

# DESIGN DISTRICT (PLOT 11), GREENWICH PENINSULA, ROYAL BOROUGH OF GREENWICH

## Geoarchaeological Deposit Model

**NGR:** TQ 3918 7980

**Date:** 30<sup>th</sup> October 2017

**Site Code:** DDT 17

**Written by:** Dr D.S. Young

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

**Tel:** 0118 378 7978 / 8941

**Email:** [d.s.young@reading.ac.uk](mailto:d.s.young@reading.ac.uk)  
<http://www.reading.ac.uk/quest>



## DOCUMENT HISTORY

REVISION	DATE	PREPARED BY	SIGNED	APPROVED BY	SIGNED	REASON FOR ISSUE
v1	02/10/17	D.S. Young		C.R. Batchelor		First edition
v2	30/10/17	D.S. Young		C.R. Batchelor		Revisions to text

## CONTENTS

1. NON-TECHNICAL SUMMARY .....	3
2. INTRODUCTION.....	3
2.1 Site context .....	3
2.2 Geoarchaeological, palaeoenvironmental and archaeological significance .....	5
2.3 Aims and objectives .....	6
3. METHODS.....	10
3.1 Field investigations .....	10
3.2 Lithostratigraphic description.....	10
3.3 Deposit modelling.....	10
4. RESULTS, INTERPRETATION & DISCUSSION OF THE GEOARCHAEOLOGICAL DEPOSIT MODELLING .....	13
4.1 Gravel.....	13
4.2 Sand .....	14
4.3 Lower Alluvium .....	15
4.4 Peat.....	15
4.5 Upper Alluvium.....	16
4.6 Made Ground .....	16
5. CONCLUSIONS & RECOMMENDATIONS.....	27
6. REFERENCES .....	28
7. APPENDIX 1: BOREHOLE DATA .....	32
9. APPENDIX 2: OASIS FORM .....	53

## 1. NON-TECHNICAL SUMMARY

A programme of geoarchaeological field investigations and deposit modelling was undertaken at the Design District site, integrating geotechnical and geoarchaeological borehole data for the site and the wider area of Greenwich Peninsula, in order to (1) clarify the nature of the sub-surface stratigraphy across the site; (2) clarify the nature, depth, extent and likely date of any former land surfaces, alluvial and peat deposits; and (3) compare the results of the investigation to other sites in this area of Greenwich Peninsula.

The results of the deposit modelling indicate that in the area of the site, the Late Devensian Shepperton Gravel is overlain by a sequence of Holocene alluvial sediments, containing peat, and buried beneath modern Made Ground. The site is likely to lie either within, or on the margins of, a former Late Devensian/Early Holocene channel, within which the Gravel surface lies at between ca. -2 and -5m OD. At the present site the Gravel surface lies at ca. -3.37m OD; on this basis, the archaeological potential of the interface between the Gravel and alluvium is considered to be low, and deeply buried. However, the Holocene alluvium at the site includes two peat horizons, one within the Lower Alluvium (-3.27 and -3.33m OD) and one overlying the Lower Alluvium between -0.95 and -1.62m OD.

Given the deeply buried nature of the organic sediments at the site, an environmental archaeological assessment may highlight evidence for human activity (e.g. woodland clearance, burning and cereal cultivation) that may not be identifiable in the archaeological record. On this basis, it is recommended that an environmental archaeological assessment is undertaken on borehole WS5. Such an assessment will contribute to our understanding of the environmental history of the site and its environs, and provide a record that can be compared to existing records for Greenwich Peninsula which currently show some variability in terms of vegetation history and evidence for human activity.

## 2. INTRODUCTION

### 2.1 Site context

This report summarises the findings arising out of the geoarchaeological field investigations and deposit modelling undertaken by Quaternary Scientific (University of Reading) in connection with the proposed development of land at Design District (Plot 11), Greenwich Peninsula, Royal Borough of Greenwich (National Grid Reference: TQ 3918 7980; Figures 1 & 2). Quaternary Scientific were commissioned by RPS Group on behalf of Knight Dragon to undertake the investigations. The site is located towards the north of Greenwich Peninsula, bounded to the south by Edmund Halley Way, to the west by the Bus Service Road and the west by Phoenix Avenue (Figure 1). Greenwich Peninsula itself is formed and bounded by a meander of the Thames to the west, east and north of the site, and lies opposite the confluence of the River Lea. The ground across the area originally formed part of the natural floodplain of the Thames, and is underlain by river alluvium (British Geological Survey 1:50,000 sheets 256 North London 1993, 257 Romford 1996, 270 South London 1998, 271 Dartford 1998). This alluvium consists of fine-grained mineral-

rich deposits and peat, and is mapped to the south to approximately the position of the A206 where it meets higher drier ground. Beneath the alluvium, sand and gravel is present and is assigned by Gibbard (1994) to the Late Devensian Shepperton Gravel. The bedrock beneath this is mapped as the Palaeogene Lambeth Group – Clay, Silt and Sand. Ground level at the site is recorded at between ca. 3.5 and 4.5m OD (Concept Site Investigations, 2016).

No site-specific geotechnical records were previously available for the site itself; however, the results of geotechnical investigations immediately to the west of the site at Peninsula Place (Concept Site Investigations, 2016), comprising a total of 19 geotechnical boreholes, revealed a sequence of Shepperton Gravel overlain by variably silty, sandy and or clayey alluvium (in places containing peat), overlain by Made Ground. A peat horizon was recorded in 13 of the 19 boreholes, between 0.3 (VBH08) and 1.7m (VBH02) thick and generally present at elevations of between ca. -0.5 and -2.5m OD. The Gravel surface was recorded at the site at elevations of between -2.94 (VBH08) and -4.87m OD (BH08), with a provisional indication of lower gravel surfaces towards the north and east of the site (towards the northern part of the present site). Elsewhere on Greenwich Peninsula (see Figure 1), relatively high Gravel surfaces (between ca. -1 and -1.7m OD) have been recorded on the Tunnel Avenue (Landscape Zone B; Batchelor, 2013) and Victoria Deep Water Terminal sites (Landscape Zone A; Corcoran, 2002). Towards the north-east of the Tunnel Avenue site however, the Gravel surface drops to below -4m OD. It does the same towards the south-west and south-east of the MO115 (Landscape Zone B; Young & Batchelor, 2013a) and MO117 (Landscape Zones A and B; Young & Batchelor, 2013b) sites, in the far south-eastern corner of Greenwich Millennium Village (Miller & Halsey, 2011), and across much of the Greenwich Peninsula Central East site (Young & Batchelor, 2015a). At Plot 18.03 (Young, 2017c), the Gravel surface falls from -1m OD towards the northeast to below -3m OD towards the south. Elsewhere, smaller 'patches' of lower gravel surface >-4m OD were recorded towards the centre and south-western areas of the Millennium Festival Site (Landscape Zone D; Bowsher & Corcoran, unknown). These areas of lower Gravel surface have been interpreted as either localised hollows, or part of interconnected palaeochannels, and lie at similar elevations to those recorded at the present site.

Peat has been identified elsewhere on Greenwich Peninsula, including at the Victoria Deep Water Terminal site (Corcoran, 2002), where peat accumulation was radiocarbon dated to 5280-4660 cal BP (Middle-Late Neolithic), whilst at the Cable Car South Station (ca. 50m to the east; Green et al., 2011), the beginning of accumulation was dated to ca. 5580-5310/5890-5610 cal BP (Middle Neolithic), continuing until at least 3380-3210 cal BP Late Bronze Age). At Greenwich Peninsula Central East (Young & Batchelor, 2015a) a complex sequence of alluvium and at least three intercalated peat horizons of between 0.1 and 1.0m thickness were recorded, dated to 6720-6500 cal BP (lower Peat; Late Mesolithic), 6190-5990 cal BP (middle Peat; Early Neolithic) and 3340 to 3080 cal BP (upper Peat; Middle Bronze Age). The peat horizons recorded across much of Greenwich Peninsula thus appear to have accumulated within the same general age range of 6700 to 3000 cal BP (late Mesolithic to late Bronze Age; broadly equivalent to Devoy's (1979) Tilbury III Peat).

## 2.2 Geoarchaeological, palaeoenvironmental and archaeological significance

The geoarchaeological, palaeoenvironmental and archaeological potential of the Design District (Plot 11) site has been discussed in broad terms within the overarching WSI for the area of Greenwich Peninsula encompassed by the 2015 Masterplan (see QUEST/RPS, 2017). Significantly, peat is likely to be present at the Design District (Plot 11) site, representing a period of semi-terrestrial conditions that may date to the Neolithic through to the Bronze Age. The palaeoenvironmental potential of the sequences at the site is therefore considered to be high. Significantly, on the basis of the radiocarbon dates from sites elsewhere on the Peninsula, it is possible that this peat may have been accumulating at the same time as trackway construction occurred at the 72-88 Bellot Street (McClean, 1993; Philp, 1993) and the Garage Site, Bellot Street (Branch *et al.*, 2005) sites (Bronze Age) approximately 1.5km to the south. In addition, the existing records from the nearby area indicate a variable sequence of Holocene alluvial deposits resting on a highly variable Shepperton Gravel surface. The different deposits recorded are significant as they represent different environmental conditions that would have existed in a given location. For example: (1) variations in the topography of the River Terrace Gravels could indicate the position of former channels and islands on the floodplain; (2) the presence of soils and peat represent former terrestrial or semi-terrestrial land-surfaces, and (3) the less organic alluvial deposits of sands/silts/clays represent periods of varying hydrological conditions on the floodplain. At present, our understanding is that the Design District (Plot 11) site lies in an area of deeper gravel surfaces, potentially indicative of a within-channel setting, overlain by organic-rich deposits and peat. By studying the sub-surface stratigraphy across the site in greater detail, it will be possible to build a greater understanding of the former landscapes and environmental changes that took place over space and time at this location of Greenwich Peninsula.

Organic-rich sediments (in particular peat) also have high potential to provide a detailed reconstruction of prehistoric environments on both the wetland and dryland. In particular, there is the potential to increase knowledge and understanding of the interactions between hydrological change, human activity, vegetation succession and climate in this area of the Middle Thames Valley. Significant vegetation changes include the early Holocene/early Mesolithic transition from pine-dominated to mixed-deciduous dominated woodland; the late Mesolithic/Neolithic decline of elm woodland, the Neolithic colonisation and decline of yew woodland; the late Neolithic/early decline of wetland and dryland woodland. Such investigations are carried out through the assessment/analysis of palaeoecological remains (e.g. pollen, plant macrofossils & insects) and radiocarbon dating. Palaeoenvironmental reconstructions have been carried out on the sedimentary sequences from elsewhere in this general area, including at the Victoria Deep Water Terminal site (Corcoran, 2002), at the Cable Car South Station (Green *et al.*, 2011), Greenwich Peninsula Central East (Young & Batchelor, 2015a), Enderby Wharf (Batchelor *et al.*, 2015), Plot 18.03 (Young, 2017c) and Alcatel-Lucent Telegraph Works (Young & Batchelor, 2015b).

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). As stated above, such evidence was identified in the form of a Bronze Age trackway at the nearby 72-88 Bellot Street (McClean, 1993; Philp, 1993) and Garage Site, Bellot Street (Branch *et al.*, 2005) sites (Bronze Age) approximately 1km to the south.

### **2.3 Aims and objectives**

On the basis of the geoarchaeological, palaeoenvironmental and archaeological potential of the site, further records are required to enhance our understanding of the sub-surface stratigraphy of the Design District (Plot 11) site, and for any further assessment/analysis of the deposits (if necessary). The recommendations made here are in line with those made in the overarching WSI for the area of Greenwich Peninsula encompassed by the 2015 Masterplan (see QUEST/RPS, 2017), and in the site-specific WSI for this site (Young, 2017a).

Five research aims relevant to the geoarchaeological investigations at the site are outlined here:

1. To clarify the nature of the sub-surface stratigraphy across the site;
2. To clarify the nature, depth, extent and date of any former land surfaces, alluvial and peat deposits;
3. To compare the results of the investigation to other sites in this area of Greenwich Peninsula;
4. To investigate whether the sequences contain any artefact or ecofact evidence for prehistoric or historic human activity;
5. To investigate whether the sequences contain any evidence for natural and/or anthropogenic changes to the landscape (wetland and dryland);
6. To integrate the new geoarchaeological record with ongoing investigations in the area of Greenwich Peninsula (including those carried out as a response to the Historic England Archaeological Brief and Plot Specific WSI), and other recent work in the local area, for publication in an academic journal.

In order to address the first three of these aims, the following objectives are proposed:

1. To retrieve undisturbed continuous samples from one targeted borehole location (WS5; see Figure 3) for field and laboratory-based investigation;
2. To use the stratigraphic data from the new borehole and existing records to produce a deposit model of the major depositional units across the site;
3. To make recommendations for any further geoarchaeological, palaeoenvironmental and archaeological investigations.

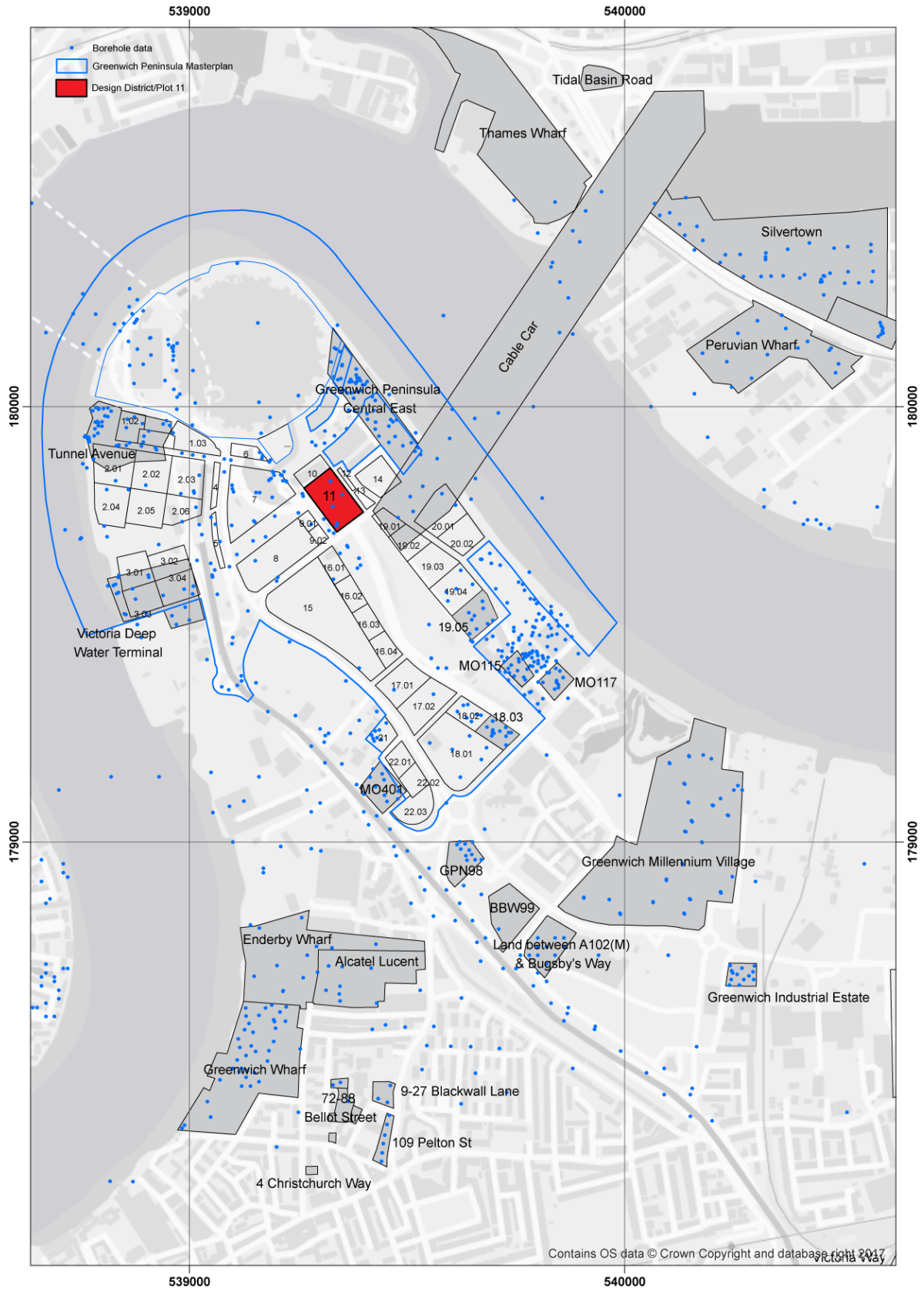
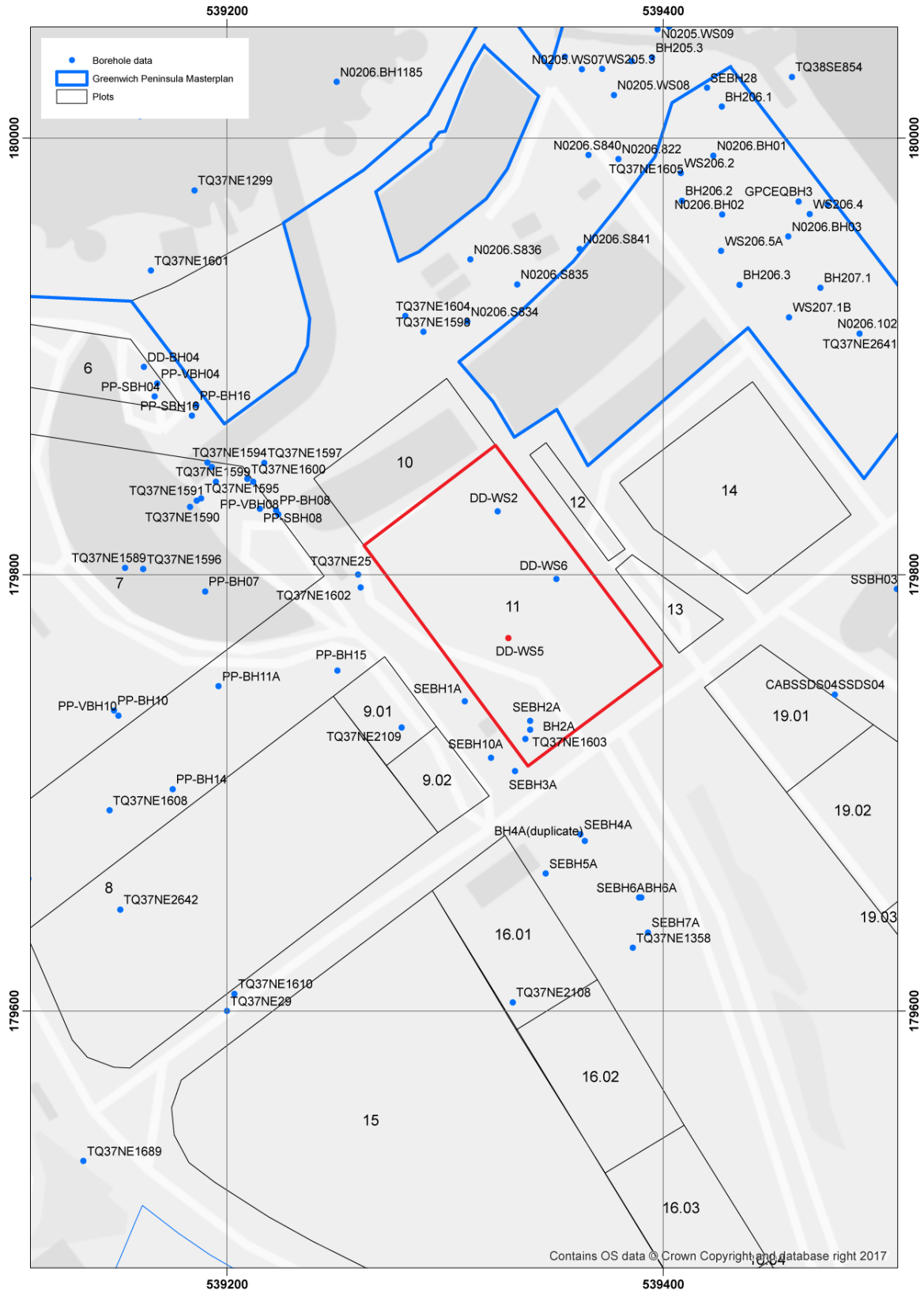


Figure 1: Location of (1) Design District (Plot 11), Royal Borough of Greenwich and selected other geoarchaeological and archaeological sites nearby: Greenwich Peninsula Plot 19.05 (Young & Batchelor, 2017a); Plot MO115 (Young & Batchelor, 2013b); Plot MO117 (JHW13; Young & Batchelor, 2013a); Plot 18.03 (Young, 2017c); Greenwich Millennium Village (Miller & Halsey, 2011); Land between A102(M) & Bugsby's Way (GPN98); The Leisure Site, Bugsby's Way (BW99); Land between A102(M) & Bugsby's Way (GPN98); Enderby Wharf, Christchurch Way (Batchelor *et al.*, 2015a); Alcatel-Lucent Telegraph Works (Young & Batchelor, 2015b); Greenwich Wharf (Nicholls *et al.*, 2017); Plot MO401 (Batchelor, 2014); Bellot Street (GLB05; Branch *et al.*, 2005); 72-88 Bellot Street (BSG93; McLean, 1993; Philp, 1993); Tunnel Avenue (GPF12; Batchelor, 2013); Greenwich Peninsula Central East (Young & Batchelor, 2015a); The Cable Car route (CAB11; Batchelor *et al.*, 2015b); Victoria Deep Water Terminal (TUA02; Corcoran, 2002); Greenwich Peninsula Plot 18.03 (Young & Batchelor, 2017b) and Plot NO201 (Young, 2017b). Outline of the 2015 Master Plan (QUEST/RPS, 2017) shown in blue.





**Figure 2: Location of the geoaerchaeological (red), geotechnical and British Geological Survey (BGS) archive (blue) boreholes in the area of the Design District (Plot 11) site, Greenwich Peninsula, Royal Borough of Greenwich. Site outline shown in red.**

## 3. METHODS

### 3.1 Field investigations

During the geotechnical investigations at the site in August 2017, core samples were collected for geoarchaeological purposes from a single borehole (WS5) (Figure 2). The collection of the samples was monitored by Quaternary Scientific. The borehole core samples were recovered using a Terrier Rig and window sampler gouge set. This coring techniques provide a suitable method for the recovery of continuous, undisturbed core samples and provides sub-samples suitable for sedimentary and microfossil assessment and analysis and also macrofossil analysis. Spatial coordinates for each borehole were obtained using a Leica Differential GPS (see Table 1).

### 3.2 Lithostratigraphic description

Laboratory-based lithostratigraphic descriptions of the new borehole samples was carried out using standard procedures for recording unconsolidated sediment and peat, noting the physical properties (colour), composition (gravel, sand, clay, silt and organic matter) and inclusions (e.g. artefacts). The procedure involved: (1) cleaning the samples with a spatula or scalpel blade and distilled water to remove surface contaminants; (2) recording the physical properties, most notably colour; (3) recording the composition e.g. gravel, fine sand, silt and clay; (4) recording the degree of peat humification, and (5) recording the unit boundaries e.g. sharp or diffuse. The results are displayed in Table 2.

### 3.3 Deposit modelling

The deposit model for the Design District site was based on the existing Quest data set for Greenwich Peninsula, incorporating over 900 geotechnical, geoarchaeological and archaeological interventions (see Young et al. (in press) and Appendix 1). Sedimentary units from the boreholes were classified into seven groups: (1) Bedrock, (2) Gravel, (3) Sand, (4) Lower Alluvium, (5) Peat, (6) Upper Alluvium and (7) Made Ground. The classified data for groups 1-7 were then input into a database within the RockWorks 16 geological utilities software, the output from which was generated using ArcMap 10. A southeast to northwest transect of selected boreholes across the site and the wider area is displayed in Figure 3. Models of surface height were generated for the Gravel, Lower Alluvium, Peat and Upper Alluvium using an Inverse Distance Weighted algorithm (Figures 4, 5, 6 and 8). Thickness of the Peat, total Holocene alluvium (incorporating the Sand, Lower Alluvium, Peat and Upper Alluvium) and Made Ground (Figures 7, 9 and 10) were also modelled (also using an Inverse Distance Weighted algorithm).

Because the boreholes are not uniformly distributed over the area of investigation the reliability of the models generated using RockWorks is variable. 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 from site with the exception of the model for the wider area (Figure 11), which uses a radius of 100m for the purpose

of visualising the topographic features. In addition, it is important to recognise that multiple sets of boreholes 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.

Table 1: Spatial attributes and lithostratigraphic data for the new geotechnical and geoarchaeological boreholes at Design District (Plot 11), Greenwich Peninsula, Royal Borough of Greenwich

Borehole	Easting	Northing	Elevation (m OD)	Total Depth (m)	Upper Alluvium surface (m bgl)	Peat surface (m bgl)	Lower Alluvium surface (m bgl)	Sand surface (m bgl)	Gravel surface (m bgl)
WS2	539324.00	179829.00	5.30	8.00	3.40	Unknown	Unknown	Unknown	Unknown
WS5	539329.00	179771.00	4.60	8.00	2.75	5.55	6.22	7.93	7.97
WS6	539329.00	179771.00	4.60	8.00	2.75	Unknown	Unknown	Unknown	Unknown

## 4. RESULTS, INTERPRETATION & DISCUSSION OF THE GEOARCHAEOLOGICAL DEPOSIT MODELLING

The results of the deposit modelling are displayed in Figures 3 to 10. Figure 3 is a two-dimensional southeast-northwest transect of selected boreholes across the wider area of the site, whilst Figures 4 to 10 are surface elevation and thickness models for each of the main stratigraphic units. Figure 11 is an updated surface elevation model for the Gravel across the wider area of Greenwich Peninsula. The borehole records in the surrounding area provide a provisional indication of the likely former landscapes that may have persisted at the site, and its associated palaeoenvironmental and archaeological potential. The full sequence of sediments recorded in the boreholes surrounding the site comprises:

Made Ground – widely present

Upper Alluvium – widely present

Peat – widely present

Lower Alluvium – locally present; contains a peat horizon in borehole WS5

Sand – locally present

Gravel – widely present

### 4.1 Gravel

The Shepperton Gravel was present in all the boreholes that penetrated to the bottom of the Holocene sequence in this area. It was deposited during the Late Glacial (15,000 to 10,000 years before present) and comprises the sands and gravels of a high-energy braided river system which, while it was active would have been characterised by longitudinal gravel bars and intervening low-water channels in which finer-grained sediments might have been deposited. Such a relief pattern would have been present on the valley floor at the beginning of the Holocene when a lower-energy fluvial regime was being established.

Within the site itself the surface of the Gravel is recorded in borehole WS5 at -3.37m OD (boreholes WS2 and WS6 did not reach the Shepperton Gravel surface, terminating at -2.7 and -3.2m OD respectively). The deposit model for the wider area (see Figures 3 and 4) indicates that the Gravel slopes from around -3m OD to the south of the site, to between ca. -4 and -5m OD towards the north (towards borehole TQ37NE1299); north of TQ37NE1299 it then rises again to ca. -3m OD, towards the west of The O2. The surface topography in this wider area thus indicates that the Design District site lies either within or on the margins of a large former channel that may date to the Late Devensian or Early Holocene periods (see Figure 11). This channel is aligned broadly northeast-southwest, and may traverse the entire area of Greenwich Peninsula; it opens out where it meets the modern channel of the Thames to the northeast of the Design District site.

This depression in the Shepperton Gravel surface is one of a number of palaeochannels identified in the Late Devensian/Early Holocene topography of Greenwich Peninsula (see Figure 11 and Young *et al.*, in press). Perhaps one of the more substantial of these channels (and similar in character to the channel identified here) is that aligned broadly west-east and underlying the

Alcatel-Lucent (Young & Batchelor, 2015b), Enderby Wharf (Batchelor & Young, 2015) and 20 Horn Lane (Batchelor & Young, 2017) sites. This channel reaches similar depths of around -4 to -5m OD. Towards its eastern end at 20 Horn Lane and Greenwich Millennium Village (Miller & Halsey, 2011), the Shepperton Gravel is lower, ranging between -4 and -8m OD. Similarly towards the south-east, a deep depression is evident beneath the Greenwich Industrial Estate site (Morley, 2003), potentially representing a channel draining off the terrace edge towards the present day River Thames. Towards the north of 20 Horn Lane and further onto the main area of Greenwich Peninsula, the Shepperton Gravel surface is recorded in various places down to -4m OD representing the presence of further smaller channels. For example, towards the north-east of the Tunnel Avenue site the Gravel surface drops to below -4m OD, perhaps forming part of the same channel identified at the Design District site. It does the same towards the south-west and south-east of the MO115 (Landscape Zone B; Young & Batchelor, 2013a) and MO117 (Landscape Zones A and B; Young & Batchelor, 2013b) sites, in the far south-eastern corner of Greenwich Millennium Village (Miller & Halsey, 2011), and across much of the Greenwich Peninsula Central East site (Young & Batchelor, 2015a). In addition, smaller 'patches' of lower gravel surface >-4m OD were recorded towards the centre and south-western areas of the Millennium Festival Site (Landscape Zone D; Bowsher & Corcoran, unknown). These areas of lower Gravel surface have been interpreted as either localised hollows, or part of interconnected palaeochannels.

Relatively high Gravel surfaces (between ca. -1 and -1.7m OD) were recorded towards the north of the Peninsula on the Tunnel Avenue (Landscape Zone B; Batchelor, 2013) and Victoria Deep Water Terminal sites (Landscape Zone A; Corcoran, 2002). These topographic features represent small, but potentially important former islands. Wherever the Gravel surface reaches such elevations, it is more likely to represent the former River Terrace of the Kempton Park Gravel, deposited during the middle-late Pleistocene. Such terraces have negligible potential for Palaeolithic remains since the Kempton Park Gravel was deposited during a period when hominid remains have not previously been recorded in the British Isles; however, they do represent areas of greater archaeological potential as they would have been raised above the surrounding floodplain. This is demonstrated by prehistoric trackway remains found within the overlying peat at Bellot Street (e.g. Branch *et al.*, 2005).

## 4.2 Sand

A thin unit of Sand was recorded in borehole WS5 between -3.33 and -3.37m OD; this unit has been recorded elsewhere on Greenwich Peninsula in thicknesses of between ca. 0.05 and 2m, generally (but not restricted to) where the Gravel surface is recorded at its lowest. This unit is typical of moderate to high energy fluvial activity within rivers or streams, often found at the base of channel features across Greenwich Peninsula. Up to ca. 1.5m of Sand was identified just to the northwest (ca. 10-20m) of the site in boreholes TQ37NE1593 and TQ37NE1594, indicative of fluvial activity within the possible Late Devensian/Early Holocene channel identified above. In these boreholes it was recorded at lower elevations of between ca. -5.8 and -4.2m OD.

### 4.3 Lower Alluvium

The majority of boreholes in area of the site contain a unit of sandy silt, recorded either directly overlying the Shepperton Gravel or the Sand where it is recorded. The deposits of the Lower Alluvium are described as a predominantly silty or clayey, tending to become increasingly sandy downward in most sequences. The Lower Alluvium frequently contains detrital wood or plant remains, and in many cases is described as organic and with occasional Mollusca remains. The sediments of the Lower Alluvium are indicative of deposition during the Early to Mid-Holocene, when the main course of the Thames was probably confined to a single meandering channel. During this period, the surface of the Shepperton Gravel was progressively buried beneath the sandy and silty flood deposits of the river. The richly-organic nature of the Lower Alluvium suggests that this was a period during which the valley floor was occupied by a network of actively shifting channels, with a drainage pattern on the floodplain that was still largely determined by the relief on the surface of the underlying Shepperton Gravel.

The surface of the Lower Alluvium is generally recorded at between ca. -2 and -3m OD, although in places (including at the present site) it rises to between ca. -1 and 0m OD (Figure 5). The Lower Alluvium occasionally contains richly organic or peaty units; this is the case in borehole WS5 at the present site, where peat was identified within the Lower Alluvium at between -3.27 and -3.33m OD. The unit does not appear to be widespread, and most likely represents a transition to semi-terrestrial conditions within a localised floodplain hollow at a time when sandy and silty material was accumulating elsewhere.

### 4.4 Peat

A horizon of peat was recorded between -0.95 and -1.62m OD in borehole WS5, overlying the Lower Alluvium. Peat is frequently recorded in the area surrounding the site, generally overlying the Lower Alluvium or the Shepperton Gravel (see Figure 3) and present at elevations of between ca. 0.0 and -4.0m OD (see Figure 3). Although geotechnical boreholes WS2 and WS6 reached depths of -2.7 and -3.2m OD respectively, no peat was identified; however, these boreholes did not reach the base of the Holocene alluvial sequence. In the area surrounding the site the surface of the Peat lies at between ca. 0.0 and -2.0m OD (Figure 6), and it is present in thicknesses of between ca. 0.5 and 2.0m (Figure 7). The peat appears to be thickest within the area of the palaeochannel identified above; around 2m is recorded towards the north of the site.

Where peat is recorded it is indicative of a transition towards semi-terrestrial (marshy) conditions, supporting the growth of sedge fen/reed swamp and/or woodland communities which might have been utilised by prehistoric communities. Across Greenwich Peninsula more generally, the Peat is frequently recorded in thicknesses of up to 3m, with greater thicknesses often recorded in areas where the Shepperton Gravel topography is lower. Thick peat horizons have been recorded to the south at the Alcatel-Lucent (Batchelor *et al.*, 2015) and Enderby Wharf (Batchelor & Young, 2015) sites for example, although in places the peat can be relatively thin (<0.5m), for example at Plot 18.03 (Young & Batchelor, 2017c). At these sites, the peat has been dated to from the early to late Neolithic period, and middle Neolithic to Bronze Age periods respectively. Peat has been identified

elsewhere on Greenwich Peninsula, including at the Victoria Deep Water Terminal site (Corcoran, 2002), where peat accumulation was radiocarbon dated to 5280-4660 cal BP (Middle-Late Neolithic), whilst at the Cable Car South Station (ca. 50m to the east; Green et al., 2011), the beginning of accumulation was dated to ca. 5580-5310/5890-5610 cal BP (Middle Neolithic), continuing until at least 3380-3210 cal BP Late Bronze Age). At Greenwich Peninsula Central East (Young & Batchelor, 2015a) a complex sequence of alluvium and at least three intercalated peat horizons of between 0.1 and 1.0m thickness were recorded, dated to 6720-6500 cal BP (lower Peat; Late Mesolithic), 6190-5990 cal BP (middle Peat; Early Neolithic) and 3340 to 3080 cal BP (upper Peat; Middle Bronze Age). The peat horizons recorded across much of Greenwich Peninsula thus appear to have accumulated within the same general age range of 6700 to 3000 cal BP (late Mesolithic to late Bronze Age; broadly equivalent to Devoy's (1979) Tilbury III Peat).

#### 4.5 Upper Alluvium

The Upper Alluvium was recorded in all records across the site, resting variously on the Peat, Lower Alluvium (where recorded) or the Gravel. The sediments of the Upper Alluvium are indicative of deposition within low energy fluvial and/or semi-aquatic conditions during the Holocene. The high mineral content of the sediments are considered to reflect increased sediment loads resulting from intensification of agricultural land use from the later prehistoric period onward, combined with the effects of rising sea level. The deposits of the Upper Alluvium are described as predominantly silty or clayey which are very occasionally organic-rich. The surface of this unit surrounding the Design District site (Figure 8) is relatively even, lying at between ca. 0.5 and 2m OD, probably close to the natural level of the floodplain in this area.

The thickness of the Holocene alluvial sequence (incorporating the Sand, Lower Alluvium, Peat and Upper Alluvium) is displayed in Figure 9. This thickness tends to reflect the topography of the Gravel surface, with greater thicknesses recorded in areas of lower Gravel topography and *vice versa*, as might be expected; in the area of the present site, between ca. 3 and 5m is generally recorded (see Figure 9).

#### 4.6 Made Ground

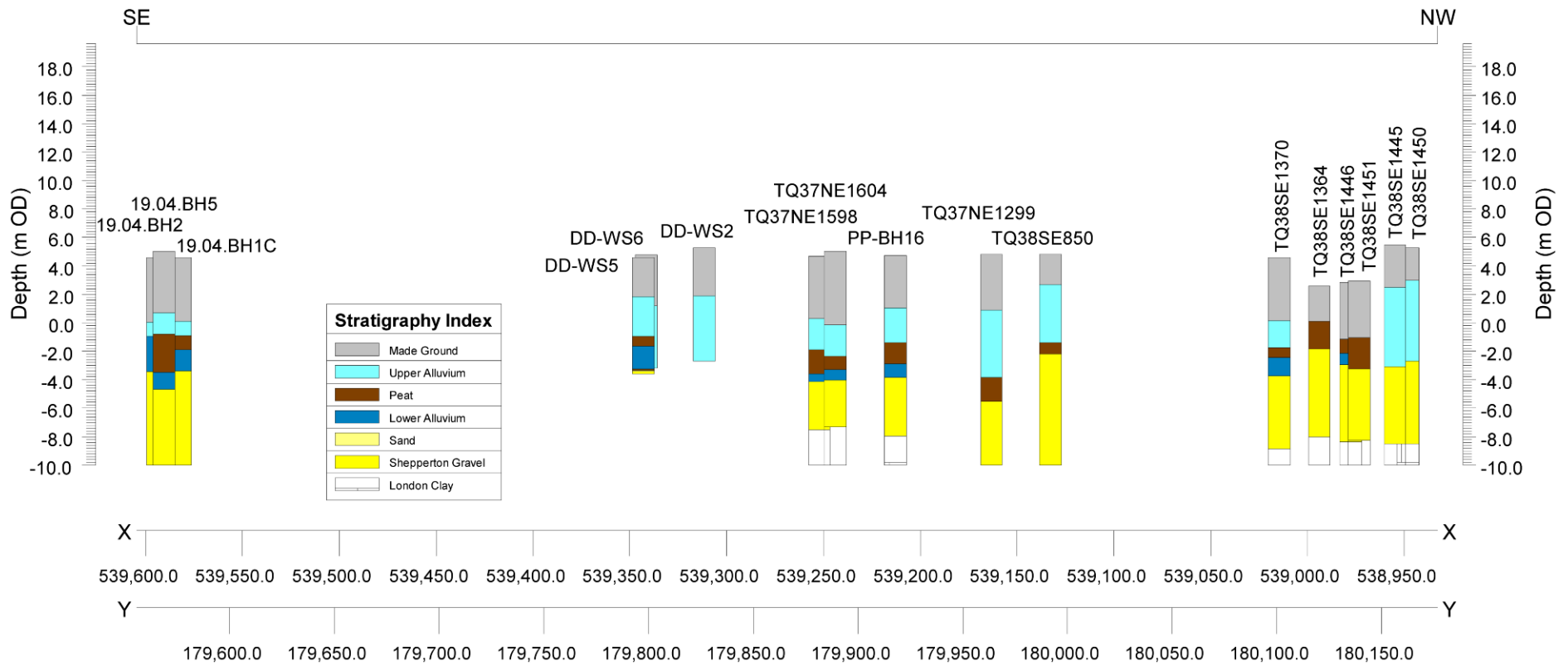
Between ca. 3 and 4m of Made Ground caps the Holocene alluvial sequence in the area surrounding the Design District site (Figure 10).

**Table 2: Lithostratigraphic description of borehole WS5, Design District (Plot 11), Greenwich Peninsula, Royal Borough of Greenwich**

Depth (m OD)	Depth (m bgl)	Description	Stratigraphic group
4.60 to 1.85	0.00 to 2.75	Made Ground of topsoil over concrete, brick and mortar in a matrix of brown silty clay.	MADE GROUND
1.85 to 1.00	2.75 to 3.60	10YR 4/2; As3 Ag1; dark greyish brown silty clay. Some dark grey mottling. Diffuse contact in to:	UPPER ALLUVIUM
1.00 to 0.60	3.60 to 4.00	10YR 4/1; As2 Ag1 Ga1; dark greyish brown sandy silty clay. Diffuse contact in to:	



Depth (m OD)	Depth (m bgl)	Description	Stratigraphic group
0.60 to -0.95	4.00 to 5.55	10YR 4/1; Ag2 As2 Ga+; dark grey silt and clay with a trace of sand. Diffuse contact in to:	
-0.95 to -1.62	5.55 to 6.22	2.5YR 2.5/1; Sh4 Th+ Tl+; humo. 4; very well humified reddish black peat with traces of herbaceous and woody material. Diffuse contact in to:	PEAT
-1.62 to -3.27	6.22 to 7.87	2.5Y 4/1; Ag2 As1 Dh1 Ga+; dark grey clayey silt with detrital herbaceous material and a trace of sand. Sharp contact in to:	LOWER ALLUVIUM
-3.27 to -3.33	7.87 to 7.93	2.5YR 2.5/1; Sh3 Tl <sup>2</sup> 1 Th+ Ag+; humo. 3; well humified reddish black woody peat with a trace of herbaceous material and silt. Sharp contact in to:	PEAT
-3.33 to -3.37	7.93 to 7.97	2.5Y 4/2; Ga3 Ag1 Gg+; dark greyish brown silty sand with occasional gravel clasts. Sharp contact in to:	SAND
-3.37 to -3.40	7.97 to 8.00	2.5Y 4/2; Gg3 Ga1; dark greyish brown sandy gravel. Clasts are flint, sub-angular to rounded, up to 20mm in diameter.	SHEPPERTON GRAVEL



**Figure 3: Southeast-northwest transect of selected boreholes across the Design District (Plot 11) site (DD-) and the wider area of Greenwich Peninsula, Royal Borough of Greenwich.**

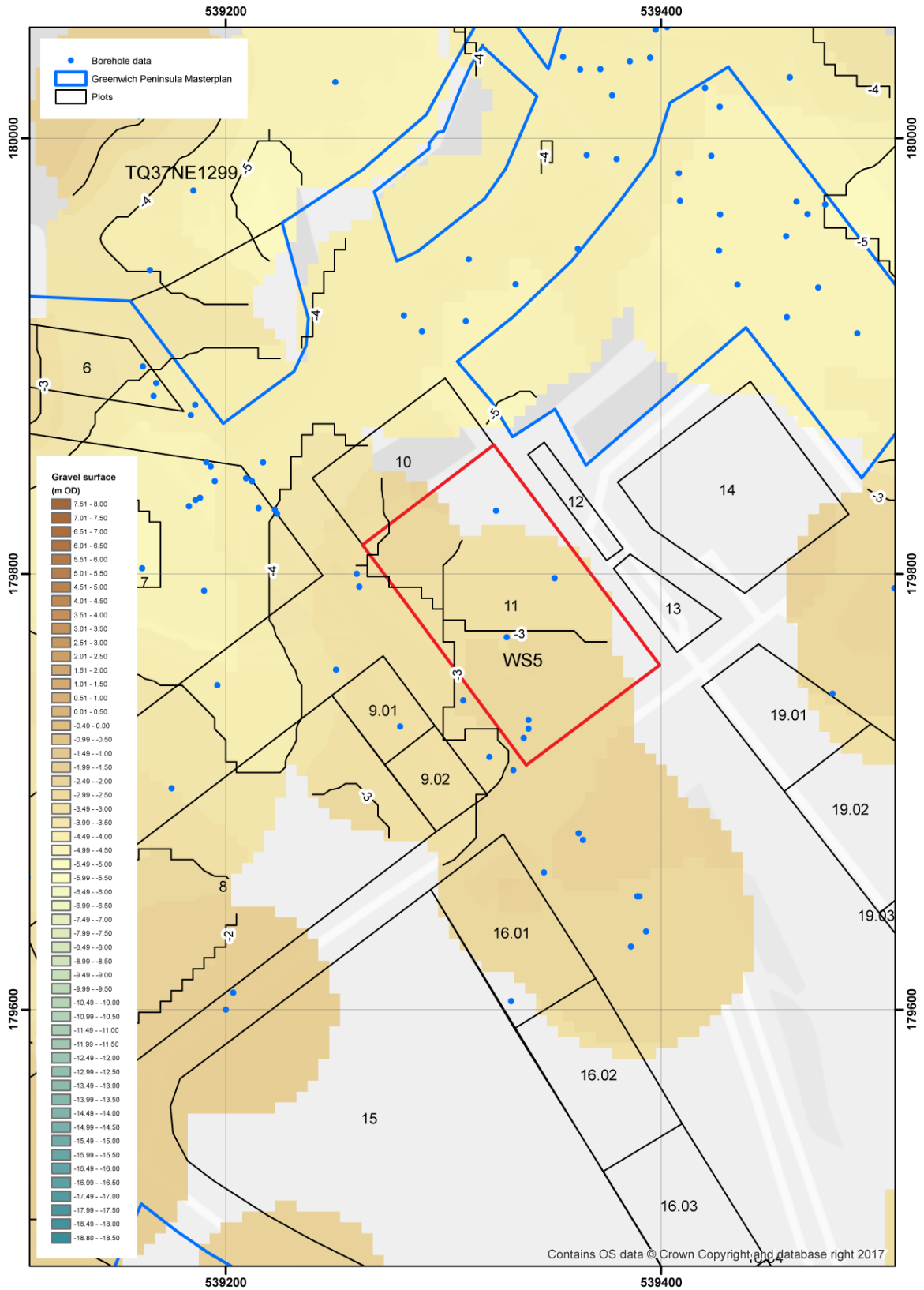


Figure 4: Top of the Gravel (m OD)

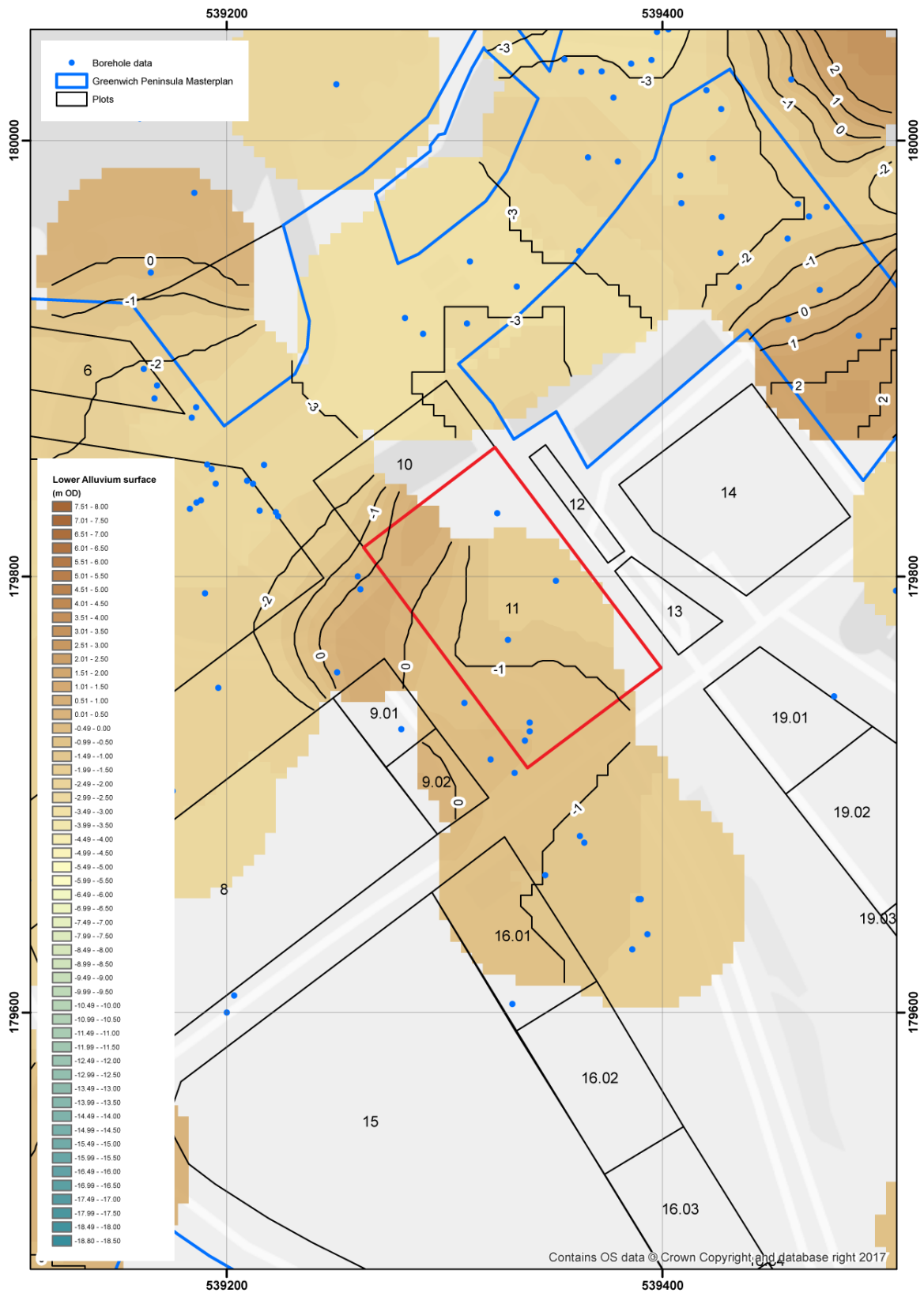
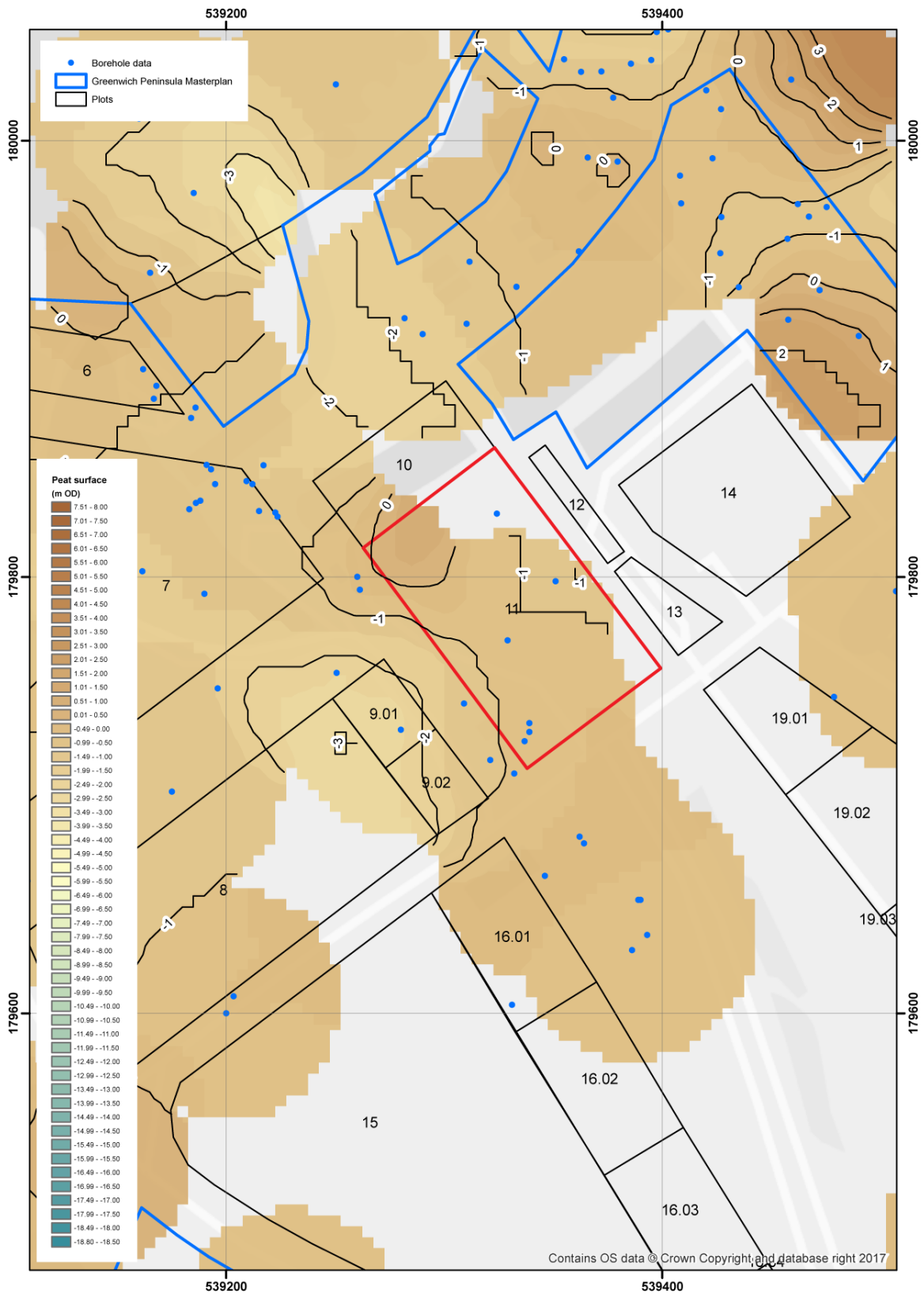
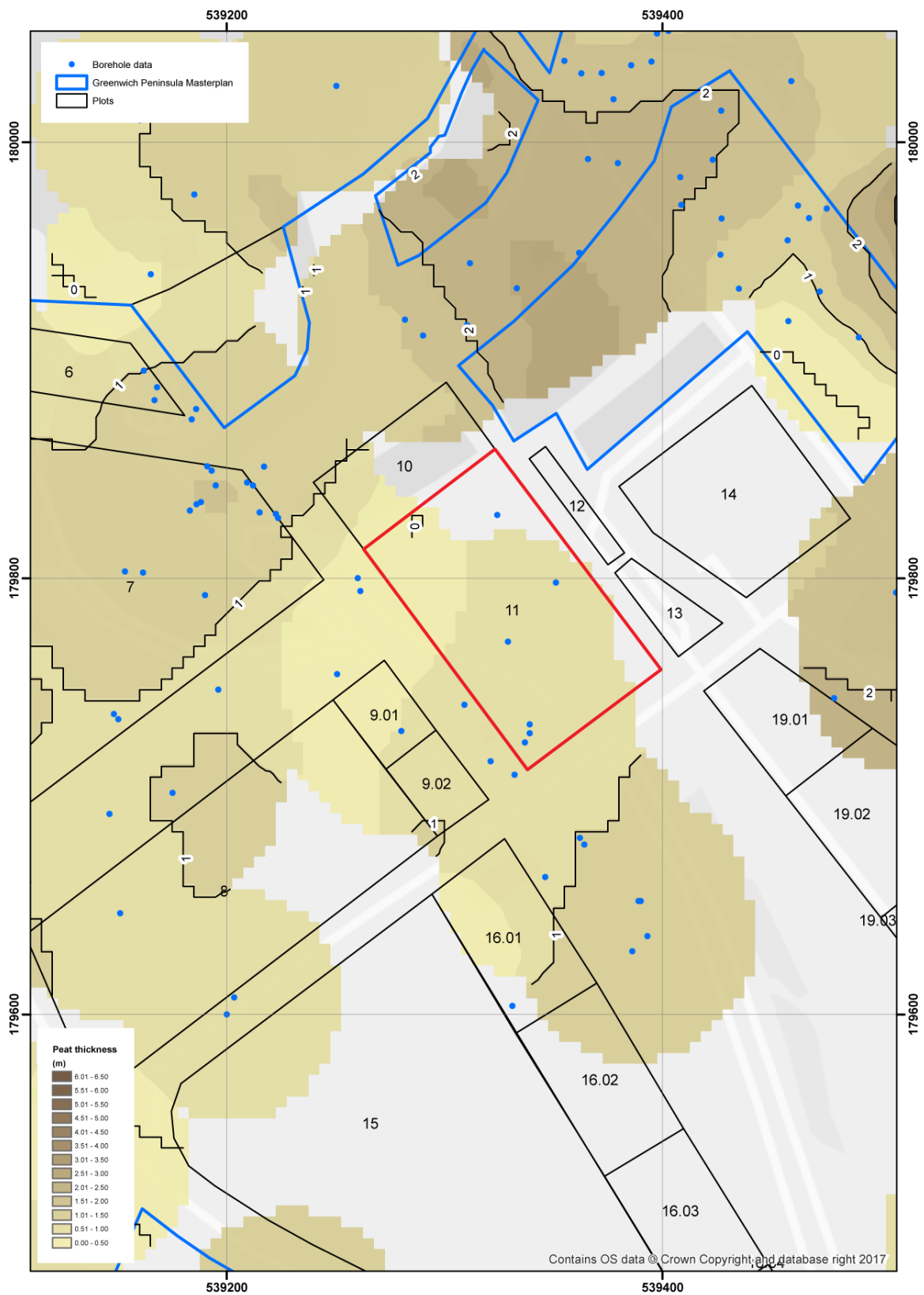


Figure 5: Top of the Lower Alluvium (m OD)



**Figure 6: Top of the Peat (m OD)**



**Figure 7: Thickness of the Peat (m)**

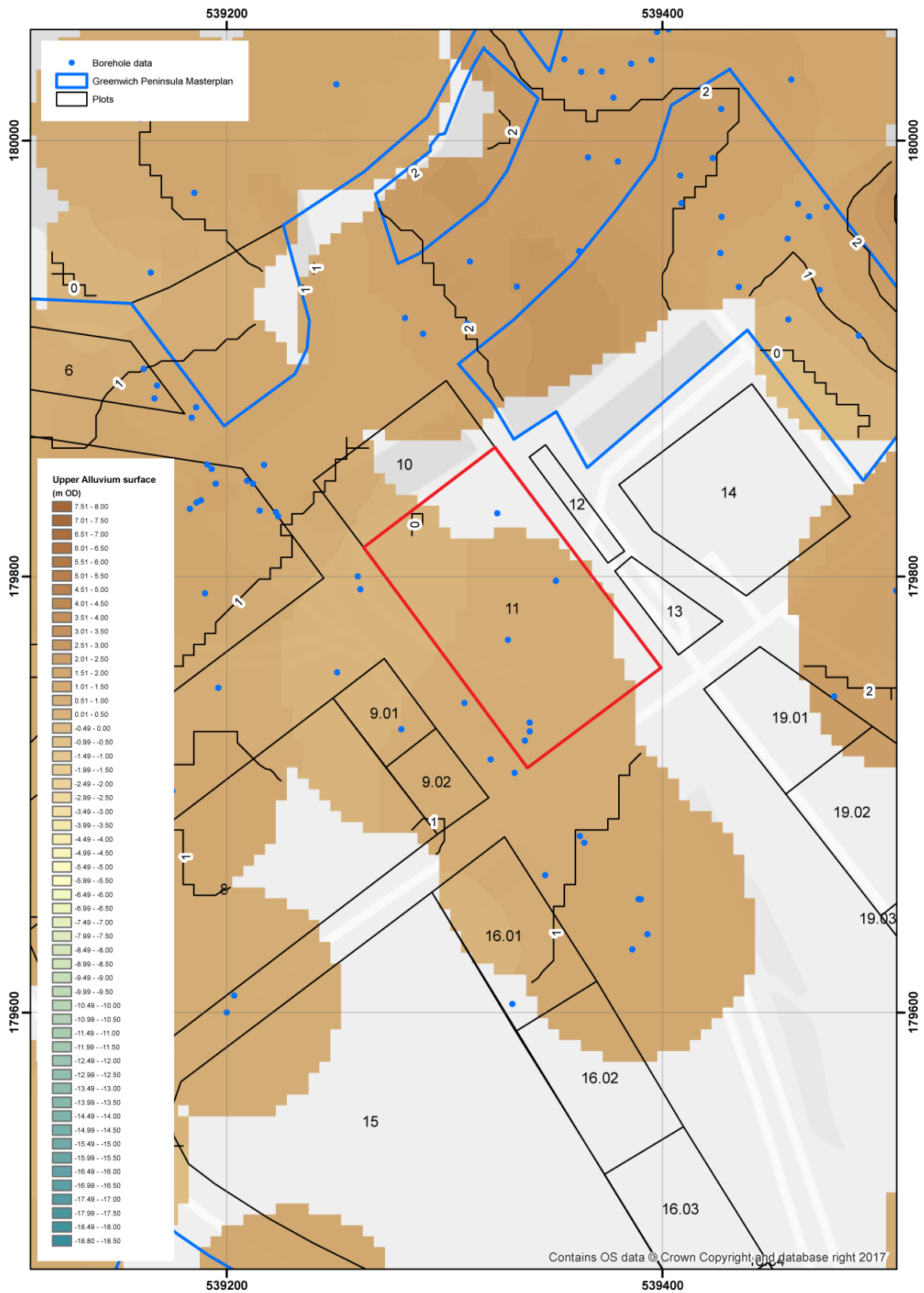
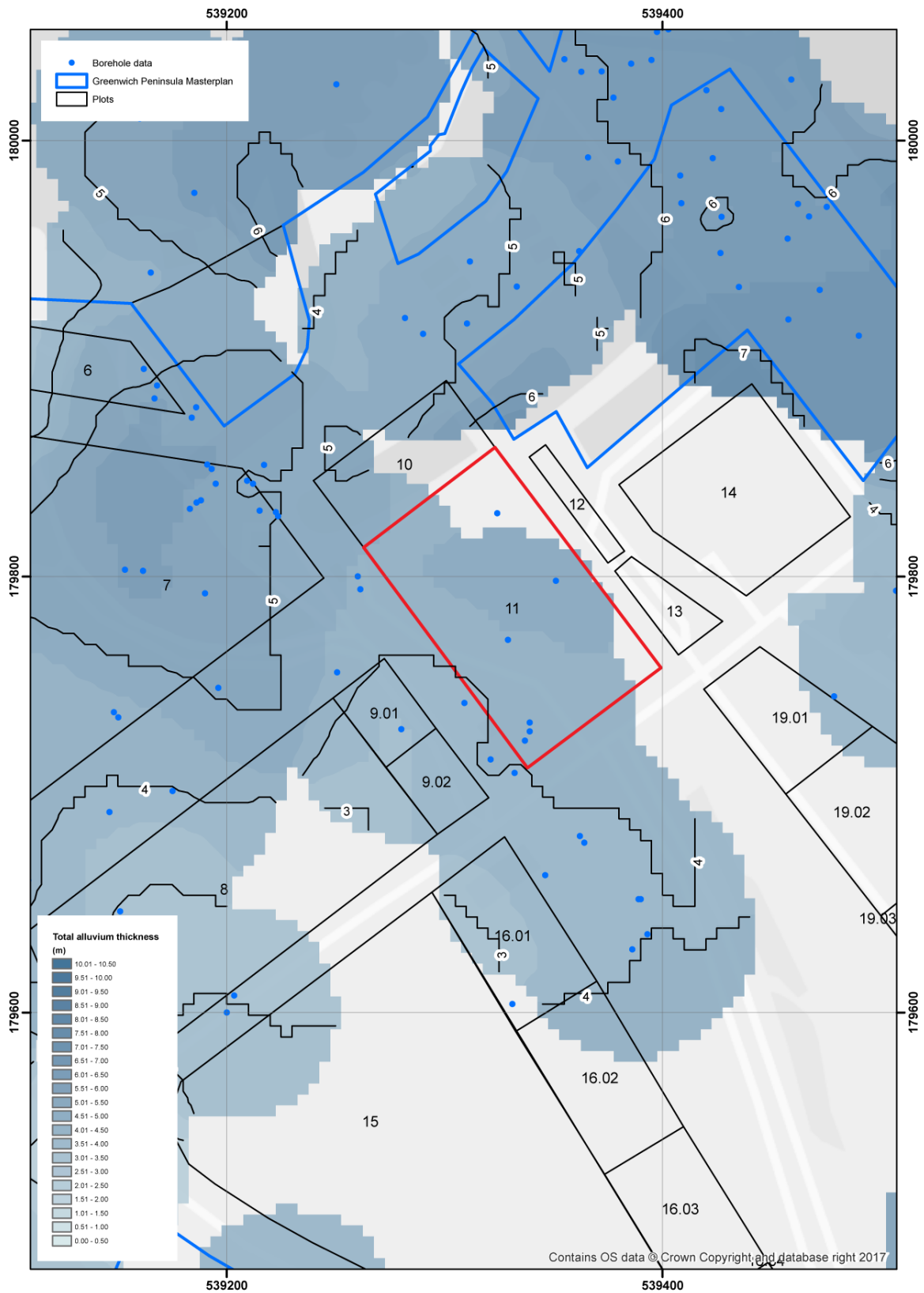
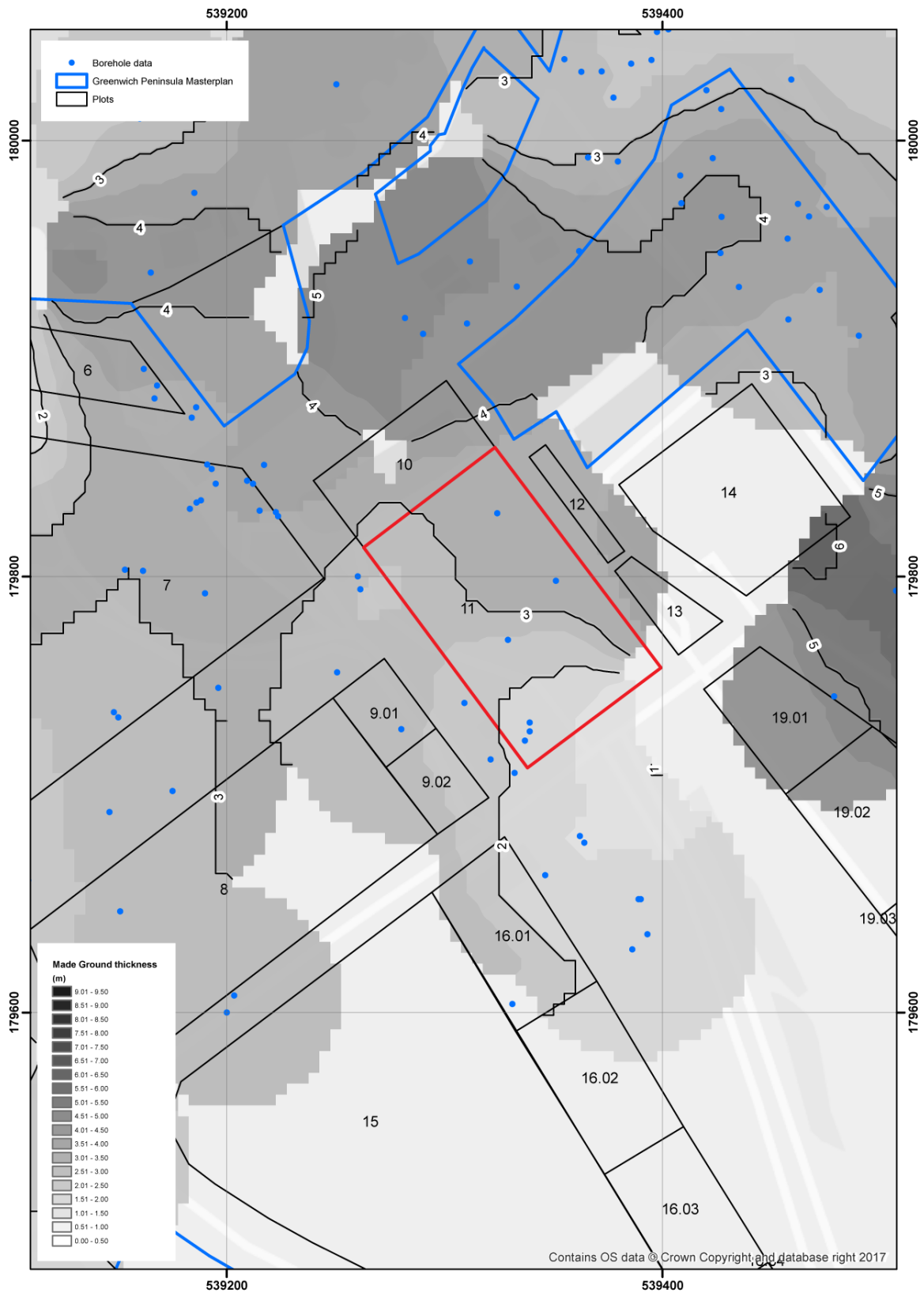


Figure 8: Top of the Upper Alluvium (m OD)

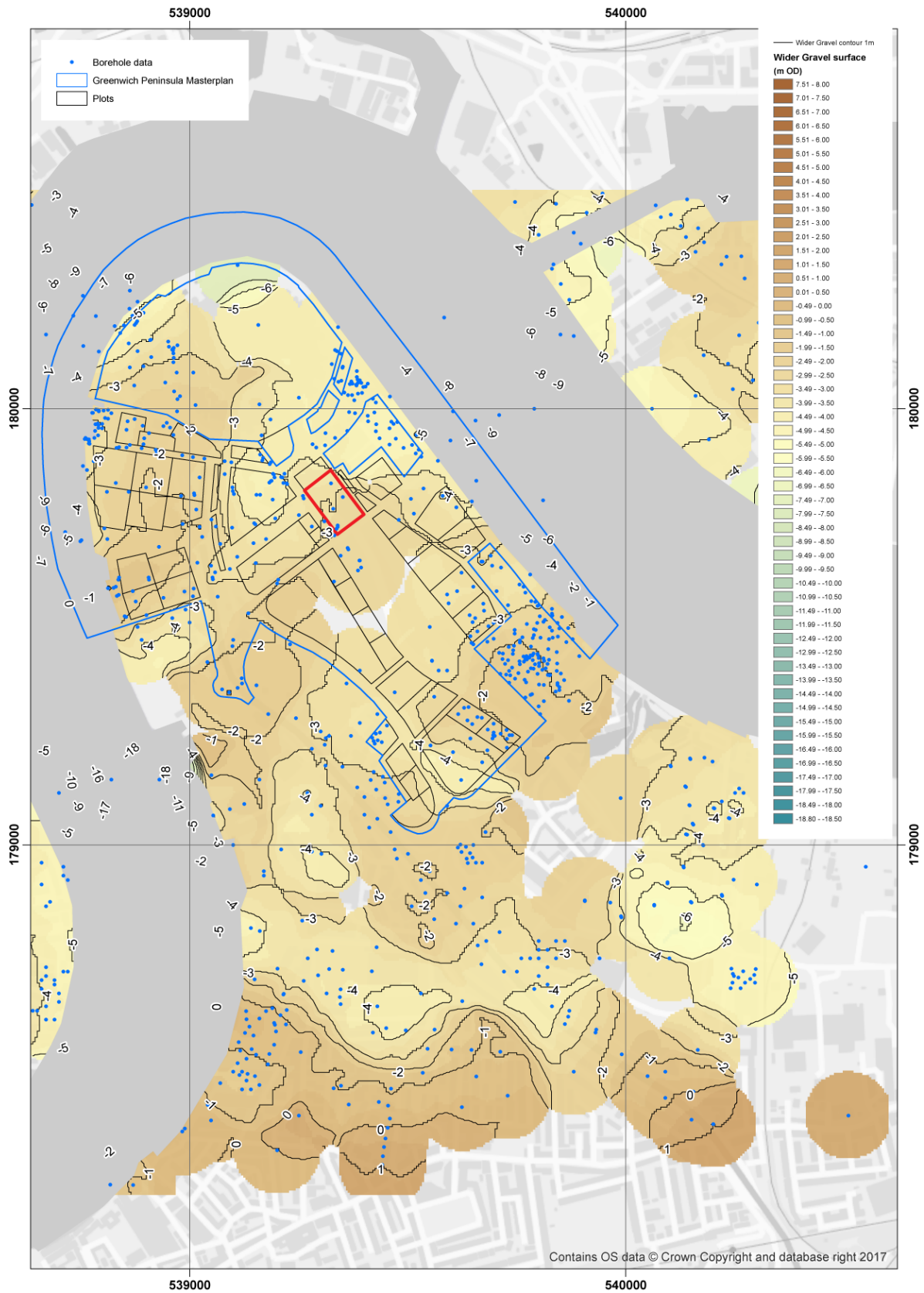


**Figure 9: Thickness of the Total Alluvium (Lower Alluvium, Peat and Upper Alluvium) (m)**





**Figure 10: Thickness of Made Ground (m)**



**Figure 11: Top of the Gravel across the wider area of Greenwich Peninsula (m OD; 100m interpolation radius). See Figure 1 for site names.**

## 5. CONCLUSIONS & RECOMMENDATIONS

A programme of geoaerchaeological field investigations and deposit modelling was undertaken at the Design District site, integrating geotechnical and geoaerchaeological borehole data for the site and the wider area of Greenwich Peninsula, in order to (1) clarify the nature of the sub-surface stratigraphy across the site; (2) clarify the nature, depth, extent and likely date of any former land surfaces, alluvial and peat deposits; and (3) compare the results of the investigation to other sites in this area of Greenwich Peninsula.

The results of the deposit modelling indicate that the sediments present beneath the Design District site are similar in character to those recorded elsewhere on Greenwich Peninsula, and in the Lower Thames Valley more generally. In the area of the site the Late Devensian Shepperton Gravel is overlain by a sequence of Holocene alluvial sediments, buried beneath modern Made Ground. The deposit model for the wider area indicates that the site is likely to lie either within, or on the margins of, a former Late Devensian/Early Holocene channel, within which the Gravel surface lies at between ca. -2 and -5m OD. At the present site the Gravel surface lies at ca. -3.37m OD; on this basis, the archaeological potential of the interface between the Gravel and alluvium is considered to be low, and deeply buried. Archaeological remains have been found within the floodplain deposits ca. 1.5km to the south of the site, including the Bronze Age trackway at Bellot Street (Branch *et al.*, 2005; McLean, 1993; Philp, 1993); however, this was recorded in association with an underlying Gravel surface of -2m OD or higher.

Between ca. 3 and 5m of Holocene alluvial deposits are recorded in the area surrounding the site. At the Design District site this includes two peat horizons, one at the base of the Lower Alluvium (-3.27 and -3.33m OD) and one overlying the Lower Alluvium between -0.95 and -1.62m OD. Where peat and organic sediments are recorded, the sequences have the potential to contain a wealth of further information on the past landscape, through the assessment/analysis of palaeoecological remains (e.g. pollen, plant macrofossils and insects) and radiocarbon dating; they also have an associated archaeological potential, given that they would have formed semi-terrestrial land surfaces that might have been utilised by prehistoric communities. Environmental archaeological or palaeoenvironmental investigations can identify the nature and timing of changes in the landscape, and the interaction of different processes (e.g. vegetation change, human activity, climate change, hydrological change) thereby increasing our knowledge and understanding of the site and nearby area. In the case of human activity, palaeoenvironmental evidence can include: (1) decreases in tree and shrub pollen suggestive of woodland clearance; (2) the presence of herbs indicative of disturbed ground, pastoral and/or arable agriculture; (3) charcoal/microcharcoal suggestive of anthropogenic or natural burning, and (4) insect taxa indicative of domesticated animals. Such investigations are routinely carried out where required as part of planning conditions across the Lower Thames Valley and its tributaries, instructed by the LPA Archaeological Advisor.

On this basis, it is recommended that an environmental archaeological assessment is undertaken on borehole WS5. Given the deeply buried nature of the organic sediments at the site, such an assessment may highlight evidence for human activity (e.g. woodland clearance, burning and cereal

cultivation) that may not be identifiable in the archaeological record. In addition, although a number of palaeoenvironmental records exist for Greenwich Peninsula, including at the Victoria Deep Water Terminal (Corcoran, 2002), Cable Car South Station (Green et al., 2011), Greenwich Peninsula Central East (Young & Batchelor, 2015a), Enderby Wharf (Batchelor et al., 2015) Alcatel-Lucent Telegraph Works (Young & Batchelor, 2015b) and 20 Horn Lane (Batchelor & Young, 2017), there is some variability in the nature of the vegetation history and evidence for human activity at these sites (e.g. see Batchelor & Young, 2017). Further work at the Design District site will contribute to our understanding of the environmental history of the site and its environs, and provide an additional record for the northern area of Greenwich Peninsula that can be compared to existing records.

This assessment should consist of: (1) radiocarbon dating of the base and top of the upper peat, and the base of the lower peat, in order to ascertain the age of peat accumulation and cessation; (2) organic matter determinations to aid identification of the sedimentary units; (3) assessment of the palaeobotanical remains (pollen, waterlogged wood and seeds) to provide a provisional reconstruction of the vegetation history; (4) assessment of the diatoms to provide an indication of the palaeohydrology (e.g. marine, brackish or freshwater), and (5) assessment of the zooarchaeological remains (insects and Mollusca) to provide information on the general environmental conditions, climatic change and hydrology of the site. The assessment will also highlight any indications of nearby human activity, and provide recommendations for further analysis (if necessary).

## 6. REFERENCES

Barnett, C., Allen, M.J., Evans, G., Grimm, J.M., Scaife, R., Stevens, C.J. & Wyles, S.F. (2010) A Submerged Forest with Evidence of Early Neolithic Burning Activity and the Tilbury Alluvial Sequence at Canning Town, East London. *Transactions of the London and Middlesex Archaeological Society*, 61, 1-15.

Batchelor, C.R. (2013) A report on the geoarchaeological borehole investigations and deposit modelling on land at Greenwich Peninsula, Tunnel Avenue, London Borough of Greenwich (Site Code: GPF12). *Quaternary Scientific (QUEST) Unpublished Report February 2013; Project Number 079/12*.

Batchelor, C.R. (2014) A report on the geoarchaeological deposit modelling on land at plot MO401, the Gateway Site, Greenwich Peninsula, London Borough of Greenwich. *Quaternary Scientific (QUEST) Unpublished Report November 2014; Project Number 178/14*.

Batchelor, C.R., Branch, N.P., Elias, S., Young, D., Austin, P., Green, C.P., Morgan, P. and Williams, K. (2008a). Former Borax works, Norman Road, Belvedere, London Borough of Bexley: rapid environmental archaeological assessment (site code: NNB07). *ArchaeoScape Unpublished Report*.

Batchelor, C.R., Branch, N.P., Christie, R., Elias, S., Young, D.S., Austin, P., Williams, K., & Wilkinson, K. (2008b) Imperial Gateway, Belvedere: environmental archaeological assessment report. *Quaternary Scientific (QUEST) Unpublished Report December 2008; Project Number 056/08.*

Batchelor, C.R., Young, D.S., Green, C.P., Austin, P., Cameron, N. & Elias, S. (2012). A Report on the Environmental Archaeological Analysis of Boreholes collected from the London Cable Car Route, London Boroughs of Newham and Greenwich (site code: CAB11). *Quaternary Scientific (QUEST) Unpublished Report January 2012; Project Number 140/10.*

Batchelor, C.R., Young, D.S., Green, C.P. (2015) Land at Enderby Wharf, Christchurch Way, London Borough of Greenwich SE10 0AG (NGR: TQ 3925 7873): Environmental Archaeological Analysis Report. *Quaternary Scientific (QUEST) Unpublished Report May 2015; Project Number 140/13.*

Batchelor, C.R. and Young, D.S. (2017) *20 Horn Lane, Royal Borough of Greenwich Geoarchaeological Deposit Model Report.* Quaternary Scientific (QUEST) Unpublished Report April 2017; Project Number 213/16.

Branch, N.P., Green, C.P., Vaughan-Williams, A., Elias, S., Swindle, G., & Batchelor, C.R. (2005) Bellot Street, Maze Hill, London Borough of Greenwich (site code: GBL05): environmental archaeological assessment. *ArchaeoScape Unpublished Report.*

Branch, N.P., Batchelor, C.R., Elias, S., Green, C.P. & Swindle, G.E. (2007) Preston Road, Poplar High Street, Poplar, London Borough of Hamlets (site code: PPP06): environmental archaeological analysis. *ArchaeoScape Unpublished Report.*

Branch, N.P., Canti, M.G., Clark, P. and Turney, C.S.M. (2005) *Environmental Archaeology: Theoretical and Practical Approaches*, Edward Arnold, London.

Bowsher, J. (2002) Gallions Reach Urban Village, Canal extension, Thamesmead: an archaeological watching brief. *MoLAS unpublished report.*

Corcoran, J. (2002) Greenwich Peninsula SE10: a geoarchaeological report. *MoLAS unpublished report.*

Corcoran, J. (2008) Preliminary evaluation of archaeological and palaeoenvironmental potential at Greenwich Wharf (Phase 1). (Site Code GWW07). *MoLAS unpublished report.*

Corcoran, J. and Lam, J. (2002) Land at Project Alice, the former British Gypsum Site, Corinthian Quay, Church Manor Way, Erith: a report on the geoarchaeological evaluation. *MoLAS Unpublished Report.*

Corcoran, J., Halsey, C., Spurr, G., Burton, E. and Jamieson, D. (2011) Mapping past landscapes in the lower Lea valley: A geoarchaeological study of the Quaternary sequence. *Museum of London Archaeology, MOLA Monograph 55*.

Concept Site Investigations (2007) Greenwich Peninsula Plot MO1-14 borehole logs. *Concept Site Investigations Unpublished Report December 2007*.

Concept Site Investigations (2016) Greenwich Peninsula: Peninsula Place Factual Report. *Concept Site Investigations Unpublished Report November 2016*.

Daykin, A. (2008) Summary of preliminary results from Greenwich Wharf (Phase 1) Blocks 6b, 6c and 7 (Site Code GWW07). *MoLAS unpublished report*.

Devoy, R.J.N. (1979) Flandrian sea-level changes and vegetational history of the lower Thames estuary. *Philosophical Transactions of the Royal Society of London*, B285, 355-410.

Gibbard, P.L. (1994) *Pleistocene History of the Lower Thames Valley*. Cambridge University Press, Cambridge.

Green, C.P., Batchelor, C.R. & Young, D.S. (2011) A Report on the Geoarchaeological Borehole Investigations and Deposit Modelling on the London Cable Car Route, London Boroughs of Newham and Greenwich (site code: CAB11). *Quaternary Scientific (QUEST) Unpublished Report May 2011; Project Number 140/10*.

Green, C.P. & Young, D.S. (2012) A Report on the Geoarchaeological Borehole Investigations and Deposit Modelling on Land at Canning Town Regeneration Area 7/1C, London Borough of Newham (NGR 539610 181443). *Quaternary Scientific (QUEST) Unpublished Report June 2012; Project Number 048/12*

Hogg, I. (2012) Greenwich Peninsula, Tunnel Avenue, Royal Borough of Greenwich: An Archaeological Watching Brief Report. *AOC Archaeology Group, Unpublished Report*.

Holder, N. (1998) An Archaeological Excavation Assessment and Updated Project Design for Royal Docks Community School Site, Prince Regent Lane, Newham. *MoLAS Unpublished Report*.

Ian Farmer Associates (2016) Factual Report on Ground Investigation Carried Out at Greenwich Peninsula, Plot 18.03, West Parkside, SE10 0BL. *Ian Farmer Associates Unpublished Report, July 2016*.

Lakin, D. (1998) Atlas Wharf, Westferry Road, Isle of Dogs. *MoLAS unpublished report*.

McLean, G. (1993) An outline report on an archaeological evaluation at the land at the rear of 72-88 Bellot Street Greenwich London SE10. *SELAU Unpublished Report*.

Meager, R. (2014) Archaeological Desk Based Assessment: Alcatel-Lucent Telegraph Works Blackwall Lane Greenwich London SE10. *CgMs Consulting Unpublished Report*.

Miller, P. & Halsey, C. (2011) Greenwich Millennium Village Phase 3-5, Greenwich SE10: A geoarchaeological and historic environment assessment. *Museum of London Archaeology Unpublished Report 2011*.

Morley, M. (2003) Greenwich Industrial Estate, Bugsby's Way, Charlton, London SE7, a Geoarchaeological Investigation. *MoLAS Unpublished Report*.

Pepys, S. (1665). Samuel Pepys Diary September 1665. Available at <http://www.pepysinfo/1665/1665sep.html> accessed on 20th April 2007.

Philp, B. (1993) An Outline Report on an Archaeological Evaluation Excavation at the Land at the Rear of 72-88 Bellot Street, Greenwich, London SE10. *SELAU Unpublished Report*.

QUEST/RPS (2017) Greenwich Peninsula, Royal Borough of Greenwich. Geoarchaeological & Palaeoenvironmental Written Scheme of Investigation. *Quaternary Scientific (QUEST)/RPS Unpublished Report, June 2017; Project Number 052/16*.

Sidell, E.J. (2003) *Relative sea-level change and archaeology in the inner Thames estuary during the Holocene*. University College, London, Unpublished PhD Thesis.

Stafford, E. (2012) Landscape and Prehistory of the East London Wetlands. *Oxford Archaeology Monograph no. 17*.

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

Wessex Archaeology (2000) Fort Street (West) Silvertown, London, E16, Archaeological excavation assessment report. *Wessex Archaeology: Unpublished Report*.

Wilkinson, K.N., Scaife, R.J. & Sidell, E.J. (2000) Environmental and sea-level changes in London from 10,500 BP to the present: a case study from Silvertown. *Proceedings of the Geologists' Association*, 111, 41-54.

Young, D.S. & Batchelor, C.R. (2013a) A report on the geoarchaeological borehole investigations and deposit modelling on land at Plot MO115, Greenwich Peninsula, London Borough of Greenwich

(site code: CHB13). *Quaternary Scientific (QUEST) Unpublished Report February 2013; Project Number 210/12.*

Young, D.S. & Batchelor, C.R. (2013b) A report on the geoarchaeological borehole investigations and deposit modelling on land at Plot MO117, Greenwich Peninsula, London Borough of Greenwich (site code: JHW13). *Quaternary Scientific (QUEST) Unpublished Report February 2013; Project Number 210/12.*

Young, D.S. and Batchelor, C.R. (2015a) Greenwich Peninsula Central East, Plots N0205, N0206 and N0207 (Site Code: CTT15): Environmental Archaeological Assessment Report. *Quaternary Scientific (QUEST) Unpublished Report August 2015; Project Number 067/15.*

Young, D.S. and Batchelor, C.R. (2015b) Alcatel-Lucent Telegraph Works, London Borough of Greenwich Environmental Archaeological Assessment Report. *Quaternary Scientific (QUEST) Unpublished Report December 2015; Project Number 094/14.*

Young, D.S. (2017a) Design District (Plot 11), Greenwich Peninsula, Royal Borough of Greenwich. Geoarchaeological and Palaeoenvironmental Written Scheme of Investigation. *Quaternary Scientific (QUEST) Unpublished Report August 2017; Project Number 112/17.*

Young, D.S. (2017b) Greenwich Peninsula Plot NO201, Royal Borough of Greenwich. Desk-Based Geoarchaeological Deposit Model. *Quaternary Scientific (QUEST) Unpublished Report June 2017; Project Number 112/17.*

Young, D.S. (2017c) Greenwich Peninsula Plot 18.03, West Parkside, Royal Borough of Greenwich Geoarchaeological Deposit Model Report. *Quaternary Scientific (QUEST) Unpublished Report May 2017; Project Number 145/16.*

Young, D.S., Batchelor, C.R., Green, C.P. and Clark, A. (in press) *Deposit modelling in the Lower Thames Valley (East London): Correlating the sedimentary sequence with archaeological and palaeoenvironmental evidence of prehistoric human activity.* Historic England Deposit Modelling Guidelines (tbc).

## 7. APPENDIX 1: BOREHOLE DATA

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
BH10-2011	538830.63	179591.7	4.61	30
BH11-2011	538837.02	179573.32	4.49	30
BH13-2011	538812.26	179588.74	1.66	30
BH13A	539569	179881	5.64	9.75
BH1A-2011	538812.94	179997.36	5.65	30
BH2A	539339	179729	2.98	30
BH2C-2011	538971.08	179994.61	4.87	30



Name	Easting	Northing	Elevation (m OD)	Total depth (m)
BH3A-2011	538790.76	179961.93	4.99	30
BH4A(duplicate)	539364	179678	3.04	30
BH6A	539390	179652	3.1	30
BH7-2011	538755.27	179868.66	2.8	30
BH802	538873.93	179976.86	4.106	30
BH803	538906.71	179944.1	4.092	30
BH804	538831.75	179910.64	4.078	30
BH805	538862.19	179917.21	4.615	30
BH806	538892.06	179961.53	5.113	30
BH807	538954.6	179956.83	3.419	30
BH808	538894.02	179919.26	4.172	30
BH809	538921.9	179905.98	4.162	30
CABSSDS04	539478.67	179745.07	5.05	30
EWBH1	539161	178803	2.25	10
EWBH2	539258	178827	1.9	10
EWBH3	539149	178692	2.77	29.46
EWBH4	539201	178717	2.16	30
EWBH5	539271	178740	2.05	20
EWBH6	539261	178689	2.05	30.18
EWBH7	539215	178657	2.44	20
EWQBH1	539270.39	178739.98	1.84	6
EWQBH2	539215.97	178659.37	2.32	7
EWQBH3	539428.27	178765.33	1.59	5
GMVBH3/1	540102	179182	5.8	10
GMVBH3/10	540153	179049	6.7	9.71
GMVBH3/11	540177	179000	6.5	9.05
GMVBH3/2	540147	179198	6.5	8
GMVBH3/4	540136	179135	6.3	8
GMVBH3/7	540145	179092	6	10.69
GMVBH3/8	540201	179085	5.8	11
GMVBH4/10	540065	178863	3.9	13.71
GMVBH4/11	540136	178837	3.4	12.57
GMVBH4/2	540132	178951	5.5	12.5
GMVBH4/4	540095	178915	5.2	12.57
GMVBH4/7	540149	178870	3.9	9.78
GMVBH4/8	539906	178873	3.6	8.86
GMVBH4/9	539989	178837	3.4	9.56
GMVBH5/2	540236	179062	5.7	13.29
GMVBH5/5	540220	178886	4.3	9.71
MO114BH001A	539709.3	179440.2	5.05	12.4
MO114BH002	539731	179454.2	5.37	16.6
MO114WS001B	539696.5	179472.3	5.38	5
MO114WS003	539716.6	179426.3	5.01	5
MO115BH1	539746	179381	5.2	14.3

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
MO115BH2	539741	179438	5.41	13.2
MO115BH3	539768	179379	5.58	5
MO115BH4	539753	179394	5.32	5
MO115BH5	539735	179389	5.2	5
MO115BH6	539723	179415	4.86	5
MO115BH7	539756	179421	5.63	5
MO115BH713	539739	179407	5.7	14
MO115BH714	539771	179373	5.89	17.2
MO115QBH1	539732.01	179398.95	4.4	6
MO115QBH2	539757.1	179413.97	4.63	6
MO115QBH3	539741.82	179446.1	4.62	7
MO117BH1	539858	179378	6.15	23.5
MO117BH2	539843	179371	6.3	24
MO117BH3	539812	179367	6.3	26.5
MO117BH4A	539839	179352	6.2	5
MO117BH5	539843	179367	6.2	5
MO117BH6	539851	179393	6.25	5
MO117BH719	539826	179390	6.85	17.2
MO117BH720	539847	179355	5.23	8.5
MO117BH7A	539825	179389	6.3	5
MO117BH8	539841	179399	6.3	5
SSBH01C	539535.75	179817.14	5.72	30
SSBH02D	539513.84	179759.81	5.31	30
SSBH03	539507.18	179793.44	5.34	30
STBH01	539655.23	179973.19	-8.72	1
STBH03	539656.99	179834.86	-4.08	7.8
STBH04	539597.2	179927.28	-3.88	30
TBH10	539009	179588	2.52	30
TBH11	538901	179527	4.55	30
TBH12	538876	179558	4.67	30
TBH1a	538836	179608	4.75	30
TBH2	538838	179613	4.73	30
TBH5	538906	179613	4.51	30
TBH6	538907	179608	4.48	30
TBH7	538869	179582	4.27	30
TBH8	538940	179567	4.27	30
TBH9	538988	179581	2.68	30
TP4-2011	538799.25	179965.29	5.48	2
TP5	539007	179570	2.42	4
TP802	538857.34	179971.77	4.124	2
TP804	538838.17	179912.53	3.889	2
TP805	538854.88	179911.24	4.893	2
TP806	538889.9	179909.41	4.377	2
TP808	538895.81	179932.12	4.096	2

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TP809	538924.49	179900.88	3.608	2
TQ37NE1295	539611	179774	5.26	20
TQ37NE1309/A	539820	179200	3.76	12.05
TQ37NE1358	539386	179629	3.05	30
TQ37NE1369	539013.3	180008.6	4.42	30
TQ37NE1471	539430	179300	2.1	30
TQ37NE1473	539650	179460	4.3	30
TQ37NE1474	539830	179530	4.3	30
TQ37NE1475	539780	179620	4.7	30
TQ37NE1477	539730	179550	4.57	14.93
TQ37NE1478	539800	179550	4.57	91.44
TQ37NE1588	539028.26	179706.61	2.336	30
TQ37NE1589	539153.14	179803.14	3.224	30
TQ37NE1592	539194.77	179842.51	3.943	30
TQ37NE1593	539192.92	179849.25	3.964	30
TQ37NE1594	539190.97	179851.37	3.95	30
TQ37NE1596	539161.55	179802.51	3.34	30
TQ37NE1597	539217.01	179851.21	5.025	30
TQ37NE1598	539290.01	179911.28	4.69	30
TQ37NE1599	539212.02	179842.64	5.005	30
TQ37NE1600	539209.3	179843.9	5.01	30
TQ37NE1601	539165.01	179939.42	4.925	30
TQ37NE1602	539261.15	179794.15	2.971	30
TQ37NE1603	539336.72	179724.75	3.143	30
TQ37NE1604	539281.71	179918.57	5.031	30
TQ37NE1605	539379.47	179990.44	5.024	30
TQ37NE1606	538929.59	179683.16	2.719	30
TQ37NE1679	538983	179893.3	2.15	30
TQ37NE1680	539007.1	179889.4	2.48	30
TQ37NE1681	539022.2	179842.9	2.64	30
TQ37NE1683	539014.7	179769.3	2.91	30
TQ37NE1685	539023	179729.5	3.05	30
TQ37NE1686	539017.9	179647.3	2.21	30
TQ37NE1687	539049	179640.1	2.32	30
TQ37NE1688	539063.9	179568.9	2.37	30
TQ37NE1689	539134.1	179531.3	2.73	30
TQ37NE1690	539097.8	179455.5	2.16	30
TQ37NE1691	539040.5	179419	2.55	30
TQ37NE1692	539074.2	179356.7	3.04	30
TQ37NE1695	539243.5	179290.5	2.47	30
TQ37NE1701	539006.2	179958.1	4.19	30
TQ37NE1702	539033.6	179886	3.09	30
TQ37NE1703	539058.5	179625.1	3.35	30
TQ37NE1705	538947.1	179968.2	2.57	30

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ37NE1706	538962.8	179939.8	2.06	30
TQ37NE1713	539011.1	179802	2.79	30
TQ37NE1714	539009.5	179806.6	2.79	30
TQ37NE1715	539052.6	179613.5	2.16	30
TQ37NE2108	539331	179604	3.35	30
TQ37NE2151	539670	179190	2.43	58
TQ37NE2152	538780	179880	4.8	30
TQ37NE2154	538900	179820	2.15	30
TQ37NE2155	538860	179810	2.9	30
TQ37NE2156	538810	179810	3.15	30
TQ37NE2157	539430	178630	1.57	7.6
TQ37NE2641	539490	179910.5	5.08	30
TQ37NE2642	539151	179646.5	2.75	30
TQ37NE2644	539869.5	179330.5	5.56	30
TQ37NE2646	539988	179108	6.47	31.5
TQ37NE2648	539646.5	179787.5	5.3	30
TQ37NE28	539580	179800	2.1	15.24
TQ37NE3713	539765	179592	5.65	16
TQ37NE3714	539697	179509	5.1	30
TQ37NE3715	539830.34	179541.33	5.4	30
TQ37NE3716	539789	179481	4.42	30
TQ37NE3718	539823.42	179424.03	5.28	30
TQ37NE3719	539725	179391	4.85	4.7
TQ37NE3720	539766	179420	5.03	4.7
TQ37NE3721	539775	179397	4.99	4.8
TQ37NE3722	539811	179428	5.47	4.7
TQ37NE3723	539788	179404	5.09	5
TQ37NE3724	539772	179433	5.06	5
TQ37NE3725	539782	179455	4.76	4.8
TQ37NE3726	539743	179457	4.59	4.7
TQ37NE3727	539793	179493	4.6	4.7
TQ37NE3728	539804	179475	4.88	4.7
TQ37NE3729	539822	179449	5.11	4.7
TQ37NE3730	539842	179416	5.06	4.7
TQ37NE3731	539821	179390	5.14	5
TQ37NE3732	539801	179368	5.04	5
TQ37NE3733	539781	179344	5.02	5
TQ37NE3735	539732	179372	4.85	5
TQ37NE3736	539802	179524	5.01	5
TQ37NE3737	539831	179526	5.3	5
TQ37NE3738	539853	179523	5.32	5
TQ37NE3739	539825	179499	5.05	5
TQ37NE3740	539847	179496	5.35	4.6
TQ37NE3741	539868	179497	5.6	5

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ37NE3742	539824	179472	5.12	5
TQ37NE3743	539844	179478	5.1	4.8
TQ37NE3744	539878	179472	5.57	5
TQ37NE3758	539792	179557	5.4	5.5
TQ37SE1243	539583.2	180209.1	-9.69	30
TQ38SE1011	539850	180170	-6.2	31
TQ38SE1012	539870	180250	5.15	38.8
TQ38SE1013	539910	180450	5.55	32
TQ38SE1274	539746	180474	4.63	35.05
TQ38SE1357	538862.9	180271.3	-2.03	30
TQ38SE1358	538880.5	180245.7	0.15	30
TQ38SE1359	538827.6	180189.6	0.31	30
TQ38SE1360	538880.6	180131.9	5.49	30
TQ38SE1361	538911.5	180119.1	5.33	30
TQ38SE1362	538893.9	180097.9	5.18	30
TQ38SE1364	538970.5	180083.6	2.59	30
TQ38SE1365	538944.1	180060.6	2.9	30
TQ38SE1370	539008.6	180083.3	4.56	30
TQ38SE1371	538868.9	180214	5.3	30
TQ38SE1372	538849.2	180191.3	5.36	30
TQ38SE1401	538784.7	180213	-4.41	30
TQ38SE1403	538861.9	180229.8	-0.86	30
TQ38SE1404	538791.3	180131.8	-0.7	30
TQ38SE1405	538840.2	180173.7	5.37	30
TQ38SE1408	538879.9	180200.9	4.77	30
TQ38SE1409	538876.6	180196.7	4.47	30
TQ38SE1410	538873.7	180192.7	4.59	30
TQ38SE1411	538859.8	180149.8	4.1	30
TQ38SE1413	538909.1	180157.8	4.25	30
TQ38SE1414	538910.8	180158.6	4.38	30
TQ38SE1415	538862.4	180095	5.35	30
TQ38SE1416	538873	180053.4	5.06	30
TQ38SE1417	538977.6	180029.1	4.1	30
TQ38SE1421	538894.3	180220.1	5.36	30
TQ38SE1440	538961.9	180134.3	5.38	30
TQ38SE1441	538961.9	180136.6	5.41	30
TQ38SE1442	538963.6	180139.9	5.58	30
TQ38SE1443	538962.2	180127.2	2.94	30
TQ38SE1444	538971.9	180145.7	5.62	30
TQ38SE1445	538950.9	180154.3	5.3	30
TQ38SE1446	538962.2	180107.2	2.85	30
TQ38SE1448	538959.6	180136.1	5.47	30
TQ38SE1450	538952.1	180142.2	5.49	30
TQ38SE1451	538963.4	180117.1	2.95	30

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ38SE1452	538960.4	180137.5	5.46	30
TQ38SE2283	539110	180330	5.85	30
TQ38SE3298	539157.5	180192.5	5.01	30
TQ38SE3299	539340.5	180187.5	6.12	30
TQ38SE3704	539800	180399	5.47	30
TQ38SE4131	539840	180470	4.35	12.5
TQ47NW1314	540320	179770	5.36	15
TQ47NW1315	540320	179810	3.08	3
TQ47NW302	540580	179770	4.71	15.35
TQ47NW326	540410	179730	3.35	18.29
TQ47NW327	540420	179740	1.524	10
TQ47NW328	540440	179740	1.524	10
TQ47NW330	540470	179720	3.35	15
TQ47NW856	540180	179200	8.08	18.29
TQ48SW1645	540451	180292	3.66	10
TQ48SW1646	540459	180300	4.73	20
TQ48SW1647	540449	180286	2.54	20
TQ48SW1648	540453	180287	2.51	20
TQ48SW1651	540505	180284	1.85	20
TQ48SW1652	540567	180287	1.88	20
TQ48SW1733	540219	180331	4.66	25
TQ48SW1735	540336	180300	4.2	25
TQ48SW1736	540402	180296	4.21	25.1
TQ48SW1737	540456	180301	4.25	25
TQ48SW1738	540537	180285	1.98	25
TQ48SW2054	540565	180373	4.43	16
TQ48SW2055	540570	180311	4.32	17
TQ48SW2056	540512	180368	4.35	16
TQ48SW2057	540513	180310	4.31	17
TQ48SW2058	540481	180364	4.35	17
TQ48SW2059	540471	180307	4.22	17
TQ48SW2060	540424	180376	4.33	17
TQ48SW2061	540413	180303	4.05	17
TQ48SW2062	540374	180362	4.54	17
TQ48SW2063	540364	180301	4.3	17
TQ48SW2064	540324	180353	4.43	17
TQ48SW2065	540313	180299	4.29	16
TQ48SW2066	540265	180350	4.5	17
TQ48SW2067	540231	180349	4.81	17.5
TQ48SW2079	540323	180338	5.16	20
TQ48SW2080	540565	180357	5.39	20
TQ48SW334/B	540160	180030	2.225	20
TQ48SW383/A	540060	180000	5.34	20
TQ48SW799	540360	180210	1.57	18.1

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
WS1-2011	538778.21	179990.86	1.2	30
WS2-2011	538783.48	179964.69	1.33	30
WS3-2011	538783.17	179949.72	-0.96	30
WS4-2011	538781.31	179932.99	0.84	30
WS820	538854.81	179951.99	3.826	30
TQ47NW329	540450	179730	3.35	9.14
SVTBH5	540457.35	180256.64	2	10
SVTBH6	540323.07	180343.71	4.5	10
SVTBH7	540165.7	180414.01	6	10
SVTBH8	540068.13	180466.46	8	11
BCPP5	540586.74	180192.89	1.8	5
BCPP6	540588.97	180185.91	1.7	5
BCPP7	540592.3	180180.19	1.7	5
BCPP8	540591.19	180174.32	1.7	5
BCPP9	540593.41	180169.24	1.7	6
BCPP11	540587.86	180166.38	1.8	5
BCPP12	540582.46	180160.98	1.9	5
MO401-BH1	539414.5	179149.5	2.93	10
MO401-BH2	539446.9	179143.5	2.56	10
MO401-BH3	539447.6	179107.7	4.75	10
MO401-BH4	539477.8	179099.3	4.75	10
MO401-WS1	539442.7	179157	2.45	5
MO401-WS2	539479.1	179116.7	4.73	4
MO401-WS3	539453.9	179093	4.82	5
MO401-WS4	539427.5	179127.4	3.66	5
MO401-WS5	539421.7	179168.2	2.3	5
TQ37NE712	539280	179220	1.84	9.63
TQ37NE711	539310	179230	1.54	10.67
TQ37NE696	539312	179245	2.38	10
TQ37NE710	539300	179260	2.56	13.71
TQ37NE38	539370	179250	2.4	23.5
TQ37NE730	539650	179000	1.09	3.84
TQ37NE728	539590	179090	1	8.11
TQ37NE721	539470	178990	2.31	9.14
TQ37NE722	539500	178980	1.41	9.14
TQ37NE714	539350	179180	2.42	4.27
TQ37NE944	539311	179182	0.88	4.57
TQ37NE718	539400	179070	2.5	4.57
TQ37NE945	539411	179040	2.59	6.1
TQ37NE719	539430	179060	2.36	9.14
TQ37NE717	539400	179110	2.33	6.1
TQ37NE41	539270	179120	1.5	38.5
TQ37NE698	539475	178969	2.29	10
TQ37NE697	539384	179132	2.79	9.5

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ37NE1498	538830	179830	4.09	100
TQ38SE1366	538972	180022	2.48	30
TQ37NE1684	539050	179746	2.98	30
TQ37NE1693	539119	179382	3.06	30
TQ37NE1694	539153	179366	5.66	30
TQ37NE1696	539312	179245	2.38	20
TQ37NE1700	539092	179633	2.87	9
TQ37NE1716	539053	179609	2.16	16.5
TQ37NE2643	539555	179422	3.17	30
TQ37NE2645	539678	179030	2.19	31.5
TQ37NE27	539520	179940	1.83	15.24
TQ37NE25	539260	179800	2.1	15.85
TQ37NE720	539460	179030	2.04	13.72
TQ37NE724	539530	178920	1.05	18.29
TQ37NE725	539550	178940	3.3	8.1
TQ37NE731	539670	178960	0.87	3.81
TQ38SE114	538964	180040	2.83	19.35
TQ37NE23	538940	179960	2.76	11.13
TQ37NE702	539110	179360	2.71	4.87
TQ37NE703	539180	179300	2.38	4.57
TQ37NE701	539100	179470	2.04	4.87
TQ37NE705	539080	179880	2.1	12.8
TQ37NE706	539120	179370	2.41	11.43
TQ37NE29	539200	179600	1.83	14.47
TQ37NE34	539470	179350	2.1	20.73
TQ37NE35	539550	179500	2.1	11.28
TQ37NE37	539560	179340	2.1	22.25
TQ37NE36	539570	179400	2.1	12.65
TQ37NE32	539360	179370	2.1	13.11
TQ37NE31	539090	179350	1.52	15.24
TQ37NE2098	539170	178940	3.66	8.83
TQ37NE2099	539210	178990	3.87	9.14
TQ37NE2101	539100	179000	3.66	9.14
TQ37NE2100	539280	179070	4.97	14.93
TQ37NE1587	538984	179736	2.22	29.5
TQ37NE1590	539183	179831	3.8	30
TQ37NE1591	539186	179834	3.79	25.7
TQ37NE1595	539188	179835	3.79	14.9
TQ37NE1467	539050	179160	5	35
TQ37NE1468	539160	179150	3.55	35
TQ37NE1469	539320	179250	2.45	32
TQ37NE1470	539390	179280	1.1	33
TQ37NE1472	539590	179400	2.35	37
TQ37NE1476	539810	179790	-5.3	3.65



Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ38SE1010	539790	180000	-9.3	0.4
TQ38SE1497	539946	180494	3.72	18
TQ37NE925	539054	179068	0.24	7
TQ37NE926	539092	179082	2.74	16.61
TQ37NE927	539125	179094	2.59	11.43
TQ37NE33	539390	179400	2.1	21.95
TQ37NE24	538980	179800	2.1	10.33
TQ48SW205	540080	180440	1.52	19.81
TQ37NE30	539230	179460	1.83	14.02
TQ48SW1732	540138	180394	4.94	25
TQ48SW2617	540160	180360	4.43	24.25
TQ48SW2068	540179	180382	5.03	50
TQ48SW2069	540126	180419	4.68	17
TQ48SW2070	540103	180446	5.96	25
TQ38SE895/B	539830	180321	4.72	23
TQ38SE854	539459	180028	5.83	16.61
TQ37NE1299	539185	179976	4.84	20.88
TQ38SE850	539160	180010	4.84	17.37
TQ37NE2109	539280	179730	2.82	30.48
TQ37NE602	539280	178985	4.27	13.71
TQ37NE603	539302	178980	4.27	13.72
TQ37NE779	539170	178930	2.74	7.92
TQ37NE777	539300	179090	2.74	7.62
TQ48SW572	540140	180480	5.76	23.6
TQ48SW1734	540272	180299	4.31	20
NTBH02	539850.35	180286.36	5.16	11
SSDS04	539478.67	179745.07	5.05	5
STBH02	539603.46	179994.39	-5.88	4.2
TUBH02	539709.58	179986.13	-10.04	1.6
TUBH01	539879.91	180166.61	-4.89	3.2
SEBH28	539420	180023	5	10
SEBH1A	539309	179742	2.93	6
SEBH2A	539339	179733	2.99	6
SEBH3A	539332	179710	2.93	6
SEBH4A	539362	179681	3.04	6
SEBH5A	539346	179663	2.98	6
SEBH6A	539389	179652	3.15	6
SEBH7A	539393	179636	3.35	7
SEBH10A	539321	179716	3.05	8
SEBH13A	539569	179881	5.64	10
PQBH01	538804.18	179725.773	5.272	8
PQBH02	538810.702	179701.001	4.92	8
BH207.1	539472.13	179931.5	5.3	12
BH207.2	539509.17	179917.51	6.14	12

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
BH207.3	539530.61	179889.73	6.15	12
WS205.1	539349.85	180094	5.47	6
WS205.3	539371.9	180031.66	5.86	6
BH205.1A	539337.37	180132.09	5.62	13.8
BH205.2	539347.72	180064.9	5.64	13.9
BH205.3	539394.93	180036.95	5.76	13.9
BH205.4	539390.28	180065.76	5.62	14
BH205.5	539325.45	180102.57	5.55	12.3
BH206.1	539426.81	180014.36	5.69	13.8
BH206.2	539408.57	179971.32	5.72	13.8
BH206.3	539435.05	179932.88	5.61	15.2
WS206.2	539407.99	179983.96	5.86	5
WS206.4	539467.11	179965.17	5.49	5
WS206.5A	539426.49	179948.32	5.67	6
WS207.1B	539457.74	179917.97	5.31	6
WS207.2A	539518.02	179897.56	5.88	6
GPCEQBH1	539333	180135	5.6	11
GPCEQBH2	539367	180057	5.7	11
GPCEQBH3	539462	179971	5.6	11
GPCEQBH4	539525	179906	6.2	5.65
ALQBH1	539351	178714	1.8	6
ALQBH2	539417	178711	1.8	6
MWS1	539292	178761	1.4	3
MWS2	539327	178757	1.5	3
MWS3	539320	178716	1.8	4
MWS4	539294	178701	2	0.9
MWS5	539346	178635	2.1	3
MWS6	539346	178669	1.9	3
MWS7	539314	178660	2.1	4
TQ37NE2158	539530	178660	1.69	20
TQ37NE631	539625	178642	1.92	7.9
TQ37NE3948	539669	178727	2.01	15
TQ37NE739	539660	178770	1.35	7.62
TQ37NE737	539610	178820	1.21	3.05
TQ37NE735	539560	178830	2.42	7.62
TQ37NE1946	539509	178860	3.05	6.1
TQ37NE1757	539420	178570	1.27	15
TQ37NE1756	539450	178580	1.33	15
TQ37NE1947	539495	178575	1.34	6.1
TQ37NE623	539561	178577	1.86	7.62
ALQBH4	539344	178651	2.02	6
TQ37NE3946	539867.8	178606.5	0.96	3
TQ37NE733	539630	178900	1.12	4.11
TQ37NE748 A	539860	178590	0.27	4.57

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ37NE629	539624	178399	1.74	4.88
TQ37NE626	539545	178533	1.8	5.46
TQ37NE627	539600	178531	1.68	5.49
TQ37NE746 C	539790	178670	0.79	5.49
TQ37NE628	539646	178530	1.52	5.94
TQ37NE745	539760	178740	1.14	6.1
TQ37NE630	539657	178469	1.61	6.25
TQ37NE746 B	539790	178670	0.67	6.4
TQ37NE2647	539964	178868.5	2.97	6.5
TQ37NE743	539720	178710	1.36	7.01
TQ47NW1022	540300	178910	5.9	7.3
TQ37NE741	539710	178800	2.08	7.62
TQ37NE746 A	539790	178670	0.94	7.62
TQ37NE747	539830	178630	0.79	7.62
TQ48SW382C	540370	180180	2.53	7.62
TQ48SW382D	540370	180180	2.52	7.62
TQ37NE732	539670	178880	0.31	7.77
TQ37NE622	539534	178478	1.67	8.5
TQ37NE624	539712	178526	1.25	9
TQ37NE736	539620	178860	1.6	9.5
TQ47NW1019	540510	178380	2.29	9.5
TQ37NE753 B	539990	178520	1.66	9.91
TQ37NE726	539540	178890	1.3	10
TQ37NE740	539680	178780	1.6	10
TQ37NE727	539590	178890	0.95	10.5
TQ37NE3947	539931.84	178577.05	0.85	10.5
TQ47NW1017	540510	178380	1.65	10.5
TQ37NE625	539729	178425	1.95	11
TQ37NE748 B	539860	178590	0.76	11
TQ37NE750	539930	178570	0.93	11
TQ37NE738	539650	178820	2.46	11.5
TQ37NE749	539870	178620	0.79	12
TQ37NE59	539880	178480	3.05	12
TQ38SE895D	539896	180379	4.65	15
TQ47NW283	540050	178470	0.78	12
TQ47NW284	540090	178480	0.83	12
TQ47NW285	540090	178420	0.77	12
TQ47NW287	540150	178420	1.38	12
TQ47NW288	540150	178370	1.61	12
TQ47NW360	540190	179930	3.2	12
TQ47NW289	540200	178360	2.65	12
TQ47NW312	540390	179780	2.43	12
TQ47NW1020	540510	178380	2.27	12
TQ48SW384	540420	180150	1.5	12.95

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ37NE744 A 2	539750	178710	1.07	13
TQ37NE748 C	539860	178590	0.97	13
TQ38SE895H	539834	180331	4.88	13.5
TQ38SE895K	539880	180404	5.3	14
TQ47NW1150	540165	178530	0.36	14
TQ37NE744 A	539750	178710	1.35	15
TQ47NW858	540220	179100	8.32	16
TQ47NW1016	540510	178380	1.75	16
TQ47NW859	540250	179120	8.44	18.29
TQ47NW857	540260	179130	8.08	18.29
TQ47NW860	540270	179120	8.02	18.29
TQ47NW1750	540155	178435	1.82	20
TQ47NW1021	540510	178380	2.27	20
TQ47NW1018	540510	178380	1.65	21
TQ47NW1153	540100	178740	2.53	25
TQ47NW1237	540247	178921	6.87	37.5
TQ47NW999	540550	178950	3	51.8
TQ48SW385	540470	180130	2	64
GBL05/Tr1	539330	178442	1.5	2.5
GBL05/Tr2	539347	178448	1.55	3.5
BBW99-TP3	539799.83	178760.022	3.29	5.7
BBW99-TP4	539780.018	178739.92	2.62	3.6
BBW99-TP5	539799.96	178779.9	3.09	5.4
BBW99-TP6	539800	178740	2.41	6.1
BBW99-TP7	539800.06	178699.96	1.68	6.2
BBW99-TP8	539939.99	178740	3.4	5.9
BBW99-TP9	539819.95	178760.01	2.58	5.5
BBW99-TP10	539819.97	178720	2.56	5.8
BBW99-TP11	539820	178680	2.11	5.7
BBW99-TP12	539940	178740	3.62	5.4
BBW99-TP13	539840	178780	3.43	6
BBW99-TP14	539840	178740	2.76	5.7
BBW99-TP16	539860	178780	3.43	6
BBW99-TP17	539860	178760	3.11	5.9
GPM12-BH1	540139.92	179023.846	6.9	15
GPN98-TP1	539614.5	178994.5	0.6	6
GPN98-TP2	539620.5	179001.5	2.22	4
GPN98-TP3	539633	178996	2.4	6
GPN98-TP4	539642	178982	2.48	6
GPN98-TP5	539648	178971.5	2.51	6
GPN98-TP6	539656	178959.5	2.51	6
GPN98-TP7	539637	178959	2.49	6
GPN98-TP8	539634.5	178969	2.41	6
GPN98-TP9	539622.5	178984	2.32	6

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
BLL12-BH1	539461	178441	1.9	4
BLL12-BH2	539433.608	178410.939	1.53	4
BLL12-BH3	539454.458	178402.155	1.95	4
BLL12-BH4	539459	178372.945	1.8	4
BLL12-BH5	539453.505	178351.397	2.1	4
BLL12-BH6	539448.319	178327.162	2.03	4
BLL12-BH7	539444.721	178307.794	2.5	4
BLL12-BH8	539442.816	178286.5	2.7	4
BLL12-BH9	539441.123	178266.604	2.7	4
BSG93-TR1W	539365	178405	1	2
BSG93-TR1E	539365	178405	1	2
GMP12-BH3/1	540103.401	179181	5.8	10
GMP12-BH3/10	540155	179047	6.7	11
GMP12-BH3/11	540177.5	178999	6.5	13
GMP12-BH3/2	540147.5	179197	6.5	11
GMP12-BH3/4	540138	179133.5	6.35	10
GMP12-BH3/7	540146.5	179090.5	6	12
GMP12-BH3/8	540202.5	179084	5.8	12
GMP12-BH4/10	540064.5	178861	3.9	12
GMP12-BH4/11	540136.5	178835.5	3.5	12
GMP12-BH4/2	540133	178949	5.35	10
GMP12-BH4/4	540095.5	178912.5	5.1	10
GMP12-BH4/7	540150	178868	3.65	9
GMP12-BH4/8	539906	178871.5	3.6	7
GMP12-BH4/9	539989.5	178834.5	3.3	7
GMP12-BH5/2	540238	179061.5	5.75	11
GMP12-BH5/5	540221	178883	4.3	10
GMP12-GA3	540138	179025	7.05	13
GMP12-GA1	540198.5	179191.5	6.3	10
GWW07-BH3	538989	178350	3.8	5
GWW07-BHM	539048.5	178369	3.6	5
GWW07-BH4	539041	178404	3.6	6
GWW07-BHJ	539070	178454.5	5.15	7
GWW07-BHH	539114	178472.5	5.45	8
GWW07-BH5	539132.5	178475.5	2.5	6
GWW07-BHG	539179	178497	2.2	4
GWW07-BH12	539195	178588	3.05	4
GWW07-BH13	539189.5	178626	2.6	4
CW/TR1	539250	178380	2.46	1.2
PR/TR1	539200	178300	2.04	2.5
PW/BH101	540304.531	180197.225	1.82	40
PW/BH102	540178.291	180122.719	1.8	40
PW/BH103	540290.768	180065.771	1.8	40
PW/BH104	540491.147	180098.767	1.8	40

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
BH6D	540245	180045	2	10
BH18	540474	180135	2	10
BH19	540484	180078	2	12
GW/MBH101	539129	178619	6.2	16
GW/MBH103	539160	178602	4	12
GW/MBH104	539146	178563	2.4	20
GW/MBH105	539221	178589	2.8	25
GW/MBH106	539183	178521	1.91	23
GW/MTP101	539194	178542	2.1	4
GW/MTP102	539152	178519	2.4	3.5
GW/MTP103	539112	178548	2.77	3.5
GW/MTP104	539137	178584	2.37	3.1
GW/MTP105	539198	178573	2.29	2.5
GW/MTP107	539194	178592	2.7	3.4
GW/MTP108	539208	178610	2.9	2.3
GW/MTP109	539222	178622	2.6	2.8
GW/MTP110	539175	178619	2.8	3.5
GW/MTP111	539127	178569	2.47	3.5
GW/MTP112	539130	178601	5.66	4.5
GW/MTP113	539142	178532	2.4	3.2
GW/BH3	538983	178343	4	7
GW/MBH102	539116	178529	2.63	16
PW-QBH1	540234.2	180103.7	2.07	6
PW-QBH2	540259.6	180168.5	2.05	6
PW-QBH3	540327	180119.8	1.81	6.9
PW-QBH4	540397.3	180135	2	6.3
UKPN.MSSBH01	539435.96	179257.91	2.67	15
UKPN.MSSBH13	539418.25	179245.48	2.52	15
UKPN.MSSBH14	539423.92	179231.99	2.57	15
UKPN.MSSTP02	539421.4	179238.17	2.48	3
UKPN.MSSTP03	539451.51	179273.48	2.75	3.2
UKPN.MSSTP04	539430.98	179239.97	2.43	3.2
UKPN.MSSTP05	539426.16	179254.95	2.85	3.8
UKPN.MSSTP06	539440.26	179235.89	2.05	1.9
RW.BH1-2011	538820.09	179989.79	5.65	1.1
RW.BH1A-2011	538812.94	179977.36	5.65	20
RW.BH2-2011	538784.27	179998.52	4.28	6
RW.BH2A-2011	538789.19	179997.82	4.71	0.7
RW.BH2B-2011	538791.26	179996	4.78	0.4
RW.BH2C-2011	538791.08	179994.61	4.87	25
RW.BH3-2011	538790.65	179956.1	1.99	3.15
RW.BH3A-2011	538790.76	179961.93	4.99	20
RW.BH5-2011	538769.52	179926.01	5.15	1.2
RW.BH6-2011	538764.14	179859.64	5.05	1.65

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
RW.BH7-2011	538755.27	179868.66	2.8	10.3
RW.BH10-2011	538830.63	179591.7	4.61	15.95
RW.BH11-2011	538837.02	179573.32	4.49	15.5
RW.BH12-2011	538854.39	179522.32	4.72	2
RW.BH13-2011	538812.26	179588.74	1.66	11.38
RW.TP1-2011	538802.48	179996.39	5.3	3
RW.TP2-2011	538805.72	179979.33	5.35	3
RW.TP3-2011	538789.19	179966.25	4.97	1.95
RW.TP4-2011	538799.25	179955.29	5.48	3
RW.TP5-2011	538790.13	179939.09	4.97	1.4
RW.TP6-2011	538769.52	179926.01	5.15	1.5
RW.TP7-2011	538825.04	179589.94	4.76	2.8
RW.TP8-2011	538833.02	179571.11	4.64	2.2
RW.TP9-2011	538851.09	179524.71	4.75	1.1
RW.IP1-2011	538768.3	179930.32	-0.25	1.2
RW.IP1A-2011	538765.96	179930.35	-0.37	1.4
RW.IP1B-2011	538763.27	179930.42	-0.49	0.7
RW.IP1C-2011	538759.58	179930.38	-0.59	0.4
RW.IP3-2011	538768.42	179920.97	-0.42	1.5
RW.WS1-2011	538776.21	179990.65	1.2	4
RW.WS2-2011	538783.46	179964.89	1.33	5
RW.WS3-2011	538783.17	179949.72	-0.96	5
RW.WS4-2011	538761.31	179932.99	0.84	4
N0205.TP01	539383.71	180072.97	5.56	0.9
N0205.TP02	539370.75	180062.6	5.53	1.6
N0205.TP03	539393.63	180059.5	5.64	2.6
N0205.TP04	539354.89	180037.27	5.74	3
N0205.TP05	539385.83	180059.43	5.7	0.85
N0205.TP06	539331.58	180068.82	5.68	3.7
N0205.TP07	539407.74	180058.05	5.57	0
N0205.WS01	539346.63	180126.12	5.63	5
N0205.WS02	539350.79	180097.06	5.66	3.4
N0205.WS03	539340.7	180061.98	5.67	2.1
N0205.WS04	539383.49	180086.32	5.57	3.2
N0205.WS05	539368.06	180057.33	5.68	5
N0205.WS06	539381.43	180055.01	5.76	0.7
N0205.WS06A	539382.45	180053.9	5.76	0.7
N0205.WS07	539362.72	180031.52	5.77	1.2
N0205.WS08	539377.37	180019.77	5.87	1
N0205.WS09	539397.39	180049.86	5.71	0.7
N0205.WS09A	539402.71	180051.09	5.71	3.3
N0205.WS10	539385.6	180035.32	5.83	1.5
N0205.Core 1	539373.32	180058.07	5.68	3.8
N0205.Core 2	539384.92	180066.93	5.53	3.8

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
N0206.BH01	539423	179992	5.9	45
N0206.BH02	539427	179965	5.83	30
N0206.BH03	539457.4	179955	5.61	45.5
N0206.S47	539475.3	179969.6	2.29	15
N0206.102	539490	179910.5	5.08	47.47
N0206.822	539379.47	179990.43	5.02	28
N0206.S834	539310.18	179915.97	5.16	15.5
N0206.S835	539333.07	179933.03	5.14	14.8
N0206.S836	539311.46	179944.48	4.98	14.2
N0206.S840	539365.75	179992.2	4.95	15
N0206.S841	539361.66	179949.25	5.2	16.5
N0206.BH1185	539250.24	180025.73	5	16.5
BRS.BH104	539555.5	179422.5	3.17	30
BRS.BH105	539869.5	179330.5	5.56	36.5
BRS.BH701	539646	179463	5.11	10
BRS.BH702	539712	179392	5.45	6
BRS.BH703	539803	179300	6.07	5.4
BRS.BH705	539786	179474	6.73	6
BRS.BH706B	539847	179355	5.26	6
BRS.BH707	539682	179466	4.27	36
BRS.BH709	539718	179439	5.52	23
BRS.BH710	539757	179469	6.25	24
BRS.BH712	539811	179512	6.4	24
BRS.BH713	539739	179407	5.7	23.5
BRS.BH714	539771	179373	5.89	22.6
BRS.BH715	539788	179439	6.71	24
BRS.BH716	539830	179491	6.51	22
BRS.BH717	539841	179442	6.79	23
BRS.BH718	539812	179330	6.38	23
BRS.BH719	539826	179390	6.85	21.4
BRS.BH720	539847	179362	4.9	8.5
BRS.BH720A	539847	179355	5.28	34
BRS.BH721	539893	179433	6.41	22
BRS.BH722E	539832	179475	5.08	35
BRS.TP709	539730	179424	5.53	4.3
BRS.TP742	539863	179465	4.77	4.3
BRS.WS03	539843	179509	6.15	5
EON.BH1	539414.5	179149.5	2.93	31
EON.BH2	539446.9	179143.5	2.56	31.5
EON.BH3	539447.6	179107.7	4.75	20.5
EON.BH4	539477.8	179099.3	4.75	20.7
EON.WS1	539442.7	179157	2.45	5
EON.WS4	539427.5	179127.4	3.66	5
EON.WS5	539421.7	179168.2	2.3	5



Name	Easting	Northing	Elevation (m OD)	Total depth (m)
M0120.BH1	539784.8	179345.3	5.88	25
M0120.BH2	539769.3	179338.4	5.16	23.2
M0120.BH3	539800	179317.4	5.87	21.9
M0116.BH001	539773	179425	6.15	40.5
M0116.BH002	539808	179402	6.36	40.5
M0116.BH003	539791.8	179414.7	6.39	23.2
M0116.WS001	539798.5	179435.4	6.42	5.8
M0116.WS002A	539782.5	179404.8	6.18	6
M0116.WS003	539815.6	179404.9	6.37	5.1
M0116.TP001	539781.2	179434.6	6.34	5
M0116.TP002	539800.2	179428.9	6.44	5.7
M0116.TP003	539812.3	179422.3	6.33	5
M0116.TP004	539786.4	179423.4	6.47	5.3
M0116.TP005	539769.2	179425.7	6.14	5.2
M0116.TP006	539797.5	179392.3	6.35	4
M0116.TP007	539820.4	179415.3	6.5	4.25
M0117.BH723B	539765	179432	5.22	5
M0103.BH103.1	539783	179559	6.55	60
M0103.BH103.2B	539789	179495	6.2	17.5
M0103.BH103.3D	539814.65	179516.22	6.23	24.1
M0103.BH104.1A	539702.99	179581.82	5.93	55.5
M0103.BH104.3	539769.81	179578.17	6.48	45
M0103.BH116.1B	539785.48	179434.36	6.52	25.75
M0103.BH116.2	539800.9	179410.46	6.69	23
M0103.BH119.1A	539745	179493.1	5.92	24.5
M0103.BH119.2A	539756.96	179464.12	5.68	24
M0103.BH121.1	539713.32	179635.96	6.41	56.2
M0103.BH121.2	539668.95	179649.37	6.11	26.1
M0103.BH121.2A	539671.52	179650.07	6.12	45.2
M0103.BH121.3	539693.11	179640.54	6.18	40.05
M0103.TP103.4	539797.57	179547.95	6.46	4.5
M0103.TP103.5	539772.96	179506.24	6.22	3.5
M0103.TP103.6	539796.77	179508.91	6.18	4.5
M0103.TP104.1	539755.85	179597.45	6.07	4.5
M0103.TP116.1	539778.56	179429.25	6.3	4.5
M0103.TP116.2	539797.5	179437.93	6.59	4.6
M0103.TP116.3	539800.64	179417.09	6.26	4.5
M0103.TP119.3	539745.07	179484.86	5.77	3.4
M0103.TP119.4	539762.86	179476.2	5.92	4.5
M0103.TP121.2	539690.17	179663.53	6.4	4.5
601/608.BH802	538873.9	179976.9	4.11	25
601/608.BH803	538906.7	179944.1	4.09	28
601/608.BH805	538862.2	179917.2	4.62	29.61
601/608.BH806	538892.1	179961.5	4.22	60.5

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
601/608.BH807	538954.6	179956.8	3.42	1.2
601/608.BH807A	538954.6	179956.8	3.42	33.1
601/608.BH808	538894	179919.3	4.17	29
601/608.BH809	538921.9	179906	4.16	60
601/608.WS820	538854.8	179952	3.83	7.45
601/608.TP802	538857.3	179971.8	4.12	3
601/608.TP804	538838.2	179912.5	3.89	3
601/608.TP805	538854.9	179911.2	4.89	3
601/608.TP806	538889.9	179909.4	4.38	2.8
601/608.TP808	538895.8	179932.1	4.1	3.1
601/608.TP809	538924.5	179900.9	3.61	3
M0114.BH001A	539709.3	179440.2	5.05	45.5
M0114.BH002	539731	179454.2	5.37	46.5
M0114.WS001B	539696.5	179472.3	5.38	5
M0114.WS003	539716.6	179426.3	5.01	5
TQ37NE1608	539146	179692	2.53	4
TQ37NE1610	539203.35	179607.86	3.31	4
TQ37NE1609	539095.08	179877.75	1.97	4
TQ37NE695	539080	179850	2.1	4.87
TQ37NE699	539060	179730	2.7	6.7
TQ37NE700	539070	179690	2.8	4.8
TQ37NE597	538990	179540	1.3	9.14
TQ37NE599	538960	179520	1.44	9.14
TQ37NE596	539000	179510	2.13	15
TQ37NE598	538970	179500	1.48	15.39
18.03.01	539697	179278	4.78	40
18.03.02	539696	179252	4.59	40
18.03.03	539726.1	179263.3	4.92	40
18.03.04	539739.124	179251.442	4.96	40
18.03.WS1	539683	179264	4.5	5
18.03.WS2	539713	179255	4.77	5
18.03.WS3	539727	179243	4.8	4
18.03.WS4	539727	179223	4.75	5
18.03.WS5	539694	179244	4.56	5
18.03.WS6	539697	179258	4.6	4
19.05.BH1	539648.363	179510.8	4.915	25.45
19.05.BH2	539659.052	179489.5	5.117	40.45
19.05.BH3	539684.47	179501.398	5.326	40.45
19.05.BH4	539674.194	179537.319	5.296	40.45
19.05.BH5	539654.408	179520.308	4.971	40
19.05.BH6	539641.824	179526.806	5.073	25.45
Horn-QBH1	540248.149	178699.267	1.25	4.75
Horn-QBH2	540285.027	178692.909	1.15	6
Horn-BH01	540242	178717	1.7	17

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
Horn-BH02	540244	178684	2	20
Horn-BH03	540296	178684	1.8	20
Horn-WS01	540269	178711	1.9	4
Horn-WS02	540240	178672	1.9	4
Horn-WS03	540263	178672	1.9	4
Horn-WS04	540273	178684	1.9	4
Horn-TP01	540245	178705	1.95	3
Horn-TP02	540258	178696	1.95	2.6
Horn-TP03	540298	178716	1.75	3.6
Horn-TP04	540294	178702	1.8	2.8
18.03.QBH1	539698.985	179249.806	4.186	6
18.03.QBH2	539733.179	179251.818	4.559	6
19.05.QBH2	539643.382	179478.689	2.339	6
19.05.QBH1	539672.678	179552.849	2.388	6
18.02.BH1	539628.8	179314.4	4.32	40.27
18.02.BH2A	539669.5	179291.5	4.53	40.15
18.02.BH3	539615	179300.2	4.07	30
18.02.BH4	539647.3	179277.3	4.29	30.45
18.02.WS1	539659.1	179293	4.42	5
18.02.WS2	539636.7	179285.2	4.24	5
18.02.WS4	539638.9	179315.7	4.39	5
19.04.BH1C	539589.902	179574.128	4.601	55
18.01.BH1	539603.318	179213.078	3.5	20.4
18.01.BH2	539622.27	179149.577	3.4	20.6
18.01.BH3A	539682.45	179216.595	4.2	33
18.01.WS1	539552.126	179227.732	3.1	4
18.01.WS5	539643.372	179244.145	4	4
19.04.BH2	539593.363	179553.928	4.557	40
19.04.BH3	539649.884	179592.028	5.423	28
19.04.BH4	539622.729	179624.083	5.823	30
19.04.BH5	539612.817	179581.59	5.008	20
TQ37NE577	539120	178440	4.41	13.72
TQ37NE578	539140	178440	2.1	10.66
TQ37NE579	539160	178450	2.1	10.97
TQ37NE580	539150	178470	1.95	12.19
TQ37NE582	538870	178220	4.84	15.24
TQ37NE583	539110	178500	-0.7	9.14
TQ37NE584	539130	178510	2	1
TQ37NE585	539120	178480	5.1	11.15
TQ37NE586	539100	178480	5.1	10.85
TQ37NE587	539130	178460	2.3	9.32
TQ37NE1948	539255	178525	1.18	6.1
TQ37NE1998	539140	178810	5.2	28
TQ37NE3305	538630	178730	3.73	13.1

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ37NE3306	538670	178720	4.2	16.15
TQ37NE3307	538720	178710	4.6	15
TQ37NE3308	538620	178700	3.84	16.15
TQ37NE3309	538660	178690	4.29	9.45
TQ37NE3310	538690	178690	4.81	15.6
TQ37NE3311	538630	178670	4.15	14.5
TQ37NE3312	538670	178630	4.87	19.65
TQ37NE3313	538700	178640	4.65	14.65
TQ37NE3314	538600	178630	4.33	21
TQ37NE3315	538640	178620	4.58	14.6
TQ37NE3316	538690	178600	4.62	22
TQ37NE3317	538670	178600	4.56	6.45
TQ37NE3318	538690	178680	4.83	8.85
TQ37NE3320	538710	178710	4.62	12
TQ37NE3321	538670	178700	4.48	5.8
TQ37NE3322	538620	178660	4.36	9.5
TQ37NE3323	538660	178670	4.61	10.5
TQ37NE3324	538700	178660	4.47	12
TQ37NE3325	538610	178630	4.31	9
TQ37NE3326	538650	178620	4.82	11.5
TQ37NE3327	538690	178600	4.48	11.3
TQ37NE3482	538610	178880	4.68	17
TQ37NE3483	538670	178860	4.92	16.5
TQ37NE3484	538620	178920	4.62	15.1
TQ37NE3485	538660	178910	4.97	1.7
TQ37NE3488	538720	178920	0.012	9.05
TQ37NE3493	538610	178860	3.96	2.6
TQ37NE3496	538680	178870	4.9	2.1
TQ37NE3662	538818	178221	-1.95	7.5
TQ37NE1997	538660	178960	5.1	27
TQ37NE1464	538700	179120	-5.3	24
TQ37NE3487	538710	178950	-0.21	8.5
TQ37NE3486	538710	178930	5.16	17.1
TQ37NE1465	538820	179150	-8.56	22
TQ37NE1466	538930	179150	-8.6	24
TQ37NE600	538890	179470	15.5	9.14
TQ37NE601	538880	179500	15.5	15.39
TQ37NE3490	538610	178940	4.14	3
TQ37NE1463	538620	179160	5	30
TQ37NE3214	538600	179160	3.93	15.15
TQ37NE1583	538752	179699	-2.7	31
TQ37NE1584	538714	179717	-9.23	5.55
TQ37NE1585	538749	179696	-3.01	40
TQ38SE111	538670	180170	-7.7	15.24

Name	Easting	Northing	Elevation (m OD)	Total depth (m)
TQ38SE348	538630	180211	2.13	25.6
TQ38SE1355	538755	180259	-9.03	35.4
TQ38SE1356	538733	180214	-9.9	45
TQ38SE1402	538756	180144	-3.24	30
TQ37NE2153	538770	179920	4.65	15.4
TQ38SE1384	538602	180462	5.3	53.72
TQ38SE1385	538604	180464	5.17	40
TQ38SE1386	538606	180466	5.14	40
TQ38SE1388	538637	180468	-3.09	41.55
TQ38SE1389	538626	180472	4.94	57.7
TQ38SE1390	538614	180439	-2.96	45
TQ38SE1431	538618	180459	4.94	1
TQ38SE1432	538618	180460	5.01	14
TQ38SE1437	538604	180457	4.99	39.45
TQ38SE1438	538600	180452	4.98	23
DD-BH02	539099.1	179811.6	4.19	70.3
DD-BH04	539161.8	179895.2	4.64	62
DD-BH05A	539096.7	179727.6	2.87	41
PP-BH07	539189.9	179792.3	4.38	41.95
PP-BH08	539222.5	179829.6	4.63	45.8
PP-BH10	539148.1	179737.8	3.84	68
PP-BH11A	539196	179748.9	3.8	65.5
PP-BH13	539108.9	179660.6	3.12	57.5
PP-BH14	539175.1	179701.7	3.42	54.05
PP-BH15	539250.6	179756.1	3.71	55.5
PP-BH16	539185.9	179877.6	4.75	20
PP-SBH02	539101.1	179804.9	4.22	6
PP-SBH04	539166.8	179881.6	4.52	6
PP-SBH08	539215	179830.2	4.58	6
PP-SBH16	539183.8	179872.8	4.65	6
PP-VBH02	539098.1	179820	4.22	20
PP-VBH04	539168	179887.6	4.69	20
PP-VBH08	539223.4	179827.7	4.66	17.1
PP-VBH10	539150.1	179735.3	3.79	20
DD-WS2	539324	179829	5.3	8
DD-WS6	539351	179798	4.8	8
DD-WS5	539329	179771	4.6	8

## 8. APPENDIX 2: OASIS FORM

OASIS ID: [quaterna1-297271](#)

## Project details

Project name	Design District (Plot 11), Greenwich Peninsula
Short description of the project	A programme of geoarchaeological field investigations and deposit modelling was undertaken at the Design District site, integrating geotechnical and geoarchaeological borehole data for the site and the wider area of Greenwich Peninsula, in order to (1) clarify the nature of the sub-surface stratigraphy across the site; (2) clarify the nature, depth, extent and likely date of any former land surfaces, alluvial and peat deposits; and (3) compare the results of the investigation to other sites in this area of Greenwich Peninsula. The results of the deposit modelling indicate that in the area of the site, the Late Devensian Shepperton Gravel is overlain by a sequence of Holocene alluvial sediments, containing peat, and buried beneath modern Made Ground. The site is likely to lie either within, or on the margins of, a former Late Devensian/Early Holocene channel, within which the Gravel surface lies at between ca. -2 and -5m OD. At the present site the Gravel surface lies at ca. -3.37m OD; on this basis, the archaeological potential of the interface between the Gravel and alluvium is considered to be low, and deeply buried. However, the Holocene alluvium at the site includes two peat horizons, one within the Lower Alluvium (-3.27 and -3.33m OD) and overlying the Lower Alluvium between -0.95 and -1.62m OD. On this basis, it is recommended that an environmental archaeological assessment is undertaken on borehole WS5.
Project dates	Start: 01-08-2017 End: 02-10-2017
Previous/future work	No / Yes
Type of project	Environmental assessment
Survey techniques	Landscape

## Project location

Country	England
Site location	GREATER LONDON GREENWICH GREENWICH Design District (Plot 11)
Postcode	SE10 0SQ
Site coordinates	TQ 3918 7980 51.49947693221 0.005370202149 51 29 58 N 000 00 19 E Point

## Project creators

Name	of Quaternary Scientific (QUEST)
Organisation	

Project brief RPS  
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

Physical Archive No  
Exists?

Digital Archive No  
Exists?

Paper Archive LAARC  
recipient

Paper Contents "Stratigraphic","Environmental"

Paper Media "Report"  
available

---

Entered by Daniel Young (d.s.young@reading.ac.uk)

Entered on 2 October 2017