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**ANDERSON WAY,
BELVEDERE, LONDON
BOROUGH OF BEXLEY:
GEOARCHAEOLOGY
BOREHOLE REPORT**

Prepared for
Nick Daffern of Dalcour
Maclaren

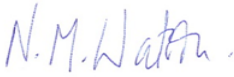
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*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

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CONTENTS

List of Figures	2
Summary	3
1. Introduction.....	4
2. Methodology	5
2.1 Core recording.....	5
2.2 Archive	6
3. Results: Borehole Stratigraphy	6
3.1 Lambeth Group bedrock.....	7
3.2 Shepperton Gravel Member	7
3.3 Fine grained alluvial deposits	7
3.4 Organic deposits.....	9
3.5 Channel bar deposits	10
3.5 Made Ground	11
4. Assessment.....	11
4.1 The Quaternary sequence.....	11
5. Conclusions.....	13
6. Acknowledgements	13
7. Bibliography	13
8. Figures.....	15
Appendix 1: Location of boreholes.....	21
Appendix 2: Lithostratigraphy of boreholes.....	22

LIST OF FIGURES

Figure 1. Plan of the site (red star on inset) showing Sevenoaks Environmental Consultancy Ltd locations in black, Dalcour Maclaren in red and lithostratigraphic cross sections. 15

Figure 2. Lithostratigraphic cross section from west to east in the north of the site. Vertical exaggeration x10..... 16

Figure 3. Lithostratigraphic cross section from west to east in the centre of the site. Vertical exaggeration x10. 17

Figure 4. Lithostratigraphic cross section from northwest to southeast. Vertical exaggeration x10..... 18

Figure 5. Lithostratigraphic cross section from southwest to northeast. Vertical exaggeration x10..... 19

Figure 6. Core lithology..... 20

SUMMARY

This document reports on six geoarchaeological boreholes drilled at Anderson Way, Belvedere, London Borough of Bexley. The cores were delivered to ARCA for logging on behalf of Dalcour Maclaren at the request of Nick Daffern. The results from earlier borehole work by Sevenoaks Environmental Consultancy Ltd (SEC) are included.

Lambeth Group bedrock sub-crops below the unconsolidated Quaternary strata between -13.35m OD (14.50m bgl) in SEC BH4 and -13.80m OD (14.50m bgl) in BH2. It is unconformably overlain by the Shepperton Gravel Member that lies between -6.45m OD (7.50m bgl) in SEC BH03 and -5.10m OD (6.00m bgl) in SEC BH01.

Lithological evidence demonstrates that there was a cyclical change in the environment represented by fresh and brackish water peats, and intertidal mudflats evolving within a very low energy regime. Four intercalated peat units in the reduced fluvial/intertidal mud are seen in the Dalcour Maclaren cores (the deeper bedrock and gravel units were not sampled). Peat growth began at -5.39m OD (DMWS02). Its highest elevation is -1.25m OD in the same borehole. There is evidence of deeper peat in SEC boreholes at c. -6m OD. Channel bar deposits of interlaminated very fine sands and organic particles are recorded in DMWS05. Thick laminated fine sands are also present in SEC WS14. Oxidised silt/clay deposits cap the sequence in the Dalcour Maclaren cores whereas Made Ground and /or topsoil are found at the SEC locations.

1. INTRODUCTION

- 1.1 This report presents the results of a geoarchaeological investigation of six boreholes drilled at Anderson Way, Belvedere, London Borough of Bexley (henceforth 'the site'). The drilling work was carried out on the instruction of Nick Daffern of Dalcour Maclaren and the cores were delivered to the University of Winchester in January 2021 for recording and sub-sampling by ARCA.
- 1.2 The sections of the report are arranged as follows: Section 1 provides essential background to the project, i.e. the geographical and geological situation of the site, and the aims of the present work. Section 2 outlines the methodology employed in collecting and utilising the geological data. The lithostratigraphy is presented in Section 3; Section 4 discusses the significance of the data recovered in relation to the aims that have been set and previous work on the site; conclusions are presented in Section 5. A bibliography, figures and appendices providing the locations and lithostratigraphy of the borehole logs complete the report.
- 1.3 The site is centred on NGR 550007 179755, and comprises a triangular area of approximately 1ha with an elevation between c. +0.40m and +1.20m OD (**Error! Reference source not found.**). It is bounded on the north by Anderson Way and on the south by Bronze Age Way (A2016). The site lies on the southern floodplain of the River Thames, the river lying c. 860m due east.
- 1.4 The British Geological Survey (1:50,000 1998, sheet 271) map the bedrock geology of the site as the Lambeth Group that dates to the Ypresian Age of the Eocene (56-55 Ma). The arenaceous bedrock is overlain by Alluvium that dates to the Holocene Epoch (11.7ka to present day) (British Geological Survey 2021a; 2021b). The Alluvium consists of unconsolidated clay and silt and intercalated peat beds and forms the modern floodplain. The underlying gravel is assigned to the Shepperton Gravel Member (on altitudinal evidence) which was laid down between 15ka and 10ka (Gibbard 1994, 193)
- 1.5 The six Dalcour Maclaren boreholes (DMWS01-DMWS06) were drilled with a Terrier-type percussive drilling rig in 2020. Prior work at the site has been conducted by Sevenoaks Environmental Consultancy Ltd (SEC) (2018). This consisted of six test pits (TP1-TP6) dug by mechanical excavator to c. 4m bgl; ten window sample boreholes (WS01-WS05, WS11-WS15) drilled

by Terrier-type rig to c. 5m bgl and six deep boreholes drilled by cable percussion to c. 25m bgl. This work took place between 2015 and 2018.

1.6 The aims of the work are to:

1.6.1 Determine the lithostratigraphic sequence of the site and the depositional environments in which the strata formed;

1.6.2 Assess the potential of the deposits to provide palaeoenvironmental information and sub-sample these deposits;

1.6.3 Briefly relate the Dalcour Maclaren core strata to earlier work completed on the site by Sevenoaks Environmental Consultancy Ltd (2018).

2. METHODOLOGY

2.1 Core recording

2.1.1 The cores were opened and cleaned with a scalpel, logged and photographed according to standard criteria under laboratory conditions at the ARCA Laboratory, University of Winchester (Jones *et al.* 1999; Munsell Color 2000; Tucker 2011).

2.1.2 Data from selected boreholes drilled by Sevenoaks Environmental Consultancy Ltd have been included in this report. The lithological strata descriptions of the SEC cores have been interpreted to coincide with the descriptions assigned to strata in the Dalcour Maclaren cores. These unit descriptors are where possible, grouped into formal geological units e.g. 'Sandy gravel' is assigned to the Shepperton Gravel Member. The logs of the deep boreholes drilled by cable percussion are more circumscribed – the method of recovery is crude – than the detailed logs of the window sample cores which have combined both initial logging and a subsequent analysis (SEC 2018, Appendix 1). On occasion it has been necessary to combine recorded but essentially minor stratigraphical differences from the SEC data into a single lithological descriptor: this has been noted in the Appendices in this report.

2.1.3 Lithological and positional data of the six Dalcour Maclaren borehole cores were combined with selected SEC boreholes from the site in a RockWorks 15 database (RockWare 2013). The

software was then used to plot lithostratigraphic cross-sections (see Section 8. Figures). Lithological data from the boreholes and their location and elevation are recorded in Appendices 1 and 2.

2.2 Archive

2.2.1 The material archive comprises the cores from the six boreholes and will remain in storage at the University of Winchester for six months after which they will be disposed of or returned to Dalcour Maclaren after consultation with Nick Daffern. No artefacts were recovered.

2.2.2 The digital archive consists of the RockWorks database (in Microsoft Access format); lithostratigraphic cross-sections in JPG format; photographs of cores in JPG format and this report in PDF format. These digital archives are stored both on the University of Winchester server and on an external hard drive stored outside the University of Winchester. Copies of these data can be supplied on request.

2.2.3 OASIS records will be completed on approval of this report.

3. RESULTS: BOREHOLE STRATIGRAPHY

3.0.1 The sedimentary sequence found on the site is divided into four main stratigraphic units. The units identified from youngest to oldest are:

1. Made Ground (Modern)
- 2a. Fine grained alluvial deposits (Holocene intertidal/fluvial strata)¹
- 2b. Intercalated organic deposits: primarily peat beds (Holocene)
- 2c. Channel bar deposits: sands (Holocene)
3. Shepperton Gravel Member (Late Devensian sands and gravels)
4. Lambeth Group bedrock (Eocene)

3.0.2 These units are described in stratigraphic order below. The results from the Dalcour Maclaren cores are discussed in

¹ Rivers and streams produce freshwater fluvial deposits i.e. alluvium. Marine fine grained deposits will also be deposited in tidal/estuarine environment that pertained to the lower River Thames for much of the Holocene. Since the BGS refers to Alluvium the informal unit 'fine grained alluvium' will be used here to indicate both intertidal and fluvial deposits.

preference to the SEC data except where the later provides evidence of the stratigraphy that is not found in the Dalcour Maclaren cores.

3.1 Lambeth Group bedrock

3.1.1 The Lambeth Group bedrock sub-crops below the unconsolidated Quaternary strata in the six SEC cable percussive boreholes (BH1-BH6) on the site. It lies between -13.35m OD (14.50m bgl) in BH4 in the northeast and -13.80m OD (14.50m bgl) in BH2 in the southeast of the site (Figure 2 and

Figure 3).

3.1.2 The lithology of the bedrock is described as very compact greenish grey sand; the sand may be clayey. Compact pale grey very sandy gravel, shell and sub-rounded to well-rounded flint found in BH05 and BH06 are interpreted as possible beach gravels.

3.1.3 The Lambeth Group is unconformably overlain in all the SEC cable percussive boreholes by the Shepperton Gravel Member.

3.2 Shepperton Gravel Member

3.2.1 The Shepperton Gravel Member lies between -6.45m OD (7.50m bgl) in BH03 in the centre west of the site and -5.10m OD (6.00m bgl) in BH01 in the centre the site (

Figure 3).

3.2.2 The lithology presents a fining upward sequence of gravel to sand. The basal gravel is described as dark grey sandy gravel, which can be compact or loose, with sub-rounded to well-rounded flint clasts. This is overlain by compact sand coloured grey, dark grey or greyish brown. The particle size may vary from coarse and fine to silty sand.

3.2.3 The sand and gravel deposits are overlain by fine grained alluvial deposits in all the cable percussion boreholes.

3.3 Fine grained alluvial deposits

- 3.3.1 On the site the fine grained deposits in the Dalcour Maclaren cores outcrop between +0.39m OD in DMWS03 and +0.53m OD in DMWS04 (Figure 3).² The maximum thickness of the deposit including its intercalated organic strata is 5m in DMWS01 and DMWS02, both located in the east of the site (Figure 4). Overall the maximum thickness is 7m recorded in SEC BH02 where a complete profile is preserved unaffected by truncating Made Ground. The topsoil is included because it develops within the top of the alluvium.
- 3.3.2 The lithology of the reduced mineralogenic deposits that lie in the phreatic zone is grey (2.5Y 5/1) damp (wet at depth) and soft silt/clay often with a silty texture (Figure 6). Anoxic conditions exist below the water table and the deposits are coloured shades of grey as a result of the presence of the mineral vivianite (hydrated iron phosphate) and any humic compounds that may be present. The strata are homogenous and may present local, faint colour banding on a 10mm scale. Coarse sand-sized grains of peat and wood are occasionally to frequently found throughout and roots may be present too. The strata vary in thickness from a maximum of 2.15m in DMWS01 to a minimum of c. 0.26m found between organic units in DMWS01 (Figure 4). Much thinner (~1mm) individual reduced silt/clay laminae are occasional found within organic units. Thicker units of reduced silt/clay in the order of 2-3m are found in BH02 and BH03, for example, towards the top of the phreatic zone whereas 3.5m is recorded in BH06 in the centre north of the site, a borehole distinguished by the absence of definitive peat beds (Figure 2).
- 3.3.3 Oxidised mineralogenic silt/clays are present in the vadose zone in all the boreholes on the site. Their lithology is similar to the reduced silt/clays since their characteristic brown colour is a post-depositional diagenetic feature resulting from redox reactions caused by a fluctuating water table (Figure 6). The sediment is brown (10YR 4/3), damp, firm and homogenous silt/clay with occasional to frequent dark orange iron oxide grains. Horizontal silt/very fine sand laminae are occasionally present.
- 3.3.4 SEC boreholes record the upper levels of the alluvium to be truncated by Made Ground at 13 locations. Topsoils are also recorded and may be found buried by the Made Ground (e.g. WS03, TP3 and TP4).

² In DMWS01 and DMWS02 the top 1m of the stratigraphy has been excavated away. In the four remaining boreholes topsoil is not present and compression has depressed the sediment by up to 0.36m.

3.3.5 Units of peat and organic detritus are intercalated in the reduced alluvial silt/clay deposits and are discussed in Section 3.4. Channel bar deposits are also represented in the stratigraphy and are discussed in Section 3.5.

3.4 Organic deposits

3.4.1 Four distinct organic lithologies were encountered in the Dalcour Maclaren boreholes: peat beds, silt/clay with organics, organic detritus and interlaminated sand and organic particles (Figure 6). Each lithology will be discussed in turn below.

3.4.2 A total of 11 peat units are distributed in five of the six boreholes (DMWS01-DMWS04, and DMWS06). Four units are present in DMWS02 and DMWS03 located contiguously east of centre of the site. Boreholes DMWS01, DMWS04 and DMWS06 each have one peat unit. The stratigraphically earliest unit is found at -5.39m OD in DMWS02 and the latest sub-crops in the same borehole at -1.25m OD (Figure 4). Thicknesses of the beds are variable from 40mm to a maximum of 950mm in DMWS06 (Figure 5). Peat is found in all the SEC boreholes and test pits except BH06, TP1 and WS14. The deepest seated unit (a clayey peat see Section 3.4.4) appears at -5.85m OD in BH04 over a thin alluvium capping sands (Figure 2). 1.7m of peat is recorded in BH05 north of centre of the site (Figure 2).

3.4.3 The lithology of the peat is black (10YR 2/1), dryish and firm moderately well-humified with a crumbly granular to blocky structure (Figure 6). The organic constituents are sand to granular-sized fragments and frequent fibres. The units are homogenous and show no evidence of having any reed fragments. There are occasional granular- to rare pebble-sized fragments of wood. Wood fragments may be near vertical and lack bark suggesting that they are roots. The SEC peat has a similar wood peat lithology.

3.4.4 A unit classified as 'silt/clay with organics' is identified in the five Dalcour Maclaren boreholes that contain peat (DMWS01-DMWS04 and DMWS06). It conformably overlies the peat deposits with a gradual boundary, and is distinguished by a very clayey lithology containing peat clasts with a flaky texture, and wood fragments. The deposit appears to represent allochthonous peaty material deposited as transgressive clays inundate a peat bed. The colour is very dark greyish brown

(10YR 3/2). Deposits logged as clayey peat found in SEC boreholes have been similarly classified here although their mode of formation is unclear.

3.4.5 A deposit classified as 'organic detritus' is recorded in DMWS01 where three thin (<310mm) organic units are interbedded with reduced silt/clay and silt/clay with organics are recorded sub-cropping at -4.18m OD (4.69m bgl). The lithology is very dark grey (10YR 3/1), wet, soft matrix of moderately well-humified organic remains set in a chaotic structure of frequent wood clasts from granular- to coarse pebble-size.

3.4.6 A final organic lithology is recorded in DMWS05 lying at -2.68m OD (3.13m bgl) in the south centre of the site (Figure 4 and Figure 6). It consists of 1.87m of alternating laminae of very fine, dark greyish brown sand (2.5Y 4/2) and black organic particles of fine to coarse sand size. The larger organic particles often exhibit a flake-like shape. Organic laminae coalesce in the centre of the unit and then return an interlaminated aspect with the sand. The deposit possibly represents a local channel bar or mud flat developing within a rich peaty environment.

3.5 Channel bar deposits

3.5.1 Sand and silt/clay laminae are found interlaminated in DMWS05 conformably overlying the sand and organic interlaminated deposit discussed in Section 3.4.6. The deposit lies at -1.40m OD and is 1.28m thick (Figure 4 and Figure 6). The lithology presents as a dark greyish brown (2.5Y 4/2), damp and soft, poorly bedded laminae of very fine sand and silt/clay, the latter tending to predominate. Very fine black organic grains and organic flakes of coarse sand-sized grade are present in the sand fraction. The laminae are grouped in fine, sub- horizontal beds of irregular thickness. The deposit appears to be a channel bar or mud flat that has evolved in an environment where the source of the peat detrital particles is now either depleted or more likely, buried.

3.5.2 Three SEC boreholes (WS04, WS12 and WS14) record sandy channel deposits. WS04 and WS12 are located proximal to DMWS05 in south centre and WS14 lies in the east of the site. In WS04 and WS12 the sand – of fine grade – is in the order of 0.7m thick and sub-crops at -0.28 and -0.60m OD respectively. A much thicker deposit (2.66m) of laminated fine sand is found in WS14 (Figure 2).

3.5 Made Ground

3.5.1 Made Ground is recorded only in the SEC boreholes and trial pits in 13 of the 22 locations; its maximum thickness is 1.49m in BH04. The lithology is recorded as dark greyish brown silty clay that contains clasts of brick, crushed stone, clinker, and glass. In the Dalcour Maclaren boreholes the top 1m was excavated on site at DMWS01 and DMWS02 leading to the truncation of the oxidised silt/clay deposits. In the remaining four boreholes although no topsoil was preserved the oxidised silt/clay was not truncated (pers. com. Nick Daffern).

4. ASSESSMENT

4.0.1 The sub-sections below review the lithostratigraphic evidence against the relevant aims of Section 1.14.

4.1 The Quaternary sequence

4.1.1 The site lies on the southern edge of the present day floodplain and estuary of the River Thames. On the site the Lambeth Group bedrock forms an irregular, incised basement to the later Quaternary sediments of the Lower Thames Valley basin. The line of pinch out of these sediments lies c. 0.7km south along the line of the B213 road where they on lap against the rising bedrock.

4.1.2 The Shepperton Gravel Member covers the bedrock erosion surface and forms a c. 6-8m thick sequence of freshwater sand and flint gravel deposits. It was aggraded under periglacial conditions on the ancient Thames braid plain between 15ka and 10ka (Gibbard 1994, 193). The deposit is deeply buried lying at c. -6m OD (c. 7m bgl).

4.1.3 Climatic amelioration at the end of the Pleistocene (11.7ka) resulted in the melting of the permafrost and consequent sub-surface drainage. These factors in conjunction with milder winters, and plant growth dramatically reduced stream energy and sediment supply. In the Holocene the River Thames occupies relict channels as it develops from an anastomosing to its modern day meandering planform. The braid plain evolves into a floodplain and fine grained mineralogenic alluviation tended to smooth the irregular topography.

- 4.1.4 The initial fine grained alluviation – referred to as Lower Alluvium at the site of Merrilands Crescent located 3.7km north northwest on the north bank (Watson 2017) – varies considerably in thickness across the site: BH04 in the north west records only 0.5m of grey sandy silt whereas BH06 in the north centre records 3.5m of silt/clay. A high water table and propensity to flood, promoted the eventual formation of fresh water marshes and peat accumulation. Evidence for a deep seated clayey peat is found in BH03, west of centre, commencing at -6.45m OD and in BH04 a clayey peat is seen to commence at -5.85m OD. A definitive peat unit is first found growing at -5.45m OD in DMWS02 east of centre of the site however only 60mm was recovered at the end of the core. The peats are woody and this is a characteristic of all the peat units. At Merrilands Crescent the Quaternary sediment stack lies considerably higher – a result of the higher bedrock sub-crop at c. -7m OD – with the top of the so called Lower Alluvium lying between -1.98m OD and -0.84m OD. Peat growth was established over this unit by 3347 – 3098 cal BC in the Middle Neolithic, and stopped accumulating by 1494 – 1301 cal BC in the Middle Bronze Age.
- 4.1.5 On the site a complex sedimentary architecture has formed as a result of constant adjustment of the River Thames to glacial eustacy and isostacy. First fluvial and then combined fluvial and marine/estuarine processes lay down deposits and rework earlier ones. The result is intercalated peat and fine grained transgressive alluvial deposits (mud)³: the peat marking a time when vegetation growth exceeds or keeps pace with a rising tidal frame, or there is a decline in the rate of relative sea level rise. At least four phases of peat growth are seen on the site in comparison to only one at Merrilands Crescent. This is the result of a more limited accommodation space at Merrilands Crescent where the sediments are tightly constrained by a high bedrock and the Taplow terrace.
- 4.1.6 The alternating lithology mud/peat/mud marks a cyclical change in the environment from estuarine mudflats crossed by tidal creeks to a reestablishment of brackish to freshwater alluvial deposition and the growth of peat. Channel formation is also represented in four boreholes: WS14 in the east; WS12, DMWS05 and WS04 located together in the south. In WS14 thick deposits (>2.6m) of laminated sand represent a tidal

³ ‘Mud’ is the lithological term for clay- and silt-grade sediment laid down in an estuarine environment, and is used here synonymously for ‘silt/clay’ and ‘clay.’

channel bar deposition sub-cropping at -0.24m OD. Fine sands are found in the southern boreholes at a similar elevation but are thinner (0.5m to 0.79m). In DMWS05 the laminae are alternating very fine to fine sands with organic detrital grains suggesting that the channel was reworking older peat deposits (Figure 6). Higher in the stratigraphy the organic laminae give way to clay laminae implying that the erodible peat source had become buried.

- 4.1.7 Oxidised fluvial/intertidal silt/clays are found towards the top of the sequence in all the boreholes and test pits. In the Dalcour Maclaren boreholes cores occasional, very fine sand laminae are occasionally present. These overbank deposits were laid down in the later Holocene on the floodplain and are often truncated by modern Made Ground.

5. CONCLUSIONS

- 5.1 The Dalcour Maclaren borehole cores elucidate in great detail the fine grained deposits known to exist on the site. Lithological evidence demonstrates that there was a cyclical change in the environment represented by fresh and brackish water peats, and intertidal mudflats evolving within a very low energy regime. This change is driven by relative sea-level change. The Dalcour Maclaren cores record a maximum of four intercalated peat units in the reduced fluvial/intertidal mud. They attain a thickness of between 40mm to 950mm (DMWS06). Peat growth began at -5.39m OD (DMWS02).
- 5.2 Channel bar deposits of interlaminated very fine sands and organic particles are recorded in DMWS05. Higher in the stratigraphy the organic fraction is replaced by clay.
- 5.3 Oxidised silt/clay deposits cap the sequence.

6. ACKNOWLEDGEMENTS

ARCA would like to thank the following for their help during the present project: Nick Daffern of Dalcour Maclaren and Dr Eleanor Standley of the University of Oxford.

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8. FIGURES

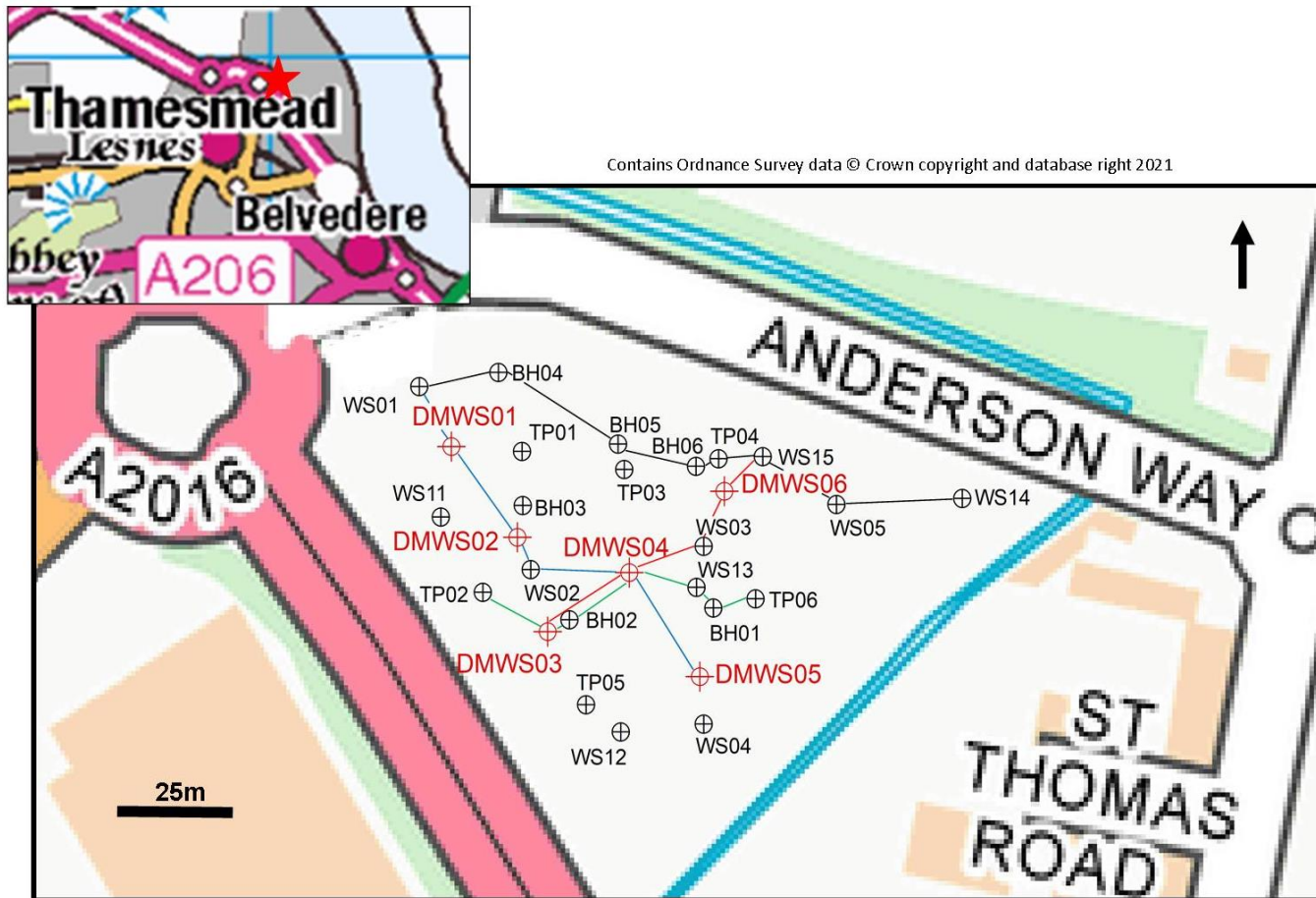


Figure 1. Plan of the site (red star on inset) showing Sevenoaks Environmental Consultancy Ltd locations in black, Dalcour Maclaren in red and lithostratigraphic cross sections.

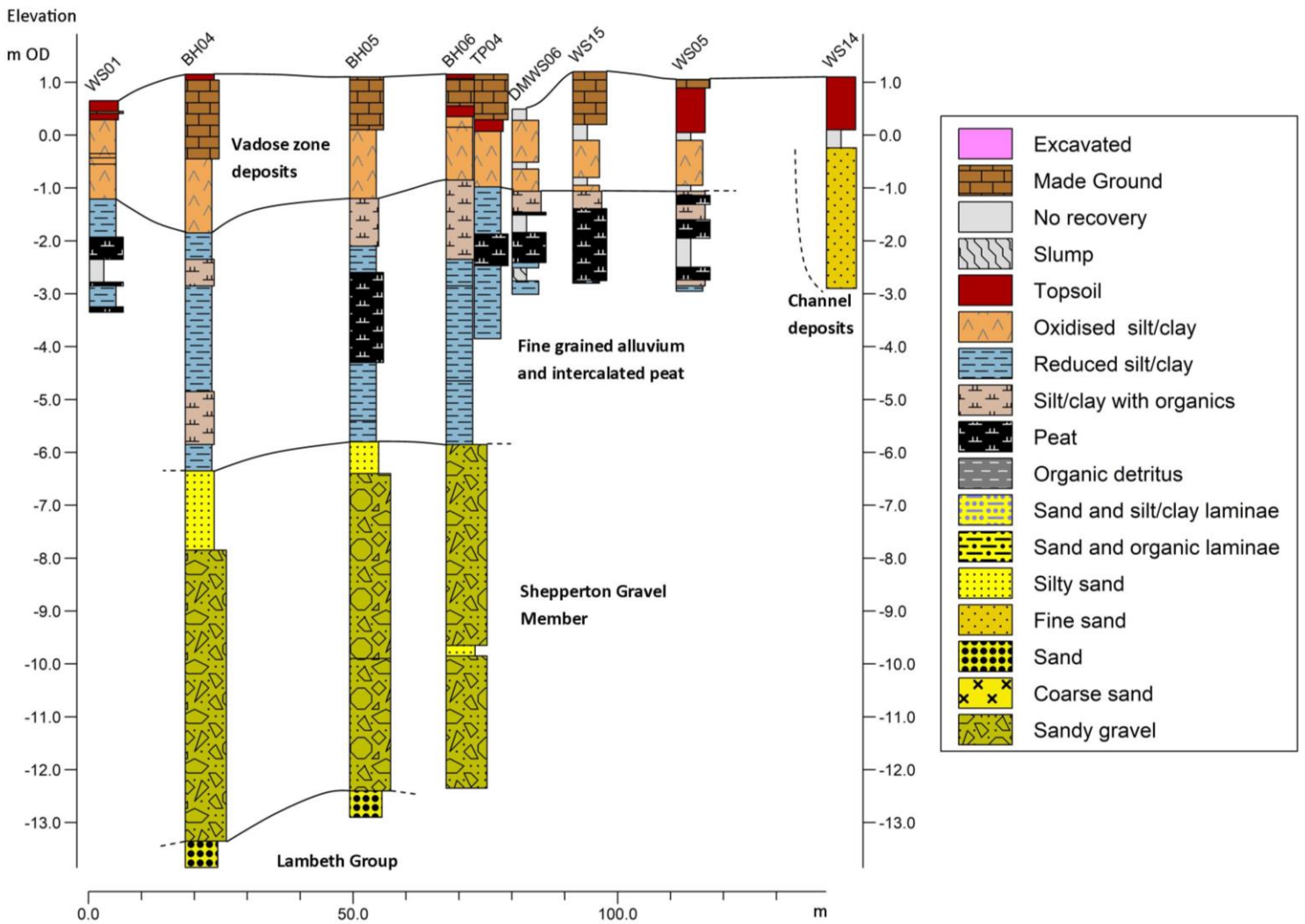


Figure 2. Lithostratigraphic cross section from west to east in the north of the site. Vertical exaggeration x10.

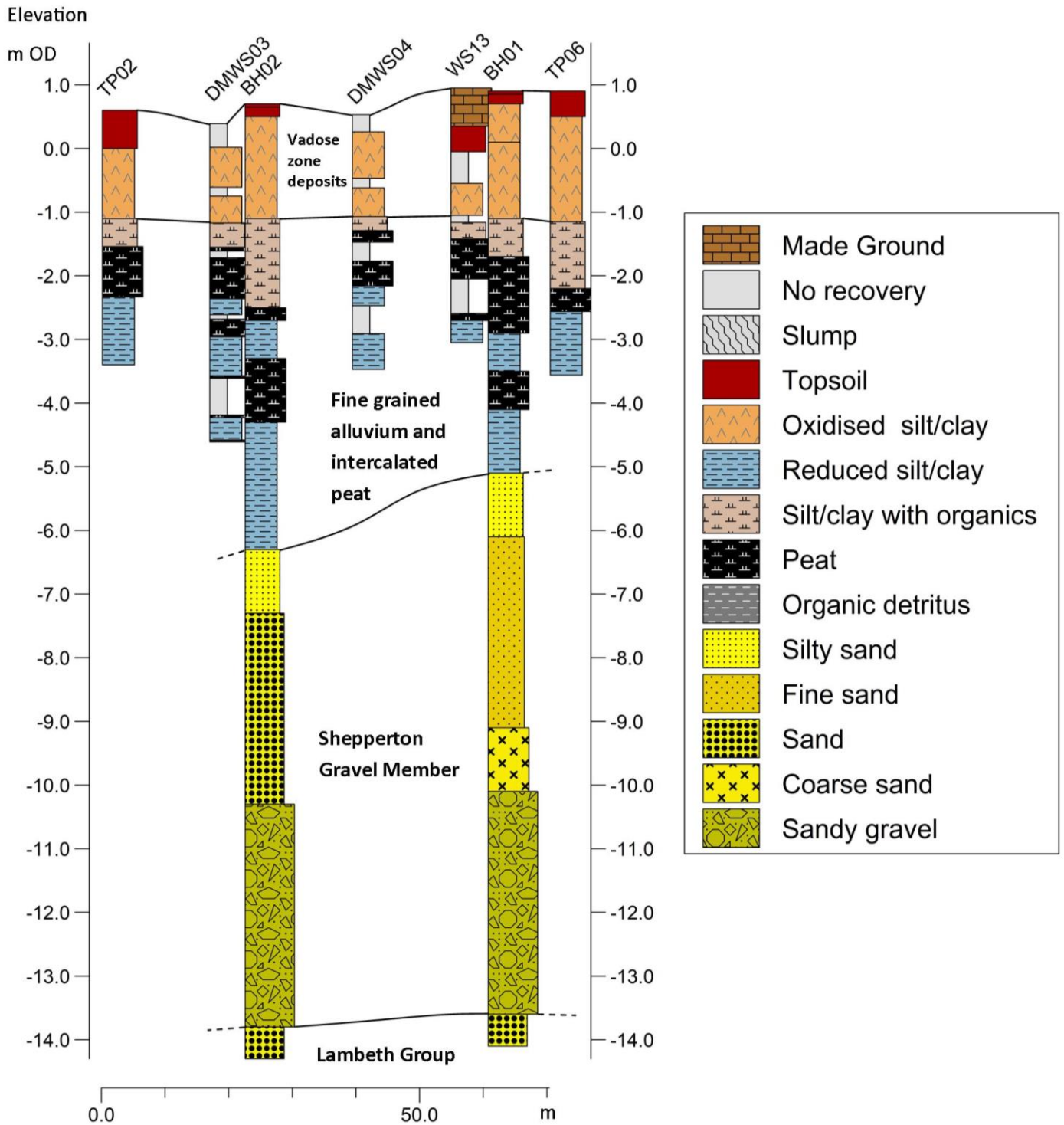


Figure 3. Lithostratigraphic cross section from west to east in the centre of the site. Vertical exaggeration x10.

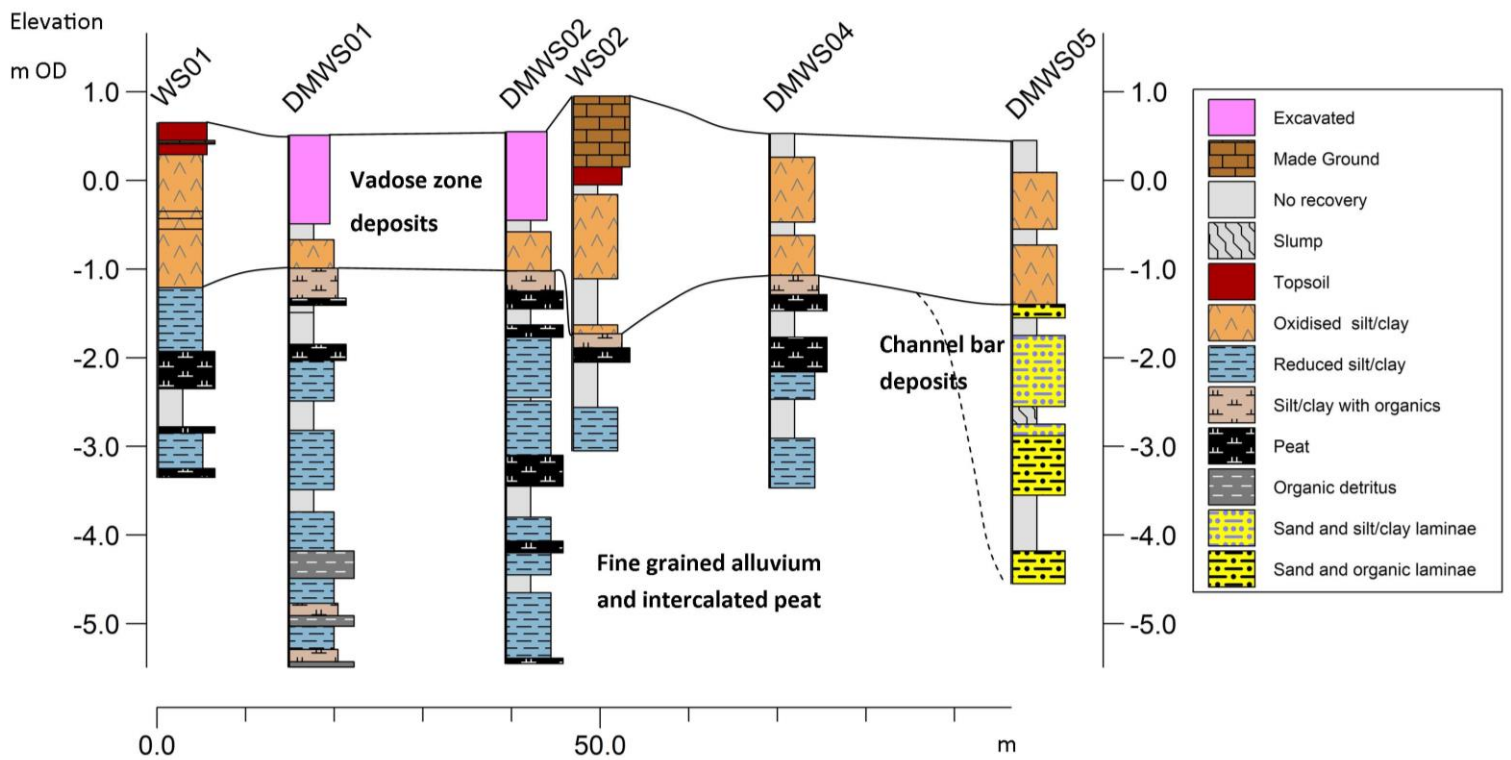


Figure 4. Lithostratigraphic cross section from northwest to southeast. Vertical exaggeration x10.

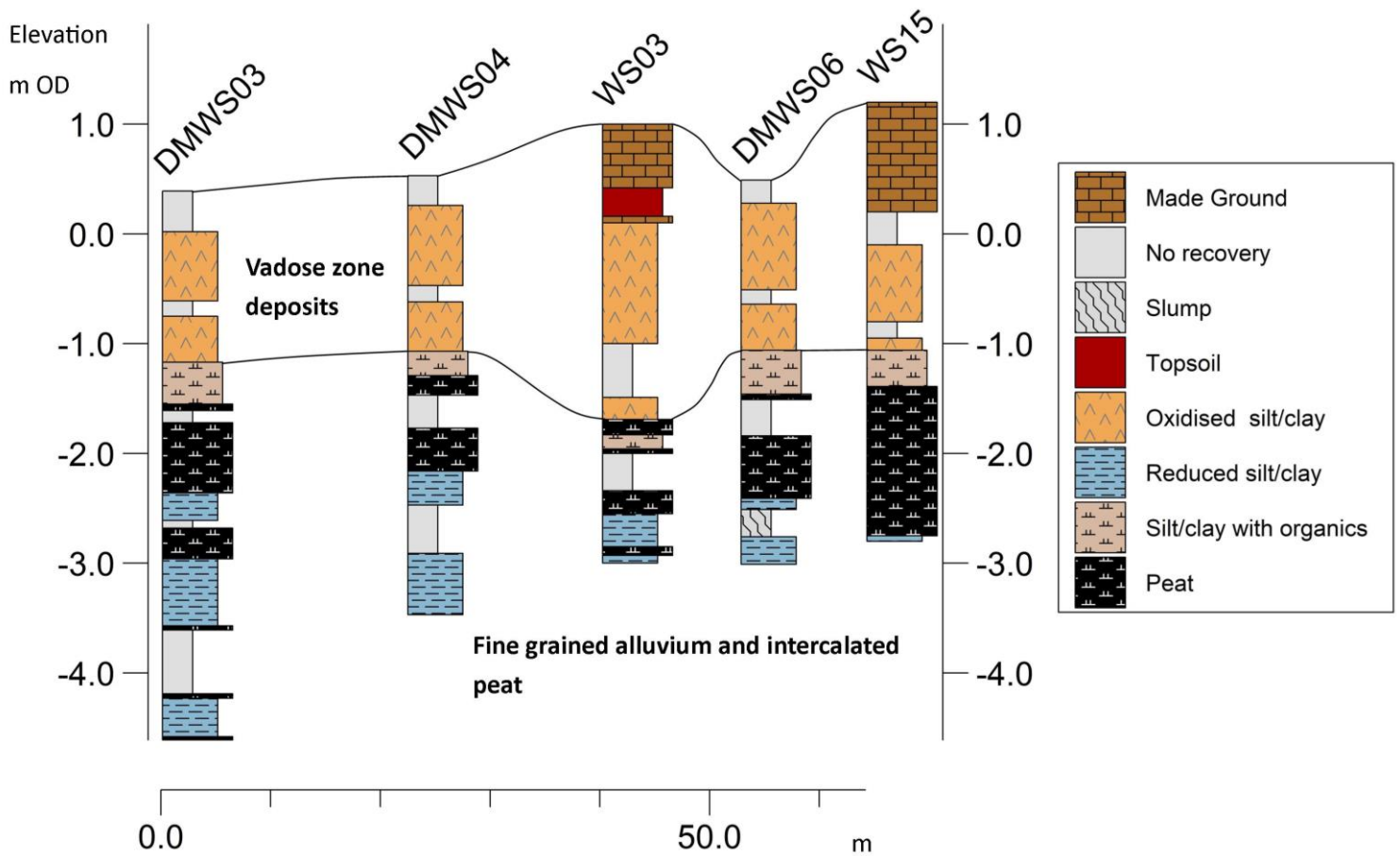


Figure 5. Lithostratigraphic cross section from southwest to northeast. Vertical exaggeration x10.

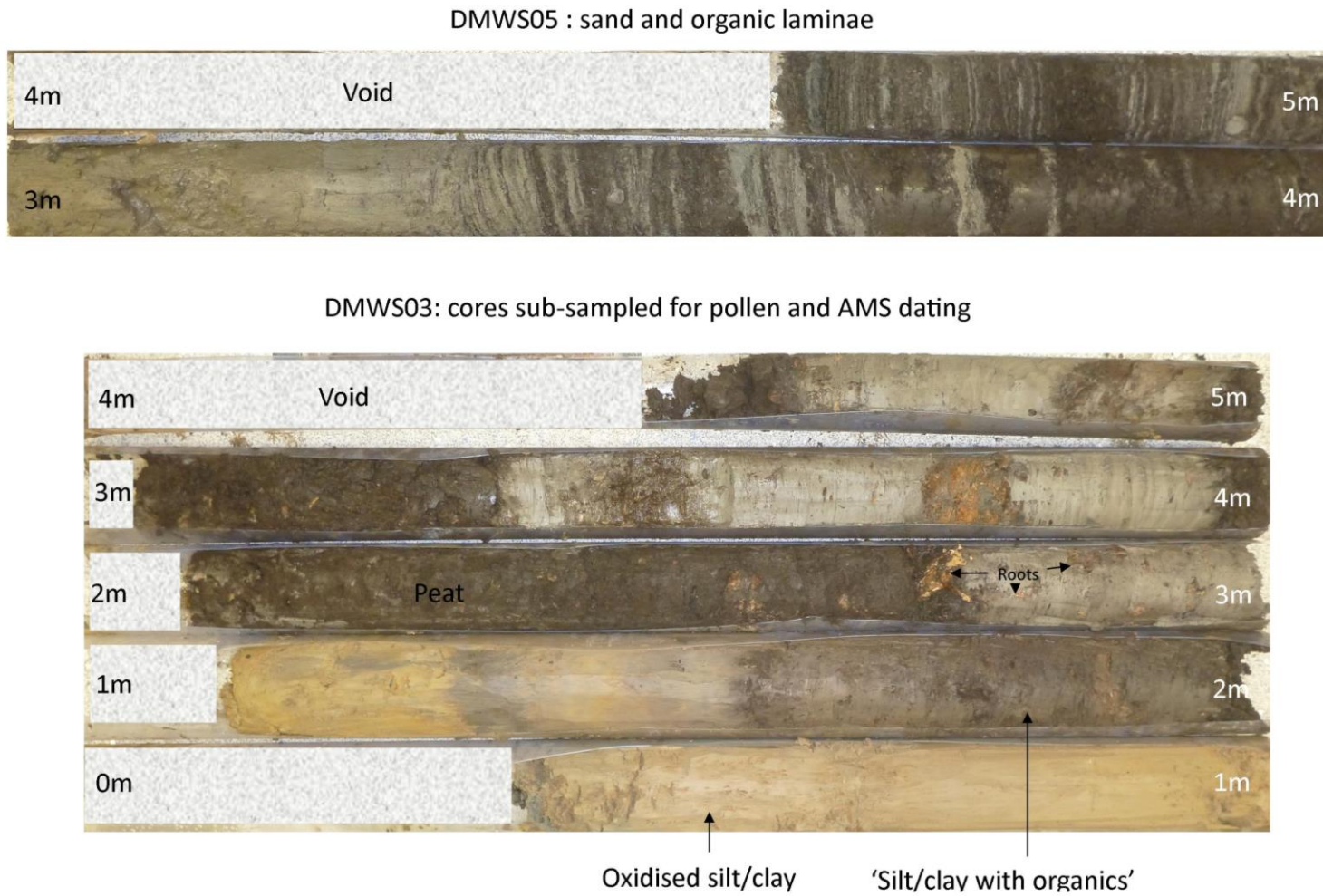


Figure 6. Core lithology.

APPENDIX 1: LOCATION OF BOREHOLES

Bore	Easting	Northing	Elevation
DMWS01	549953.36	179780.09	0.51
DMWS02	549968.26	179760.643	0.55
DMWS03	549975.075	179740.44	0.39
DMWS04	549993.51	179753.07	0.53
DMWS05	550009.42	179730.85	0.45
DMWS06	550014.97	179770.49	0.49
BH01	550012.50	179745.50	0.9
BH02	549980.00	179743.00	0.7
BH03	549969.50	179767.50	1.05
BH04	549964.00	179796.00	1.15
BH05	549991.00	179780.65	1.1
BH06	550008.60	179775.90	1.15
TP01	549969.32	179779.08	1.05
TP02	549960.46	179748.89	0.6
TP03	549992.37	179775.24	1.1
TP04	550013.67	179777.52	1.15
TP05	549983.76	179724.83	0.65
TP06	550022.04	179747.50	0.9
WS01	549946.12	179792.98	0.65
WS02	549971.29	179753.73	0.95
WS03	550010.32	179758.76	1
WS04	550010.32	179720.71	0.9
WS05	550040.30	179767.70	1.05

WS11	549951.00	179765.00	0.4
WS12	549991.59	179718.99	0.7
WS13	550008.69	179749.95	0.95
WS14	550068.68	179769.00	1.1
WS15	550023.68	179777.98	1.2

APPENDIX 2: LITHOSTRATIGRAPHY OF BOREHOLES

Borehole	Top m	Base m	Lithology	Description
DMWS01	0.00	1.00	Excavated	
DMWS01	1.00	1.18	No recovery	Void
DMWS01	1.18	1.50	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional dark orange iron oxide grains (oxidised). Gradual boundary to:
DMWS01	1.50	1.84	Silt/clay with organics	10YR 3/2 Very dark greyish brown, damp and firm silt/clay with occasional to frequent irregular, fine pebble-sized lenses of flaky, sand to granular-sized organic particles. (Inundations and reworking of underlying peat). Diffuse boundary to:
DMWS01	1.84	1.92	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and fibres. Reed fragments not present. Occasional

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

				granular - sized wood fragments.
DMWS01	1.92	2.00	No recovery	Void
DMWS01	2.00	2.36	No recovery	Void
DMWS01	2.36	2.54	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and fibres. Reed fragments not present. Occasional granular to coarse pebble- sized wood fragments, decomposed and rod shaped. (roots?).
DMWS01	2.54	3.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous with a silty texture. Frequent organic grains in upper 60mm muddy appearance 2.5Y 4/3. Occasional, vertical, fine to coarse pebble-sized wood (roots). (Reduced alluvium).
DMWS01	3.00	3.33	No recovery	Void
DMWS01	3.33	4.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay (bluish). Homogenous with a silty texture. Occasional coarse sand-sized grains of peat and wood throughout. Rare roots at top. (Reduced alluvium).
DMWS01	4.00	4.25	No recovery	Void
DMWS01	4.25	4.69	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay. Homogenous with a silty texture. Occasional coarse sand-sized grains of peat and wood throughout. (Reduced alluvium). Diffuse boundary to:
DMWS01	4.69	5.00	Organic detritus	10YR 3/1 Very dark grey, wet and soft peat /organic detritus. Chaotic structure of frequent wood clasts from granular to coarse pebble size. Matrix of moderately well humified organic remains.
DMWS01	5.00	5.28	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay (bluish). Homogenous. Occasional coarse sand-sized grains of peat and wood throughout. (Reduced alluvium). Diffuse boundary to:

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS01	5.28	5.42	Silt/clay with organics	2.5Y 4/3 Olive brown, wet and soft silt/clay with frequent organic grains. Muddy appearance. Diffuse boundary to:
DMWS01	5.42	5.54	Organic detritus	10YR 3/1 Very dark grey, wet and soft peat/organic detritus? Chaotic structure of frequent wood clasts from granular to coarse pebble size. Matrix of moderately well humified organic remains. Diffuse boundary to:
DMWS01	5.54	5.80	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay (bluish). Homogenous. Frequent coarse sand-sized grains of peat and wood throughout. (Reduced alluvium). Diffuse boundary to:
DMWS01	5.80	5.94	Silt/clay with organics	2.5Y 4/3 Olive brown, wet and soft silt/clay with frequent organic grains. Muddy appearance. Diffuse boundary to:
DMWS01	5.94	6.00	Organic detritus	10YR 3/1 Very dark grey, wet and soft peat /organic detritus?. Chaotic structure of frequent wood clasts of granular size. Matrix of moderately well humified organic remains. End of BH.
DMWS02	0.00	1.00	Excavated	
DMWS02	1.00	1.13	No recovery	Void
DMWS02	1.13	1.57	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised). Rare horizontal silt laminae parting the unit. Gradual boundary to:
DMWS02	1.57	1.80	Silt/clay with organics	10YR 3/2 Very dark greyish brown, damp and firm silt/clay with occasional to frequent irregular, fine pebble-sized lenses of flaky, sand to granular-sized organic particles. (Innundation and reworking of underlying peat). Diffuse boundary to:
DMWS02	1.80	2.00	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flakey, organic fragments and fibres. Reed fragments not present. Occasional granular to coarse pebble sized wood fragments, compressed and rod shaped, no bark and lying at an angle (roots).

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS02	2.00	2.18	No recovery	Void
DMWS02	2.18	2.32	Peat	10YR 2/1 Black, wet and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flakey, organic fragments and fibres. Reed fragments not present. Occasional granular to coarse pebble sized wood fragments, compressed and rod shaped, no bark and lying at an angle (roots). Diffuse boundary to:
DMWS02	2.32	3.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous with a silty texture. Frequent organic grains in upper 80mm. Rare, fine pebblesized wood (roots). (Reduced alluvium).
DMWS02	3.00	3.04	No recovery	Void
DMWS02	3.04	3.65	Reduced silt/clay	continuation: horizontal and parallel silt partings with alternating lighter and darker bands on a 5mm scale seen in lower half of the unit. (Reduced alluvium). Diffuse boundary to:
DMWS02	3.65	4.00	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, unstructured, sand to granular-sized flakey, organic fragments and fibres. Reed fragments not present. Occasional granular to coarse pebble sized wood fragments, compressed and rod shaped, no bark (roots). Grey silt/clay bed at 3.76-3.80m.
DMWS02	4.00	4.35	No recovery	Void
DMWS02	4.35	4.62	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous with occasional silt partings. Occasional organic grains and faint, horizontal colour banding. (Reduced alluvium). Diffuse boundary to:
DMWS02	4.62	4.75	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flakey, organic fragments and fibres. Homogenous. Reed fragments not present. Rare granular wood fragments. Silt/clay lamina towards top. Diffuse boundary to:

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS02	4.75	5.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous. Occasional organic grains and peat particles. Rare fine pebble-sized wood (roots). Faint, horizontal colour banding. (Reduced alluvium). Diffuse boundary to:
DMWS02	5.00	5.20	No recovery	Void
DMWS02	5.20	5.94	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay. Homogenous. Occasional organic grains and peat particles. Rare fine pebble-sized wood (roots). Faint, horizontal colour banding. (Reduced alluvium). Diffuse boundary to:
DMWS02	5.94	6.00	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flakey, organic fragments and fibres. Homogenous. Reed fragments not present. End of BH.
DMWS03	0.00	0.37	No recovery	Void
DMWS03	0.37	1.00	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised). Rare horizontal silt laminae parting the unit.
DMWS03	1.00	1.14	No recovery	Void
DMWS03	1.14	1.56	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised). Rare horizontal silt laminae parting the unit. Coarse, brown banding towards base. Very gradual boundary to:
DMWS03	1.56	1.94	Silt/clay with organics	10YR 3/2 Very dark greyish brown, damp and firm silt/clay with occasional to frequent irregular, fine pebble-sized lenses of flaky, sand to granular-sized organic particles. Granular to coarse pebble-sized wood, rod shaped, horizontal and compressed. (Inundation and reworking of underlying peat). Diffuse boundary to:
DMWS03	1.94	2.00	Peat	10YR 2/1 Black, damp and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and fibres. Homogenous. Reed fragments not

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Geoarchaeology Borehole Report*

				present. Occasional granular wood fragments.
DMWS03	2.00	2.11	No recovery	Void
DMWS03	2.11	2.75	Peat	10YR 2/1 Black, dryish and firm peat. Hydrogen sulphide odour. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and frequent fibres. Homogenous. Reed fragments not present. Occasional granular wood fragments. At base coarse pebble-sized root. Diffuse boundary to:
DMWS03	2.75	3.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous. Occasional to frequent organic grains and peat particles. Rare fine pebble-sized wood (roots). Faint, horizontal colour banding. (Reduced alluvium).
DMWS03	3.00	3.07	No recovery	Void
DMWS03	3.07	3.35	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and frequent fibres. Homogenous. Reed fragments not present. Occasional granular wood fragments. Diffuse boundary to:
DMWS03	3.35	3.96	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay. Homogenous. Occasional to frequent organic grains and peat particles. Cobble-sized lens of wet, organic particles including wood at 3.44-3.52m. Rare fine pebble-sized wood (roots). Wood clast fills core at 3.71-3.78. (Reduced alluvium). Diffuse boundary to:
DMWS03	3.96	4.00	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and frequent fibres. Homogenous. Reed fragments not present. Occasional granular wood fragments.
DMWS03	4.00	4.58	No recovery	Void

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS03	4.58	4.62	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and frequent fibres. Homogenous. Reed fragments not present. Occasional granular wood fragments.
DMWS03	4.62	4.97	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous. Occasional to frequent organic grains and peat particles. Coarse, irregular pebble-sized lens of wet peat. (Reduced alluvium). Diffuse boundary to:
DMWS03	4.97	5.00	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly granular to blocky structure, sand to granular-sized flaky, organic fragments and frequent fibres. Homogenous. Reed fragments not present. End of BH.
DMWS04	0.00	0.27	No recovery	Void
DMWS04	0.27	1.00	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised). Rare horizontal silt laminae parting the unit.
DMWS04	1.00	1.15	No recovery	Void
DMWS04	1.15	1.60	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised). Rare horizontal silt laminae parting the unit. Coarse, brown banding towards base. Very gradual boundary to:
DMWS04	1.60	1.82	Silt/clay with organics	10YR 3/2 Very dark greyish brown, damp and firm silt/clay with occasional to frequent irregular, fine pebble-sized lenses of flaky, sand to granular-sized organic particles. Granular to coarse pebble-sized wood, rod shaped, horizontal and compressed. (Inundation and reworking of underlying peat). Diffuse boundary to:
DMWS04	1.82	2.00	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly, granular to blocky structure, sand to granular-sized flaky organic fragments and frequent fibres. Homogenous. Reed fragments not present. Disrupted at base.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS04	2.00	2.30	No recovery	Void
DMWS04	2.30	2.69	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly, granular to blocky structure, sand to granular-sized flaky organic fragments and frequent fibres. Homogenous. Medium pebble-sized decomposed wood at base (root?) Reed fragments not present. Diffuse boundary to:
DMWS04	2.69	3.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous. Occasional organic grains and peat particles. Rare fine pebble-sized wood (roots?). (Reduced alluvium).
DMWS04	3.00	3.44	No recovery	Void
DMWS04	3.44	4.00	Reduced silt/clay	2.5Y 5/1 Grey, damp and soft silt/clay. Homogenous. Occasional organic grains and peat particles. Decomposing wood medium pebble-sized wood clasts at 3.60-3.75m causing local 10YR 3/4 staining to the silt/clay. (Reduced alluvium). End of BH. Core 4-5m; c. 0.3m of mixed very wet slump.
DMWS05	0.00	0.36	No recovery	Void
DMWS05	0.36	1.00	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional dark orange iron oxide grains (oxidised). Frequent horizontal silt laminae partings (30-70mm clay interval) between 0.60-0.80m.
DMWS05	1.00	1.18	No recovery	Void
DMWS05	1.18	1.85	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional dark orange iron oxide grains in fine pebble-sized lenses towards base (oxidised). Gradual boundary to:
DMWS05	1.85	2.00	Sand and organic laminae	2.5Y 4/2 Dark greyish brown, damp and soft, poorly bedded laminae of very fine sand and silt/clay, the latter predominates. Fine grains of quartz visible and black organic grains.
DMWS05	2.00	2.20	No recovery	Void

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS05	2.20	3.00	Sand and silt/clay laminae	2.5Y 4/2 Dark greyish brown, damp and soft, poorly bedded laminae of very fine sand and silt/clay, the latter predominates. Fine grains of quartz visible and black organic grains. Laminae grouped in fine beds of irregular thickness and poorly horizontal. Organic flakes of coarse sand-sized grade present in sand laminae.
DMWS05	3.00	3.20	Slump	
DMWS05	3.20	3.33	Sand and silt/clay laminae	2.5Y 4/2 Dark greyish brown, damp and soft, poorly developed laminae of very fine sand and silt/clay, the latter predominates often forming beds. Fine grains of quartz visible and black organic grains and organic flakes of coarse sand size seen in sand laminae. Laminae grouped in fine beds of irregular thickness and poorly horizontal. Rare angled lens of organics.
DMWS05	3.33	4.00	Sand and organic laminae	Alternating laminae of very fine dark greyish brown sand 2.5Y 4/2 and black organic particles of fine to coarse sand size. Organic laminae increase in thickness from <1mm to 60mm to 200mm at base with rare sand laminae. Organic material is uncompressed (Reworked peat).
DMWS05	4.00	4.63	No recovery	Void
DMWS05	4.63	5.00	Sand and organic laminae	Alternating laminae of very fine dark greyish brown sand 2.5Y 4/2 and black organic particles of fine to coarse sand size. Generally evenly sized <1-2mm and spaced sand and organic laminae. End of BH. Core 5-6m with shattered liner and destroyed sample.
DMWS06	0.00	0.21	No recovery	Void
DMWS06	0.21	1.00	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised).
DMWS06	1.00	1.13	No recovery	Void
DMWS06	1.13	1.55	Oxidised silt/clay	10YR 4/3 Brown, damp and firm silt/clay. Homogenous with occasional to frequent dark orange iron oxide grains (oxidised). Rare horizontal silt laminae parting the unit. Gradual boundary to:

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

DMWS06	1.55	1.95	Silt/clay with organics	10YR 3/2 Very dark greyish brown, damp and firm silt/clay with occasional to frequent irregular, fine pebble-sized lenses of flaky, sand to granular-sized organic particles. Granular to coarse pebble-sized wood, rod shaped, horizontal and compressed. (Inundation and reworking of underlying peat). Diffuse boundary to:
DMWS06	1.95	2.00	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly, granular to blocky structure, sand to granular-sized flaky organic fragments and frequent fibres. Homogenous. Reed fragments not present.
DMWS06	2.00	2.33	No recovery	Void
DMWS06	2.33	2.90	Peat	10YR 2/1 Black, dryish and firm peat. Moderately well humified, crumbly, granular to blocky structure, sand to granular-sized flaky organic fragments and frequent fibres. Occasional granular to coarse pebble-sized wood clasts. Homogenous. Reed fragments not present.
DMWS06	2.90	3.00	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay. Homogenous. Occasional organic grains and peat particles particularly concentrated at top (base of peat). (Reduced alluvium). End of BH.
DMWS06	3.00	3.25	Slump	
DMWS06	3.25	3.50	Reduced silt/clay	2.5Y 5/1 Grey, wet and soft silt/clay. Homogenous. Occasional organic grains and peat particles. Rare wood granule. (Reduced alluvium). End of BH.
SEC data (2018). Soil (<i>sic</i>) descriptions use the following frequency and size codes for inclusions: R = Rare, C = Common, A = Abundant, V = Very, S = Small (<10 mm in each dimension), M = Medium, L = Large (>100 mm in any dimension). <i>Lithology key words and comments in italics are interpretations by ARCA.</i>				
BH01	0.00	0.05	Topsoil	Turf. Topsoil
BH01	0.05	0.20	Topsoil	Compact very dark grey loamy clay. Topsoil
BH01	0.20	0.80	Oxidised silt/clay	Compact dark greyish brown very slightly silty clay with rare orange mottles, RS roots. ?Alluvium/levelling
BH01	0.80	2.00	Oxidised silt/clay	Compact brownish grey very silty clay with ferruginous staining.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

				Alluvial clay.
BH01	2.00	2.60	Silt/clay with organics	Compact dark brown clayey peat, CSM wood. Peat.
BH01	2.60	3.80	Peat	Fairly loose dark reddish brown slightly clayey peat, CS wood, RS plant material. Peat.
BH01	3.80	4.40	Reduced silt/clay	Compact dark bluish grey, RM wood. Alluvial clay.
BH01	4.40	5.00	Peat	Compact very dark brown woody peat, ASM wood. Peat.
BH01	5.00	6.00	Reduced silt/clay	Compact, wet, soft dark bluish grey slightly peaty silty clay, RM wood. Alluvial clay.
BH01	6.00	7.00	Silty sand	Compact dark greyish brown silty sand. Fluvial sand
BH01	7.00	10.00	Fine sand	Dark grey fine sand. Fluvial sand
BH01	10.00	11.00	Coarse sand	Dark grey coarse sand, CSM subangular flint. Fluvial sand
BH01	11.00	14.50	Sandy gravel	Dark grey sandy gravel, ASM subangular to subrounded flint. Fluvial gravel.
BH01	14.50	15.00	Sand	Very compact greenish grey sand. Thanet Formation. End at 18.6m
BH02	0.00	0.05	Topsoil	Turf. Topsoil
BH02	0.05	0.20	Topsoil	Very dark grey loamy clay. Topsoil.
BH02	0.20	1.80	Oxidised silt/clay	Dark brownish grey very slightly silty clay with pale brown mottles and ferruginous staining. ?Alluvium.
BH02	1.80	3.20	Silt/clay with organics	Compact dark grey clayey peat, CS wood. Peat
BH02	3.20	3.40	Peat	Fairly loose dark reddish brown very slightly clayey peat. Peat.
BH02	3.40	4.00	Reduced silt/clay	Compact dark bluish grey slightly silty peaty clay. Alluvium.
BH02	4.00	5.00	Peat	Compact very dark brown woody peat. Peat.
BH02	5.00	7.00	Reduced silt/clay	Compact dark brownish grey slightly silty clay, RSM wood. Alluvium.
BH02	7.00	8.00	Silty sand	Compact dark greyish brown silty sand. Fluvial sand.
BH02	8.00	11.00	Sand	Compact dark grey sand. Fluvial sand.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

BH02	11.00	14.50	Sandy gravel	Compact dark grey sandy gravel, ASM subrounded to well- rounded flint. Fluvial gravel.
BH02	14.50	15.00	Sand	Very compact dark greyish green sand. Thanet Formation. End at 24m
BH03	0.00	0.08	Topsoil	Compact dark brown loamy clay and grass. Topsoil.
BH03	0.08	0.46	Made Ground	Fairly loose pale grey sand and rubble, CSM brick, CSM concrete. Made ground.
BH03	0.46	0.77	Made Ground	Compact dark grey clayey sand, RS brick. Levelling
BH03	0.77	1.32	Made Ground	Compact dark grey silty clay with brown mottles, RS brick. ?Levelling.
BH03	1.32	3.00	Oxidised silt/clay	Compact greyish brown slightly silty clay. ?Alluvium.
BH03	3.00	3.50	Peat	Very dark greyish brown slightly clayey peat. Peat.
BH03	3.50	6.50	Reduced silt/clay	Slightly greenish grey slightly peaty clayey silt, RM wood, RS roots. Alluvium
BH03	6.50	7.50	Silt/clay with organics	Dark brownish grey clayey peat, CSM wood. Peat
BH03	7.50	9.00	Sand	Compact bluish grey silty sand. Fluvial sand.
BH03	9.00	13.80	Sandy gravel	Compact grey sandy gravel. Fluvial gravel.
BH03	13.80	14.30	Sand	Very compact greenish grey clayey sand. Thanet Formation. End at 25m
BH04	0	0.11	Topsoil	Compact dark grey silty loamy clay and grass, CSM brick, RM wood. Topsoil.
BH04	0.11	1.6	Made Ground	Fairly loose dark greyish brown silty clay, CSM brick, CSM crushed stone, CS clinker, RS glass. Made ground.
BH04	1.60	3.00	Oxidised silt/clay	Very compact grey very slightly silty clay with orange mottles. ?Alluvium.
BH04	3.00	3.50	Reduced silt/clay	Compact dark grey clay. Alluvial clay.
BH04	3.50	4.00	Silt/clay with organics	Fairly compact dark brown clayey peat, CSM wood, RS plant material. Peat.
BH04	4.00	6.00	Reduced silt/clay	Compact bluish grey very clayey slightly peaty silt. Alluvium.
BH04	6.00	7.00	Silt/clay with organics	Fairly loose very dark brown clayey peat, ASM wood. Peat.
BH04	7.00	7.50	Reduced silt/clay	Compact bluish grey sandy silt. Alluvium.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

BH04	7.50	9.00	Silty sand	Compact grey silty sand. Fluvial sand.
BH04	9.00	14.50	Sandy gravel	Compact dark grey sandy gravel. Fluvial gravel.
BH04	14.50	15.00	Sand	Very compact greenish grey clayey sand. Thanet Formation. End at 25m. (note error in original log '13.50' instead of 14.50m) .
BH05	0.00	0.70	Made Ground	Fairly loose grey clayey sand and rubble, CML brick, RL ?sandstone. Made ground.
BH05	0.70	1.00	Made Ground	Dark greyish brown silty clay, RSM flint, RS brick. ?Redeposited natural/levelling.
BH05	1.00	2.30	Oxidised silt/clay	Dark greyish brown slightly silty clay with ferruginous stains, RM roots. ?Alluvium.
BH05	2.30	3.20	Silt/clay with organics	Very dark brown clayey peat, CSM wood. Peat
BH05	3.20	3.70	Reduced silt/clay	Dark grey very clayey peaty silt. Alluvium.
BH05	3.70	5.40	Peat	Fairly loose dark brown slightly clayey woody peat. Peat.
BH05	5.40	6.50	Reduced silt/clay	Compact bluish grey slightly silty clay. Alluvium.
BH05	6.50	6.90	Reduced silt/clay	Compact bluish grey clayey sandy silt. Alluvium.
BH05	6.90	7.50	Silty sand	Fairly loose dark grey silty sand. Alluvial sand
BH05	7.50	11.00	Sandy gravel	Fairly loose dark grey sandy gravel. Fluvial gravel.
BH05	11.00	13.50	Sandy gravel	Compact pale grey very sandy gravel, CSAM subrounded to well-rounded flint. ?Marine/beach gravel.
BH05	13.50	14.00	Sand	Very compact greenish grey clayey sand. Thanet Formation. End at 25m
BH06	0.00	0.08	Topsoil	Fairly compact grey slightly clayey loam and turf. Modern surface.
BH06	0.08	0.60	Made Ground	Fairly pale grey sandy loam and rubble, ASMRL mixed modern materials including RL plastic. Modern levelling.
BH06	0.60	0.80	Topsoil	Fairly compact greyish brown clayey loam. Recently buried topsoil.
BH06	0.80	1.00	Oxidised silt/clay	Compact slightly greyish orangey brown slightly silty clay. ?Weathered/partially oxidized ?alluvium.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

BH06	1.00	2.00	Oxidised silt/clay	Compact fairly pale grey silty clay with orange brown mottle. ?Weathered/partially oxidized ?alluvium.
BH06	2.00	3.50	Silt/clay with organics	Fairly compact dark greyish brown organic clay silt, CM roundwood. Peat, slightly odour of hydrogen sulphide
BH06	3.50	4.00	Reduced silt/clay	Compact pale slightly greenish grey fine slightly sandy silty clay. Alluvium.
BH06	4.00	5.80	Reduced silt/clay	Compact pale grey silty clay. Alluvium.
BH06	5.80	7.00	Reduced silt/clay	Compact pale grey silty clay. Alluvium
BH06	7.00	10.80	Sandy gravel	Compact pale grey ?sandy gravel, CSAM subangular to subrounded flint, ?RM Tertiary pebble. ?Fluvial gravel
BH06	10.80	11.00	Silty sand	Fairly compact pale grey ?laminated silty sand. ?Fluvial sand
BH06	11.00	13.50	Sandy gravel	Compact pale grey very sandy gravel, CS shell, CSAM subrounded to well-rounded flint. ?Beach gravel End of Borehole.
TP01	0.00	0.44	Made Ground	Modern crush. Modern levelling.
TP01	0.44	0.54	Topsoil	Very dark grey slightly loamy clay. Topsoil, contaminated with fuel.
TP01	0.54	2.20	Oxidised silt/clay	Pale brown clay. ?Subsoil.
TP01	2.20	3.05	Silt/clay with organics	Very dark brown clayey peat, CSM wood. Peat,
TP01	3.05	4.42	Reduced silt/clay	Pale blue grey silty clay, CSM wood. Alluvial clay. End of TP
TP02	0.00	0.60	Topsoil	Compact dark greyish brown slightly loamy clay. Topsoil.
TP02	0.60	1.70	Oxidised silt/clay	Compact pale brown clay. ?Subsoil.
TP02	1.70	2.14	Silt/clay with organics	Dark brown clayey peat. Peaty.
TP02	2.14	2.93	Peat	Fairly pale reddish brown peat, ASM wood. Woody peat
TP02	2.93	4.00	Reduced silt/clay	Pale blue grey clay, ASM wood. Alluvial clay. Wood at 3.9-4m. End of TP.
TP03	0.00	0.72	Made Ground	Modern crush. Modern levelling.
TP03	0.72	0.86	Topsoil	Compact dark greyish brown slightly loamy clay. Topsoil.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

TP03	0.86	2.10	Oxidised silt/clay	Compact pale brown clay. ?Subsoil.
TP03	2.10	2.34	Reduced silt/clay	Pale grey clay. Alluvial clay.
TP03	2.34	2.86	Silt/clay with organics	Peaty clay. Peaty.
TP03	2.86	3.45	Peat	Woody peat, CSM wood. Woody peat
TP03	3.45	5.00	Reduced silt/clay	Pale blue grey very silty clay. Alluvial clay. End of TP.
TP04	0.00	0.86	Made Ground	Modern crush. Modern levelling.
TP04	0.86	1.08	Topsoil	Fairly compact dark greyish brown slightly loamy clay. Topsoil.
TP04	1.08	2.13	Oxidised silt/clay	Compact pale brown clay. ?Alluvial clay.
TP04	2.13	3.02	Reduced silt/clay	Fairly compact pale grey clay, RSM wood. Alluvial clay.
TP04	3.02	3.62	Peat	Clayey peat, CSM wood. Woody peat
TP04	3.62	5.00	Reduced silt/clay	Soft pale blue grey very silty clay, CSM wood. Alluvial clay. End of TP.
TP05	0.00	0.26	Topsoil	Compact dark greyish brown slightly loamy clay. Topsoil.
TP05	0.26	1.74	Oxidised silt/clay	Pale brown clay. ?Subsoil.
TP05	1.74	2.75	Silt/clay with organics	Dark brown clayey peat, ASM wood. Woody peat
TP05	2.75	2.93	Peat	Reddish brown peat. Peat
TP05	2.93	4.64	Reduced silt/clay	Pale blue grey silty clay, CSM wood. Alluvial clay. End of TP.
TP06	0.00	0.40	Topsoil	Compact dark greyish brown slightly loamy clay. Topsoil.
TP06	0.40	2.05	Oxidised silt/clay	Fairly compact pale brown clay. ?Subsoil
TP06	2.05	3.10	Silt/clay with organics	Dark brown clayey peat, CSM wood. Peaty
TP06	3.10	3.46	Peat	Reddish brown peat, ASM wood. Woody peat
TP06	3.46	4.46	Reduced silt/clay	Pale blue grey very silty clay. Alluvial clay. End of TP.
WS01	0.00	0.20	Topsoil	Compact fairly pale grey slightly loamy clay, RM flint, RM glass, RM clinker. Turf and topsoil.
WS01	0.20	0.24	Made Ground	Compact fairly pale grey slightly loamy clay, ASM mussel, ASM marine shell, ASM whelk, ASM cockle. Dump layer.
WS01	0.24	0.36	Topsoil	Compact fairly pale grey slightly loamy clay. Old ground surface.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

WS01	0.36	1.00	Oxidised silt/clay	Compact fairly pale orange brown silty clay with common small orange mottles. ?Subsoil.
WS01	1.00	1.08	Oxidised silt/clay	Compact fairly pale orange brown slightly silty clay. ?Subsoil.
WS01	1.08	1.20	Oxidised silt/clay	Compact very pale bluish grey clay with common orange mottles. Alluvial clay.
WS01	1.20	1.86	Oxidised silt/clay	Compact very pale brownish grey clay with common orange mottles. Alluvial clay
WS01	1.86	2.58	Reduced silt/clay	<i>Alluvial clay with organics especially towards base</i>
WS01	2.58	3.00	Peat	
WS01	3.00	3.43	No recovery	Void.
WS01	3.43	3.50	Peat	
WS01	3.50	3.90	Reduced silt/clay	
WS01	3.90	4.00	Peat	Fairly compact very dark brownish grey peat. Peat, quite humified.
WS02	0.00	0.80	Made Ground	
WS02	0.80	1.00	Topsoil	Fairly compact dark greyish brown loamy clay. Topsoil.
WS02	1.00	1.11	No recovery	Void.
WS02	1.11	2.06	Oxidised silt/clay	
WS02	2.06	2.58	No recovery	Void.
WS02	2.58	2.68	Oxidised silt/clay	
WS02	2.68	2.84	Silt/clay with organics	
WS02	2.84	3.00	Peat	Fairly compact very dark brown slightly clayey peat, CSM twig, ASCM wood, ASCM bark. Peat
WS02	3.00	3.51	No recovery	Void.
WS02	3.51	4.00	Reduced silt/clay	
WS03	0.00	0.58	Made Ground	Modern crush, ASML tile, ASML brick, ASML concrete. Levelling.
WS03	0.58	0.84	Topsoil	Compact brown slightly loamy clay. Topsoil.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

WS03	0.84	0.90	Made Ground	Compact dark greyish brown slightly silty clay, ASM oyster, CS mussel, CSM marine shell, CSM cockle. Dump/levelling
WS03	0.90	2.00	Oxidised silt/clay	
WS03	2.00	2.49	No recovery	Void and slump
WS03	2.49	2.69	Oxidised silt/clay	
WS03	2.69	2.83	Peat	Fairly compact dark brown slightly humified peat, CSRSM twig. Peat.
WS03	2.83	2.96	Silt/clay with organics	
WS03	2.96	3.00	Peat	Fairly compact very dark brown organic silty peat, CSM wood. Slightly humified peat.
WS03	3.00	3.34	No recovery	Void.
WS03	3.34	3.55	Peat	Soft very dark brown peat, ASCM wood, AS organic material. Peat, disturbed by SPT.
WS03	3.55	3.85	Reduced silt/clay	Soft pale grey clay silt. Alluvial silt.
WS03	3.85	3.93	Peat	Fairly compact dark brown slightly clayey silt and woody peat, ASM twig, ASM wood, CM bark, CS plant material. Peat.
WS03	3.93	4.00	Reduced silt/clay	Soft pale grey silty clay, CS wood. Alluvial clay
WS04	0.00	0.56	Topsoil	
WS04	0.56	1.00	Oxidised silt/clay	
WS04	1.00	1.18	No recovery	Void
WS04	1.18	1.56	Fine sand	Compact pale greyish brown clayey very fine sand. Alluvium.
WS04	1.56	1.71	Fine sand	Compact pale grey clayey fine sand with orange mottles. Alluvium.
WS04	1.71	1.82	Peat	Fairly compact dark brownish grey silty peat. Peat.
WS04	1.82	1.86	Silt/clay with organics	Fairly compact dark greyish brown silty clay, CS wood. Alluvial clay
WS04	1.86	2.00	Peat	Fairly compact dark brown peat, CSM wood, CS organics. Peat,
WS04	2.00	2.56	No recovery	Void and slump.
WS04	2.56	2.59	Peat	Soft dark brown peat, AS wood, AS organics. Peat.
WS04	2.59	2.79	Reduced silt/clay	

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

WS04	2.79	3.00	Peat	
WS04	3.00	3.40	No recovery	Void
WS04	3.40	3.54	Peat	Fairly compact very dark brown organic silt/peat, CSRM wood, CS plant material. Peat
WS04	3.54	4.00	Reduced silt/clay	Soft fairly pale grey silty clay, RSM wood. Alluvium
WS05	0.00	0.16	Made Ground	Compact orange brown clay. Recent levelling.
WS05	0.16	1.00	Topsoil	<i>includes 'old ground surface'</i>
WS05	1.00	1.15	No recovery	Void.
WS05	1.15	2.00	Oxidised silt/clay	
WS05	2.00	2.11	No recovery	Void.
WS05	2.11	2.19	Silt/clay with organics	
WS05	2.19	2.36	Peat	Compact very dark brown peat, ASM wood. Peat.
WS05	2.36	2.65	Silt/clay with organics	
WS05	2.65	3.00	Peat	
WS05	3.00	3.55	No recovery	Void.
WS05	3.55	3.79	Peat	
WS05	3.79	3.90	Silt/clay with organics	
WS05	3.90	4.00	Reduced silt/clay	Compact fairly pale grey clay, CS wood, CS organics. Alluvium.
WS11	0.00	0.40	Topsoil	
WS11	0.40	1.59	Oxidised silt/clay	
WS11	1.59	2.00	Peat	
WS11	2.00	2.58	No recovery	Void.
WS11	2.58	2.74	Peat	Fairly loose very dark brown peat and wood, CML twig. Woody peat.
WS11	2.74	3.00	Reduced silt/clay	Compact slightly greenish grey very slightly silty clay, CSM wood, CS plant material. Alluvial clay
WS11	3.00	3.55	No recovery	Void.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

WS11	3.55	3.72	Reduced silt/clay	Compact greenish grey with orange mottles slightly silty clay, CS ?wood/plant material. Alluvial clay
WS11	3.72	3.78	Peat	Loose dark brown peat and wood. Woody peat
WS11	3.78	4.00	Reduced silt/clay	
WS12	0.00	0.20	Topsoil	Compact rooted dark grey loamy clay. Turf and top soil.
WS12	0.20	1.00	Made Ground	
WS12	1.00	1.30	No recovery	Void.
WS12	1.30	2.09	Sand	<i>Oxidised 'alluvial sand'</i>
WS12	2.09	2.39	Silt/clay with organics	<i>wood cobble at base</i>
WS12	2.39	3.00	Peat	Compact dark brown humified peat, CS wood, CS plant material. Peat
WS12	3.00	3.53	No recovery	Void
WS12	3.53	3.79	Peat	Compact dark brown humified peat. Peat
WS12	3.79	4.00	Reduced silt/clay	Compact bluish grey clayey silt with strong ?ammonia odour, CS ?wood/plant material. Alluvial silt
WS13	0.00	0.60	Made Ground	
WS13	0.60	1.00	Topsoil	Subsoil?
WS13	1.00	1.50	No recovery	Void.
WS13	1.50	2.00	Oxidised silt/clay	
WS13	2.00	2.11	No recovery	Void.
WS13	2.11	2.37	Silt/clay with organics	Compact dark brown clayey peat, RS wood/plant material. Peat
WS13	2.37	3.00	Peat	
WS13	3.00	3.54	No recovery	Void.
WS13	3.54	3.65	Peat	Fairly loose very dark brown peat. Peat
WS13	3.65	4.00	Reduced silt/clay	Compact bluish grey clayey silt with strong ?ammonia odour. Alluvial silt
WS14	0.00	1.00	Topsoil	
WS14	1.00	1.34	No recovery	Void.

*Anderson Way, Belvedere, London Borough Of Bexley:
Geoarchaeology Borehole Report*

WS14	1.34	4.00	Fine sand	<i>Eight records of fine glauconitic sand laminae with some clay.</i>
WS15	0.00	1.00	Made Ground	Compact ashy grey sandy silt and hardcore, CML concrete, RL iron bar.
WS15	1.00	1.30	No recovery	Void.
WS15	1.30	2.00	Oxidised silt/clay	
WS15	2.00	2.15	No recovery	Void.
WS15	2.15	2.26	Oxidised silt/clay	Dark greenish grey with orange mottles and ferruginous staining clay. Alluvial clay.
WS15	2.26	2.59	Silt/clay with organics	Compact dark brown with grey mottles very clayey peat, CSM wood, CS plant material. Peat
WS15	2.59	3.95	Peat	
WS15	3.95	4.00	Reduced silt/clay	Compact dark grey slightly silty clay. Alluvial clay