon could be seen at 0.20m bgl and gradually decreased in height to the south and west with its deepest depth within the Manhole 2 area at 0.42m bgl. The presence of burnt and worked flint and no pottery suggests a possible Neolithic or Bronze Age date for this horizon.
- 8.4 Cutting into the Langley silts and the relict soil horizon of layer [27] was ditch [24]. This was the only archaeological feature monitored and recorded. It is suggested that was a north-west, south-east running linear ditch of possible prehistoric date.
- 8.5 The underlying subsoil across site contained material of 17<sup>th</sup> to 19<sup>th</sup> century date. The mixed and mottled appearance of the subsoil may relate to the pastoral land noted within the WSI (Hawkins 2021) as Diana Spring Field.
- 8.6 The results of this watching brief have enabled the research questions that were set out in the Written Scheme of Investigation compiled by PCA (2021) to be addressed:
- 8.7 **To determine the palaeotopography of the site.**
- 8.7.1 The watching brief was able to add to the palaeotopographical understanding of the site; in general the underlying gravels of the Lynch Hill River terraces can be seen around 1m bgl. Within the middle of the pitch area an interface layer could be seen as high at 0.60m bgl. There seemed to be evidence of a gradual slope westwards to deeper levels.
- 8.7.2 The overlying Langley silts across the site were described as “superficial” in the geotechnical investigations. On site monitoring seems to suggest that the Langley silt was up to 1m in thickness across the entire site. The deposit also had a gentle slope both southwards and westwards towards Twyford Avenue.
- 8.8 **To determine the presence or absence of prehistoric activity. Is there any evidence for worked flint in the gravel terrace (if reached)**
- 8.8.1 There is some evidence for prehistoric activity within the upper layers of the Langley silts, with burnt and worked flints being recovered from what is thought to be a relict agricultural horizon at between 0.20m bgl and 0.48m bgl. There was also a possible north-west south-

east running linear feature thought to be a gully or ditch which ran along the western side of the site. No pottery was recovered from either the relict soil or linear, both were dated by the burnt flint they contained.

8.9 **To determine any evidence for Roman material relating to the Roman Road to the south**

8.9.1 No evidence for the Roman period was witnessed during the watching brief.

8.10 **To determine the presence or absence of any other archaeological activity**

8.10.1 The only other period represented in the archaeological record is the late post-medieval. This is characterised by infrequent pockets of broken and dispersed finds from across the site. It is thought the presence of some of the pottery may demonstrate 17<sup>th</sup> century activity from a higher socio-economic household. No features were discovered relating to this period.

8.11 **To establish the extent of past post depositional impacts on the archaeological resource**

8.11.1 Large scale landscaping and levelling seems to have occurred to the northern end of site, this work seems to have removed the northern end of site leaving the relict soil horizons higher up in the sequence. The site was also covered by active and disused service trenches, drainage trenches and other services features some which might have been in place since the field's first use as a sports ground in 1899.

## **9 ACKNOWLEDGEMENTS**

- 9.1 Pre-Construct Archaeology Ltd would like to thank RPS Group for commissioning the work
- 9.2 The author would like to thank Helen Hawkins for her project management, Omar Quadir, Pat Kavanagh and Duncan Field for their work and cover on site and Mark Roughley for the CAD illustrations.

## 10 BIBLIOGRAPHY

CIfA Chartered Institute for Archaeologists. 2014. *Standard and guidance for an archaeological evaluation*

Hawkins, H. 2021. *Wasps FC Training Ground, Twyford Avenue, London: Written Scheme of Investigation for an Archaeological Watching Brief*. PCA unpublished report.

Historic England. 2015. *Management of Research Projects in the Historic Environment* (MoRPHE)

Historic England Greater London Archaeology Advisory Service (GLAAS). 2015. *Guidelines for Archaeological Projects in Greater London*.

*RPS Group 2020 Archaeological Desk Based Assessment: Wasps FC, Twyford Avenue London unpublished client report*

Taylor, J & Brown, G. 2009, updated 2018. *Fieldwork Induction Manual: Operations Manual*, Pre-Construct Archaeology Limited



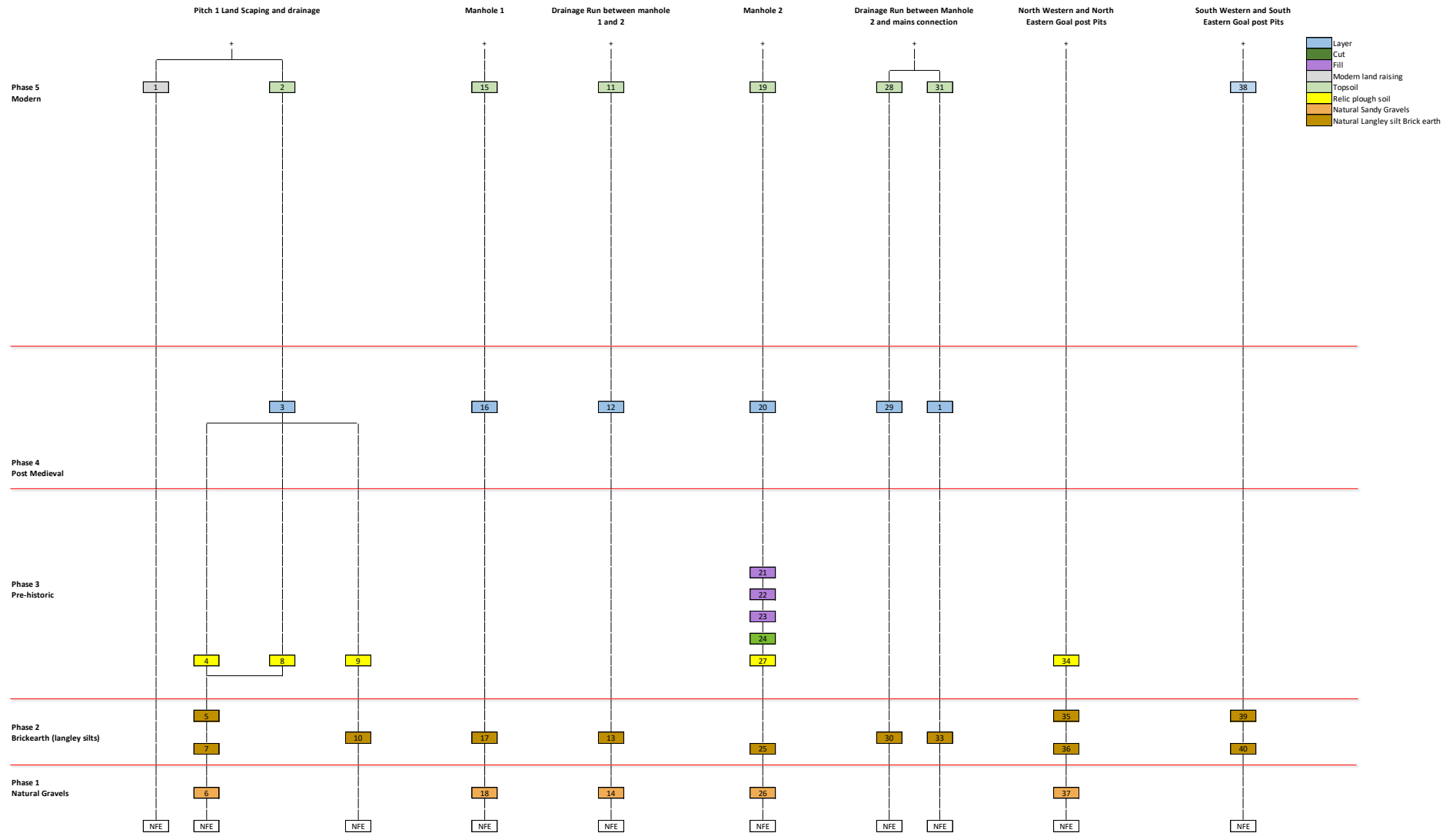
## 11 APPENDIX 1: CONTEXT INDEX

CTX Report									
Site Code	Context	Trench	Section no	Plan no	CTX_Type	CTX_Levels_high	CTX_Levels_low	Phase	Phase_CCD
TY021	1				Layer	0.4	0.2	5	
TY021	2		1		Layer	0		5	
TY021	3		1, 2		Layer	0.14	0.2	4	
TY021	4		2, 1		Layer	0.34		3	
TY021	5		1, 2		Layer	0.58		2	
TY021	6		1		Natural	0.63		1	
TY021	7		2		Layer	0.5	0.48	2	
TY021	8		2		Layer	0.2	0.3	3	
TY021	9		3		Layer	0		3	
TY021	10		3		Layer	0.1		2	
TY021	11		4		Layer	0		5	
TY021	12		4		Layer	0.2		4	
TY021	13		4		Layer	0.4		2	
TY021	14		4		Layer	1		1	
TY021	15		5		Layer	0		5	
TY021	16		5		Layer	0.2		4	
TY021	17		5		Layer	0.4		2	
TY021	18		5		Layer	0.8		1	
TY021	19		6		Layer	0		5	

CTX Report									
Site Code	Context	Trench	Section no	Plan no	CTX_Type	CTX_Levels_high	CTX_Levels_low	Phase	Phase_CD
TYO21	20		6		Layer	0.1	0.13	4	
TYO21	21		6		Fill	0.3	0.32	3	
TYO21	22		6		Fill	0.64	0.74	3	
TYO21	23		6		Fill	0.8	0.9	3	
TYO21	24		6		Cut	0.5	0.9	3	
TYO21	25		6		Layer	0.46		2	
TYO21	26		6		Layer	0.8		1	
TYO21	27		6		Layer	0.3	0.32	3	
TYO21	28		7		Layer	0		5	
TYO21	29		7		Layer	0.3		4	
TYO21	30		7		Layer	0.6		2	
TYO21	31		8		Layer	0		5	
TYO21	32		8		Layer	0.2		4	
TYO21	33		8		Layer	0.8		2	
TYO21	34		9, 10		Layer	0.45	0.5	3	
TYO21	35		9, 10		Layer	0.6	0.65	2	
TYO21	36		9, 10		Layer	0.8	0.85	2	
TYO21	37		10		Layer	1	0	1	
TYO21	38		11, 12		Layer	0.4	0.45	5	
TYO21	39		11, 12		Layer	0.6	0.7	2	
TYO21	40		11, 12		Layer	1		2	



## 12 APPENDIX 2: PHASED MATRIX



## 13 APPENDIX 3: POST-ROMAN POTTERY ASSESSMENT

Chris Jarrett

### Introduction

13.1 A small sized assemblage of pottery was recovered solely by hand from the archaeological work (less than one box). The pottery dates to both the medieval and the post-medieval periods (the 17th and 18th century). None of the sherds show evidence for abrasion, although one sherd is laminated, while two sherds of pottery was deemed to be residual or intrusive. Therefore, the pottery was mostly deposited under secondary circumstances. The assemblage is comprised only of sherd material. Pottery was recovered from five contexts and only as small sized groups (fewer than 30 sherds). The assemblage is generally homogenous and domestic in nature.

13.2 In total the assemblage consists of 24 sherds, 22 estimated number of vessels (ENV), 526g (of which none was unstratified). The pottery is discussed by types (The Assemblage) and its distribution.

### Methodology

13.3 The pottery was quantified by sherd count (SC) and estimated number of vessels (ENVs), besides weight. The assemblage was examined macroscopically and microscopically using a binocular microscope (x20), and entered into a database format, by fabric, form and decoration. The classification of the pottery types follows that of the Museum of London Archaeology (2014) and the cataloguing of the pottery was according to the guidelines set out by Barclay *et al* (2016).

### The assemblage

13.4 The pottery can be quantified as belonging to the following periods:

- Medieval: 1 sherd, 1 ENV, 20g
- Post-medieval: 23 sherds, 21 ENV, 506g

13.5 The range of medieval post-medieval pottery types and the forms that occur in the post-Roman wares are shown in Table 1.

### Medieval

13.6 The base of a jug, possibly of a biconical type, with evidence of external heating and made in 'Tudor Green' ware (TUDG), dated 1350–1500 was recovered from deposit [9].

Pottery type	Code	Date range	SC	ENV	Wt (g)	Forms
Medieval						
Tudor Green' ware	TUDG	1350–1500	1	1	20	Jug

Pottery type	Code	Date range	SC	ENV	Wt (g)	Forms
Post-medieval						
Surrey-Hampshire border whiteware with brown glaze	BORDB	1600-1700	1	1	4	Unidentified
Surrey-Hampshire border whiteware with green glaze	BORDG	1550-1700	3	3	84	Bowl: deep, bowl or dish
English brown salt-glazed stoneware	ENGS	1700-1900	1	1	17	Unidentified
Frechen stoneware	FREC	1550-1700	7	5	98	Jug: Bartmannen, rounded
Essex-type post-medieval fine redware	PMFR	1580-1700	5	5	143	Bowl or dish, unidentified
London-area post-medieval redware	PMR	1580-1900	2	2	70	Jar
Surrey-Hampshire border redware	RBOR	1550-1900	1	1	20	Unidentified
Surrey-Hampshire border redware with brown glaze	RBORB	1580-1800	1	1	4	Mug: rounded
Staffordshire-type mottled brown-glazed ware	STMO	1650-1800	1	1	13	Bowl: deep flared
White salt-glazed stoneware	SWSG	1720-1780	1	1	2	Unidentified

Table 1. TYO21: medieval and post-medieval pottery types quantified by sherd count (SC), ENV and weight and the forms that occur in those pottery types.

### Post-medieval

- 13.7 Surrey-Hampshire border wares (Pearce 1992; 1999) are more frequent in this assemblage (six sherds/6 ENV/112g with the whiteware, dated 1550–1700 more frequent and consists of bowls or dishes (contexts [1] and [4]) made in the green-glazed ware (BORDG) besides an unidentified closed form (deposit [3]) made in the 1600–1700 dated brown-glazed ware (BORDB). The redware (RBOR), dated 1550–1900, was less frequent and included a sherd of a mid-17th-century dated rounded mug made in the brown-glazed version (RBORB) (context [1]).
- 13.8 Essex-type fine redware (PMFR), dated 1580–1700 (Nenk and Hughes 1999), was the other frequent pottery type and only occurred as sherds of identifiable bowls or dishes (contexts [1] and [12]). A sherd of a large vessel with a horizontal loop strap handle was noted in deposit [20]. The local London area coarse post-medieval redware (PMR), dated 1580–1900, occurred only in the form of two rounded jars (deposit [1]).
- 13.9 The only imported pottery in the assemblage occurred as ubiquitous German Frechen stoneware (FREC), dated 1550–1700 (Hurst *et al* 1986) and present typically as sherds of rounded jugs (contexts [1] and [3]) and bartmannen indicated by the presence of vessels

with medallions depicting either a floral motif or the coat of Arms of Amsterdam (context [1] and [3]).

- 13.10 Staffordshire-type products occur as the mottled-glazed ware (STMO), dated 1660–1800 and present as the base of a deep flared bowl (context [1]) and as white salt-glazed stoneware (SWSG), dated 1720–1780 and recorded as a non-diagnostic sherd from a cylindrical vessel (context [3]) and was found with a non-diagnostic sherd of English stoneware (ENGS), dated 1700–1900.

### Distribution

- 13.11 Table 2 shows the contexts containing pottery and for each deposit is recorded the size/number of sherds, ENV and weight in grams (Wt g), the earliest and latest date of the most recent pottery type (Context ED/LD), the pottery types and forms present and a considered (spot) date for the group.

Context	Size	SC	ENV	Wt (g)	Context ED	Context LD	Pottery types (forms)	Spot date
1	S	14	12	286	1650	1800	BORDG (bowl deep), FREC (jug: bartman; rounded), PMFR (bowl or dish, unidentified), PMR (jar), RBOR (unidentified), RBORB (mug; rounded), STMO (bowl; deep flared)	1650–1700
3	S	3	3	48	1720	1780	BORDB (unidentified), ENGS (unidentified), FREC (jug: rounded), SWSG (unidentified)	1720–1800
4	S	1	1	13	1550	1700	BORDG (bowl or dish)	1600–1700
9	S	1	1	20	1350	1500	TUDG (JUG)	1300–1500
12	S	2	2	70	1580	1700	PMFR (bowl or dish, unidentified)	1580–1700
20	S	1	1	105	1580	1700	PMFR (unidentified)	1580–1700

*Table 2. TYO21. Distribution of pottery showing individual contexts containing pottery, the size of the group, the number of sherds (SC), ENV's and weight, the date range of the latest pottery type (Context ED/LD), the pottery types and forms present and a suggested deposition date (spot date).*

- 13.12 Context [9] produced the only sherd of medieval pottery in the form of a 'Tudor Green' jug base dated 1350–1500.
- 13.13 The largest group of pottery was recovered from deposit [1] and contained pottery types that were mostly contemporaneous during the period c. 1580–1700 (BORDG, FREC, PMR and RBOR/B), however, the presence of a deep flared bowl made in Staffordshire-type mottle glazed ware indicated a deposition date of c. 1650–1700.
- 13.14 Contexts [12] and [20] was dated c. 1580–1700 by the occurrence of vessels made solely in Essex-type post-medieval fine redware.

- 13.15 Deposit [4] was dated c. 1600–1700 by a Surrey-Hampshire border whiteware green-glazed bowl or dish with a flat rim. The vessel has a brown-glaze run on the exterior of the vessel which dates the item to after c. 1600.
- 13.16 The latest dated deposit in the assemblage was context [3], which contained a sherd of c. 1720–80 dated white salt-glazed stoneware and was found with residual sherds of 17th-century BORDB and FREC.

### **Significance of the collection**

- 13.17 The assemblage of pottery has some significance at a local level and demonstrates post-medieval activity on the study area. Of interest is the greater occurrence of fine earthenwares from the Surrey-Hampshire borders (BORDB/G, RBOR/B) and possibly Essex (PMFR) as opposed to the coarser London area PMR, which may indicate that the pottery came from a higher socio-economic household that was willing to expend its income on better quality pottery. The pottery types recorded in the assemblage are typical of those types and forms found in the Greater London area.

### **Potential of the collection**

- 13.18 The potential of the pottery is to date the contexts the finds were found in. The pottery has the potential to demonstrate late medieval and 17th-century activity on the study area. There are no recommendations for further work on the pottery and the importance of the assemblage should be reviewed if further archaeological work is undertaken on the study area and new finds are recovered.

### **References**

- Barclay, A., Knight, D., Booth, P. Evans, J, Brown, D. H. and Wood, I. 2016, *A Standard for Pottery Studies in Archaeology*. Prehistoric Ceramics Research Group, Study Group for Roman Pottery and Medieval Pottery Research Group.
- Hurst, J. G., Neal, D. S. and van Beuningen, H. J. E. 1986, *Pottery produced and traded in North-west Europe, 1350-1650*. Rotterdam Papers IV.
- Museum of London Archaeology 2014, Medieval and post-medieval pottery codes. <http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes>. Accessed 23 July 2020.
- Nenk, B. and Hughes M. 1999, 'Post-medieval redware pottery of London and Essex', in Egan, G. and Michael, R. L. *Old and New Worlds*. Oxbow Books, 235–245.



## 14 APPENDIX 4: REVIEW OF CERAMIC BUILDING MATERIAL

*Compiled by Amparo Valcarcel PCA*

- 14.1 A total of two fragments of post-medieval roofing tiles was retrieved from two contexts [1] [3]. Both examples have sharp arises and fine moulding sand, pointing out to an AD1700-1900 date. Given that this site was used as agricultural land, the building material may have simply derived from the demolition of nearby post-medieval buildings.
- 14.2 Other than its potential for dating the sequence there are no individual items of artistic merit or worthy of illustration. There is little potential for further work based on the building material alone.

### Distribution

Context	CBM_Fabric	Form	Quantity	Date range of material	Latest dated material	Spot date
1	2276type	Post-medieval sandy peg tile	1	1450-1900	1450-1900	1700-1900
3	2276type	Post-medieval sandy peg tile	1	1450-1900	1450-1900	1700-1900

## 15 APPENDIX 5: ASSESSMENT OF THE CLAY TOBACCO PIPES

Chris Jarrett

- 15.1 A total of five fragments (all bowls) of clay tobacco pipes were recovered solely by hand from the archaeological work and were found in two contexts. All of the bowls have an average burnish/finish and are mostly absent of makers' marks. Context [1] produced three bowls, two of which are residual Atkinson and Oswald (1969) type 15 bowls, one of which has half and the other three-quarters milling of the rim. The latest bowl was an Oswald (1975) type 10 heeled upright bowl with a thick stem, dated 1700–40. Context [3] produced the same type of bowls and dating as that found in deposit [1] and included a residual Atkinson and Oswald spurred type 15 shape, dated 1660–1680, which has nearly full milling of the rim and an Oswald type 10 bowl, which has poorly moulded and illegible initials (possibly R ?) on the sides of the heel.
- 15.2 The clay tobacco pipes are of little significance as the assemblage is small, absent of makers' marks and are of types frequently recorded in the Greater London area. The clay tobacco pipes do have the potential to date the contexts these items were recovered from. There are no recommendations for further work on the pipes, which can be discarded at the archive stage of the project.

### Bibliography

Atkinson, D. and Oswald, A. 1969, 'London clay tobacco pipes'. *Journal of British Archaeological Association*. Series 3, 2, 171–227.

Oswald, A. 1975, *Clay pipes for the archaeologist*, British Archaeological Reports British series, 14.

## **16 APPENDIX 6: GLASS**

*Chris Jarrett*

- 16.1 A single fragment (21g) of glass was recovered by the hand from the archaeological work and was found in context [1]. The glass consists of an olive-green wall fragment from a free-blown wine bottle of either an onion-type or a mallet-shape and indicates a date of c. 1680–1760. The surfaces of the wine bottle fragment are missing indicating that the exteriors were naturally weathered.
- 16.2 The fragment of wine bottle has no significance and the only potential of the find is to date the context it was found in. There are no recommendations for further work on the glass, which can be discarded.

## **17 APPENDIX 7: ANIMAL BONE**

*Karen Deighton*

- 17.1 A single very abraded fragment of animal bone was recovered from context [3] during a watching brief. Due to poor preservation the material can only be categorised as a cattle sized long bone fragment.

## 18 APPENDIX 8: GEO-ARCHAEOLOGICAL WORKS

*Duncan Field, PCA*

18.1 Langley Silt and terrace gravels were identified at the WASPS site and it was therefore visited by a geo-archaeologist in order to record the deposits and assess their potential for the presence of Palaeolithic archaeology. A monolith sample was taken from Section 5.

18.2 **Monolith <1>**

### **Summary of sedimentary sequence (Section 5)**

#### **Topsoil [15] - Subsoil [16] 0 to 0.4m**

Sharp boundary

**[17] Unit 1. 0.4 to 1m: Brown-orange silty clay.** Thick, highly compacted, very well sorted, no obvious bedding, imbrication or other sedimentary structures.

Sharp boundary at ~1m depth, depth of boundary only exhibited extremely limited variation along the length of the ~30m service trench.

**[18] Unit 2: 1 to 1.4m (base of trench): Red-Orange gravel.** Pebble sized clasts in a coarse sand matrix, clasts are sub-rounded to sub-angular. Predominantly flint with occasional clasts of very well-rounded vein quartz (<1%). Unit is clast supported, very poorly sorted and like the overlying unit exhibits no obvious bedding, imbrication or any other sort of sedimentary structures.

#### **Sieving Methodology**

At least 40L of gravel was sieved per 2m of service trench dug as well as 100L from the gravel in the manhole pit.

No environmental material or lithics were recovered during sieving.

## 19 APPENDIX 9: FLINT REPORT

Dr Barry Bishop PCA

### 19.1 Introduction

Archaeological investigations at the Wasps FC resulted in the recovery of a small assemblage of struck flint and a larger collection of unworked burnt flint. The material has been comprehensively catalogued by context and this includes further descriptive details (Catalogue L01). This report summarises the data in the catalogue; it quantifies and describes the material and presents a preliminary assessment and outline of its significance. The assemblage was recorded following standard technological and typological classifications and largely follows the methodology of Inizan *et al* (1999) with modifications and additions as indicated in the text by the author. Retouched tools were classified following standard British works such as Healy (1988) and Bamford (1985). Measurements were taken following the methodology of Saville (1980).

### 19.2 Quantification and distribution

Type	Decorification flake	Flake	Core	Conchoidal chunk	Retouched	Unworked burnt flint (no.)	Unworked burnt flint (wt:g)
No.	2	3	2	2	1	116	2313

Table L01: Quantification of the struck flint from the WASPs training ground

A total of ten struck flints and just over 2.3 kg of heavily burnt unworked flint were recovered during the archaeological excavations (Table L01). All of the material came from soil horizons with the exception of a small quantity of unworked burnt flint that was recovered from ditch [24] (Catalogue L01).

### 19.3 Unworked Burnt Flint

In total 116 pieces of burnt flint weighing a total of 2,313g was recovered; these had been humanly modified by being burnt but exhibited no signs of previous or subsequent modification. It was recovered from unstratified, topsoil and relict soil horizons as well as from ditch [24], with the greatest quantities coming from the relict soils towards the north of the site. Where recognizable, it all comprises relatively small and rounded alluvial flint pebbles and cobbles that were most probably gathered from the local Lynch Hill Terrace

deposits. They had been heated to a variable but predominantly very high degree, causing them to change colour, fragment and become 'fire-crazed'.

The quantities recovered could be suggestive either of hearth construction associated with reasonably intense occupation, or possibly from the systematic production of burnt flint, such as occurs at 'burnt mound' sites. The deliberate heating of flint is often documented from prehistoric sites and a variety of reasons have been forwarded for its production, including for cooking and for variety of craft and industrial processes (e.g. Barfield and Hodder 1987; Hodder and Barfield 1991).

#### 19.4 Struck Flint

The struck assemblage is made from fine-grained 'glassy' flint that is predominantly translucent black in colour but varying to dark brown. Cortex, where present, varies between rough but weathered and smooth rolled, and ancient thermal (frost) fracture scars are common. It is likely that the raw materials were gathered from the underlying Lynch Hill Gravel deposits, although it also appears that some of the larger and less rolled cobbles may have been preferentially selected.

No truly diagnostic pieces are present, but the technological traits of most of the pieces would be comparable to those of later prehistoric industries, particularly those dating to the later second and first millennia BC (e.g. Herne 1991; Young and Humphrey 1999; Humphrey 2003).

One possible exception is worthy of discussion. This comprises the core recovered from unstratified deposits which consists of an irregularly shaped, quartered nodular chunk that has many relatively small flakes removed from around its perimeter and at least one large flake removed from across its 'top'. As such it resembles a Middle Palaeolithic Levallois core, which given the internationally significant Mousterian remains recovered immediately to the north of the site would make this a notable find. However, it has been reduced rather clumsily and it is not at all evident that the side-flaking was intended to guide the detachment of the 'main flake'. It has not recorticated or become mineral stained, as much although not all of the Middle Palaeolithic material from the Creffield Road sites had. Taking these points together, and with regard to the other pieces of flintwork from the training ground site, it is perhaps more likely that this core is an irregularly reduced example that dates to the later prehistoric period with only incidentally resemblances to Levallois types.

The rest of the material comprises flakes, cores, conchoidally fractured pieces and a retouched implement. The latter piece is well produced and could date to any time between the Mesolithic and Early Bronze Age periods, but the rest of the material is crudely produced and includes a minimally reduced core, 'squat' flakes and disintegrated core fragments that could most easily be accommodated within Middle Bronze Age to Iron Age industries.

## 19.5 Significance

The main significance of the struck flint assemblage is that it demonstrates flintworking activities occurring at the site during the later prehistoric periods, with most of the material being typical of Bronze Age or Iron Age industries. Although most probably later in date, a possible Middle Palaeolithic Levallois core was also identified.

The quantities of unworked burnt flint are notable given the size of the areas investigated and are suggestive of its deliberate production. Unworked burnt flint is inherently undatable once removed from the ground, but large quantities are most commonly encountered in prehistoric contexts, particularly those of the Bronze Age. It is also worth bearing in mind the presence of a classic 'burnt mound' site at the Phillimore's in Kensington, c. 6km to the east, which occupies a similar topographical location (Moore *et al.* 2003).

## 19.6 Recommendations

Due to the small size of the struck flint assemblage, this report and accompanying catalogue is all that is required for the purposes of archiving and no further analytical work is warranted. The assemblage does, however, provide evidence for later prehistoric activity at the site and can contribute to wider appreciations of prehistoric landscape use in the area. It is therefore recommended that it is recorded in the Historic Environment Record and a brief mention of the assemblage included in any published account of the fieldwork. This should also include a short discussion of the dating of the possible Middle Palaeolithic Levallois core.

The relatively high quantities of unworked burnt flint that were recovered is suggestive of deliberate production although remains undated and has few contextual associations. It has been fully recorded and subsequently discarded, but mention should also be made in any published account of the investigations.

## 19.7 Bibliography

- Bamford, H. 1985 *Briar Hill: Excavation 1974–1978*. Northampton Development Corporation. Northampton.
- Barfield, L. and Hodder, M. 1987 Burnt Mounds as Saunas, and the Prehistory of Bathing. *Antiquity* 61 (233), 370-379.
- Healy, F. 1988 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham. Part VI: Occupation in the seventh to second millennia BC*. East Anglian Archaeology 39.
- Hodder, M.A. and Barfield, L.H. (Eds.) 1991 *Burnt Mounds and Hot Stone Technology: papers from the 2nd International Burnt Mound Conference, Sandwell, 12-14 October 1990*. Sandwell Metropolitan Borough Council. Sandwell.
- Herne, A. 1991 The Flint Assemblage. In: I. Longworth, A. Herne, G. Varndell and S. Needham, *Excavations at Grimes Graves Norfolk 1972 - 1976. Fascicule 3. Shaft X: Bronze Age flint, chalk and metal working*, 21 - 93. British Museum Press. Dorchester.



- Humphrey, J. 2003 The Utilization and Technology of Flint in the British Iron Age. In J. Humphrey (Ed.) *Re-searching the Iron Age: selected papers from the proceedings of the Iron Age research student seminars, 1999 and 2000*, 17-23. Leicester Archaeology Monograph 11.
- Inizan, M-L., Reduron-Ballinger, M., Roche, H. and Tixier, J. 1999 *Technology and Typology of Knapped Stone* (Translated by J. Feblot-Augustines). Cercle de Recherches et d'Etudes
- Moore, P., Bradley, T., Bishop, B. J. and Seager Thomas, M. 2003 A Late Bronze Age burnt mound site at The Phillimores, Campden Hill Road, Kensington. *London Archaeologist* 10 (7), 179-186.
- Saville, A. 1980 On the Measurement of Struck Flakes and Flake Tools. *Lithics* 1, 16-20.
- Young, R. and Humphrey, J. 1999 Flint Use in England after the Bronze Age: time for a re-evaluation? *Proceedings of the Prehistoric Society* 65, 231-242.
- Inizan, M-L., Reduron-Ballinger, M., Roche, H. and Tixier, J. 1999 *Technology and Typology of Knapped Stone* (Translated by J. Feblot-Augustines). Cercle de Recherches et d'Etudes Préhistoriques Tome 5. Nanterre.
- Saville, A. 1980 On the Measurement of Struck Flakes and Flake Tools. *Lithics* 1, 16-20.

## 20 APPENDIX 10: OASIS FORM

OASIS ID: preconst1-428470

### Project details

Project name	Wasps FC, Twyford Avenue: An Archaeological Watching Brief
Short description of the project	An archaeological watching brief was carried out at Wasps FC during construction of new drainage and goalposts. A relict prehistoric soil horizon and possible prehistoric ditch were identified. Langley silt and terrace gravels were also present and were sieved to establish if Palaeolithic implements were present but none were found.
Project dates	Start: 11-06-2021 End: 23-07-2021
Previous/future work	No / Not known
Any associated project reference codes	TYO21 - Sitecode
Type of project	Recording project
Site status	Local Authority Designated Archaeological Area
Current Land use	Community Service 2 - Leisure and recreational buildings
Monument type	DITCH Late Prehistoric
Significant Finds	FLINT Late Prehistoric
Investigation type	"Watching Brief"
Prompt	Planning condition

### Project location

Country	England
Site location	GREATER LONDON EALING EALING Wasps FC, Twyford Avenue
Postcode	W3 9PX
Study area	10000 Square metres
Site coordinates	TQ 19533 80620 51.511353581086 -0.277286158492 51 30 40 N 000 16 38 W Point
Height OD / Depth	Min: 0m Max: 0m

### Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	GLAAS
Project design originator	James Archer
Project director/manager	Helen Hawkins
Project supervisor	Richard Krason

Type of sponsor/funding body Rugby Club

Name of sponsor/funding body Wasps FC

---

### Project archives

Physical Archive recipient LAA

Physical Archive ID TYO21

Physical Contents "Worked stone/lithics"

Digital Archive recipient LAA

Digital Archive ID TYO21

Digital Contents "Worked stone/lithics","Ceramics"

Digital Media available "GIS","Images raster / digital photography","Text"

Paper Archive recipient LAA

Paper Archive ID TYO21

Paper Contents "none"

Paper Media available "Context sheet","Plan","Section"

---

### Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Wasps FC: An Archaeological Watching Brief

Author(s)/Editor(s) Krason, R

Date 2021

Issuer or publisher Pre-Construct Archaeology Ltd

Place of issue or publication London

---

Entered by archive (archive@pre-construct.com)

Entered on 17 August 2021