

ARCHAEOLOGICAL DESK BASED ASSESSMENT

Land at Oldlands Farm, Bognor Regis

JAC27136
Land at Oldlands Farm,
Bognor Regis
Version 1 Draft for Comment
May 2021

ARCHAEOLOGICAL DESK BASED ASSESSMENT

Quality Management

Version	Status	Authored by	Reviewed by	Approved by	Date
Version 1	Draft for Comment	James Archer	Peter Reeves	Peter Reeves	17/05/2021

© Copyright RPS Group Plc. All rights reserved.

The report has been prepared for the exclusive use of our client and unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS'), no other party may use, make use of, or rely on the contents of this report. The report has been compiled using the resources agreed with the client and in accordance with the scope of work agreed with the client. No liability is accepted by RPS for any use of this report, other than the purpose for which it was prepared. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report.

RPS accepts no responsibility for any documents or information supplied to RPS by others and no legal liability arising from the use by others of opinions or data contained in this report. It is expressly stated that no independent verification of any documents or information supplied by others has been made. RPS has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report's accuracy. No part of this report may be copied or reproduced, by any means, without the prior written consent of RPS.

Prepared by:

RPS

**James Archer BA (Hons) ACIfA
Associate Director**

20 Farringdon Street
London, EC4A 4AB

T +44 20 3691 0500

E james.archer@rpsgroup.com

Prepared for:

Lysander

EXECUTIVE SUMMARY

- Land at Oldlands Farm, Bognor Regis has been assessed for its below ground archaeological potential in advance of proposed development.
- The proposed development will not impact on any designated archaeological assets.
- The site is not located within an Archaeological Notification Area as defined locally by Arun District.
- A programme of geophysical survey across the site has identified a rectilinear enclosure in the northern study site parcel as well as a possible further enclosure to the north at Lidsey. No anomalies of likely archaeological interest were identified in the southern site parcel.
- This assessment has collated the results of previous work at the site and within the immediate area and has concluded a high archaeological potential at the site for the Bronze Age and Iron Age periods, as well as for Roman/Saxon/Medieval agricultural activity. A moderate potential is considered for the Neolithic period. A low potential has been considered for all other past periods of human activity. If remains were present at the site, these have been considered most likely to be of local or perhaps regional significance.
- Whilst archaeological remains are likely to have been subject to some truncation as a result of past ground disturbance generally associated with agricultural activity, the results of previous archaeological work in the immediate area would suggest that survival of remains is likely to be good.
- Given the site's archaeological potential, it is possible that the proposed development of the study site could have an impact upon archaeological remains of most likely a local or perhaps regional significance.
- It is anticipated that the archaeological advisor to Arun District will require further archaeological work in advance of development at the study site, likely to comprise of evaluation trenching and mitigation as appropriate. Further details are required confirming the extent of proposed development impact, including cut and fill excavations, which would then inform the extent of further archaeological work.
- The results of previous archaeological work in the immediate area have identified locally to regional significant archaeological remains, with archaeological works undertaken to preserve those remains by record. It is therefore considered that the site's archaeological character can be similarly characterised, and that highly significant remains which might preclude development are not anticipated. Therefore, any further archaeological work could reasonably be secured by attaching an appropriately worded planning condition to the granting of planning consent.

Contents

EXECUTIVE SUMMARY	1
1 INTRODUCTION AND SCOPE OF STUDY	4
2 PLANNING BACKGROUND AND DEVELOPMENT PLAN FRAMEWORK.....	5
National Planning Policy	5
Local Planning Policy	6
Relevant National and Local Designations	7
3 GEOLOGY AND TOPOGRAPHY	9
Geology	9
Topography	9
4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND WITH ASSESSMENT OF SIGNIFICANCE.....	10
Timescales used in this report.....	10
Introduction	10
Previous Archaeological Work	11
Early Prehistoric – Palaeolithic & Mesolithic	12
Later Prehistoric – Neolithic, Bronze Age & Iron Age	12
Roman	13
Saxon/Early Medieval & Medieval	13
Post Medieval & Modern (including map regression exercise)	14
Historic Landscape Characterisation.....	15
LiDAR Plot	15
Undated Evidence	15
Assessment of Significance	15
5 SITE CONDITIONS, THE PROPOSED DEVELOPMENT & REVIEW OF POTENTIAL DEVELOPMENT IMPACTS ON ARCHAEOLOGICAL ASSETS	17
Site Conditions	17
Proposed Development	17
Review of Potential Development Impacts on Archaeological Assets	17
6 SUMMARY AND CONCLUSIONS	18

Figures

Figure 1: Site Location

Figure 2a: HER Plot (Data from West Sussex HER)

Figure 2b: Plan of Previous Archaeological Work Within Immediate Area of Site

Figure 2c: HLC Plot (Data from West Sussex HER)

Figure 3: LiDAR Plot

Figure 4: 1724 Budgen Map of Sussex

Figure 5: 1778 Yeakell & Gardner Map of Sussex

Figure 6: 1805 Ordnance Survey Drawing

Figure 7: 1842 South Bersted and 1846 Aldingbourne Parish Tithe Maps

Figure 8: 1876 Ordnance Survey (1:2500)

Figure 9: 2001 Google Earth Image

Figure 10: 2012 Google Earth Image

Figure 11: 2015 Google Earth Image

Figure 12: 2020 Google Earth Image

Figure 13: Proposed Development

Appendices

Appendix 1: Site Geotechnical Data

Appendix 2: Geophysical Survey Plans 2021

1 INTRODUCTION AND SCOPE OF STUDY

- 1.1 This below ground archaeological desk-based assessment has been researched by Alex Slater, prepared by James Archer, and approved by Peter Reeves of RPS Heritage on behalf of Lysander.
- 1.2 The subject of this assessment, also known as the study site, is land at Oldlands Farm, Bognor Regis. The site is approximately 33ha in extent and is centred at SU 94505 01846 (Fig. 1) within the administrative area of Arun District. The Flansham to Bersted bypass bisects the study site into two land parcels, to the north and south of this bypass. These will be referred to in this report as the northern and southern study site land parcels accordingly.
- 1.3 Lysander has commissioned RPS Heritage to establish the archaeological potential of the site and to provide guidance on ways to address any archaeological constraints identified.
- 1.4 In accordance with relevant policy and guidance on archaeology and planning, and in accordance with the 'Standard and Guidance for Historic Environment Desk-Based Assessments' (Chartered Institute for Archaeologists October 2020), this assessment draws together the available archaeological, topographic and land-use information in order to clarify the archaeological potential of the site.
- 1.5 This desk-based assessment comprises an examination of evidence on the West Sussex Historic Environment Record (HER), and other sources, and includes the results of a comprehensive map regression exercise and geophysical survey.
- 1.6 This assessment thus enables relevant parties to assess the archaeological potential of various parts of the site and to consider the need for design, civil engineering, and archaeological solutions to the archaeological potential identified.

- 2.10 *Setting of a heritage asset* is defined as: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- 2.11 In short, government policy provides a framework which:
- Protects nationally important designated Heritage Assets;
 - Protects the settings of such designations;
 - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions;
 - Provides for the excavation and investigation of sites not significant enough to merit *in-situ* preservation.
- 2.12 The NPPG reiterates that the conservation of heritage assets in a manner appropriate to their significance is a core planning principle, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. Importantly, the guidance states that if complete, or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance and make the interpretation publicly available. Key elements of the guidance relate to assessing harm. An important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special architectural or historic interest. Additionally, it is the degree of harm, rather than the scale of development, that is to be assessed. The level of 'substantial harm' is considered to be a high bar that may not arise in many cases. Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF. Importantly, harm may arise from works to the asset or from development within its setting. Setting is defined as the surroundings in which an asset is experienced and may be more extensive than the curtilage. A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.
- 2.13 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations.

Local Planning Policy

Arun District

- 2.14 The site is located within the District of Arun, which adopted the Arun Local Plan 2011-2031 in July 2018. It contains the following policy relating to the historic environment:

POLICY HER DM6: SITES OF ARCHAEOLOGICAL INTEREST

There will be a presumption in favour of the preservation of scheduled and other nationally important monuments and archaeological remains. Where proposed developments will have either a direct impact on sites listed in Table 16.1 (i.e. developments requiring Scheduled Monument Consent) or where developments will have an indirect impact on the settings of those sites listed in Table 16.1, or where a site on which development is proposed has the potential to include heritage assets with archaeological interest (having consulted the Historic Environment Record) permission will only be granted where it can be demonstrated that development will not be harmful to the archaeological interest of these sites.

In all such instances:

a. Applicants must arrange for a desk based archaeological assessment of the proposed development site to be undertaken by a suitably qualified person. The archaeological assessment will take the form of a factual review of the known information on historic assets and an appraisal of these assets. This information shall accompany the planning application, and, where not supplied, will be required before any planning application is determined*. Where the Planning Authority has reason to believe, either from the archaeological assessment as above, or from other evidence sources, that significant archaeological remains may exist, further assessment in the form of a field evaluation will be required to be carried out before the planning application is determined. Any field survey undertaken shall be carried out by a professionally qualified archaeological organisation or consultant only. All stages of archaeological fieldwork shall be subject to a Written Scheme of Investigation approved by the local planning authority. No development shall take place on the proposed development site until the applicant, or their agents or successors in title, is in receipt of a Written Scheme of Investigation that has been approved by the Local Planning Authority;

or

b. A field evaluation as above, which shall include a historic environmental record of the archaeological site without the requirement to undertake a separate desk based archaeological assessment.

c. Preservation in situ of archaeological sites or remnants of such sites, is the preferred option. However, where the assessment, which shall be subject to a Written Scheme of Investigation, shows that the preservation of archaeological remains in situ is not justified, conditions may be attached to any permission granted that development will not take place until provision has been made by the developer for a programme of archaeological investigation and recording. Any such programme shall be carried out prior to the commencement of the development.

d. Whenever practicable, opportunities should be taken for the enhancement and interpretation of archaeological remains left in situ. Developers shall record any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and possible impact, and to make this evidence (and any archive generated) publicly accessible.

e. Where development is to be phased the presumption would normally be that the whole site should be recorded as one project in order to maintain the continuity of the archaeological record.

f. Developments shall also be consistent with all other Local Plan Policies.

* Those submitting planning applications are strongly advised however to undertake a desk based archaeological assessment in advance of a planning application being lodged as, depending on the outcome of this assessment, further assessment in the form of a field evaluation may be required (as outlined in a. above).

- 2.15 The northern part of the site is located within the area of the Aldingbourne Neighbourhood Development Plan 2014-2034 (with Post Examination Modifications version), which does not contain any particular policy relevant to archaeological assets.

Relevant National and Local Designations

- 2.16 In terms of relevant designated heritage assets, as defined above and as shown on Figure 2a, no designated World Heritage Sites, Scheduled Monuments, Historic Battlefield sites or Historic Wreck sites lie within the vicinity of the study site.

- 2.17 In terms of relevant local designations, the study site is not located within an Archaeological Notification Area as defined locally by Arun District. However, the Archaeological Notification Area associated with a multi-period site at Bersted is located immediately to the south of the study site (see Figure 2a), and a further ANA associated with Medieval settlement at Lidsey is located to the immediate north.
- 2.18 In line with relevant planning policy and guidance, this desk based assessment seeks to clarify the site's archaeological potential and the need or otherwise for additional mitigation measures.

3 GEOLOGY AND TOPOGRAPHY

Geology

- 3.1 The solid geology of the study site is provided by the British Geological Survey (BGS Online 2021), which shows the underlying geology as undifferentiated chalk formations. This is overlain by raised marine deposits across the majority of the site, with river terrace deposits recorded along the western boundary.
- 3.2 Extensive series of past site investigation works have been undertaken across the site and these are shown in Appendix 1. These confirm the above geology, comprising an undifferentiated chalk bedrock, overlain by raised marine deposits across a majority of the site and river terrace deposits generally focused in those trial pits along the western site boundary. This is overlain by either topsoil or in some cases generally to the west, depths of made ground.

Topography

- 3.3 The study site is generally level at c.2-3m Above Ordnance Datum (AOD).
- 3.4 The nearest watercourse to the study site is the Lidsey Rife, circa 220m to the east. Further small watercourses are recorded within the wider area, and a drainage ditch is shown along the site's southern boundary. The Aldingbourne Rife is located circa 900m to the south west, which the Lidsey Rife joins circa 1.2km to the south. The site is located at the interfluvium between these two watercourses.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND WITH ASSESSMENT OF SIGNIFICANCE

Timescales used in this report

Prehistoric

Palaeolithic	900,000 -	12,000 BC
Mesolithic	12,000 -	4,000 BC
Neolithic	4,000 -	2,500 BC
Bronze Age (including Chalcolithic)	2,500 -	800 BC
Iron Age	800 -	AD 43

Historic

Roman	AD 43 -	410
Saxon/Early Medieval	AD 410 -	1066
Medieval	AD 1066 -	1485
Post Medieval	AD 1486 -	1799
Modern	AD 1800 -	Present

Introduction

- 4.1 This chapter reviews the available archaeological evidence for the study site and the archaeological/historical background of the study site and surrounding area, and, in accordance with NPPF, considers the potential for any as yet to be discovered archaeological evidence on the study site prior to any assessment of any later development or below ground impacts.
- 4.2 What follows comprises a review of known archaeological assets within a 1km radius of the study site (Figs. 2a-c), also referred to as the study area, held on the West Sussex Historic Environment Record (HER), together with a historic map regression exercise charting the development of the study area from the 18th century onwards until the present day.
- 4.3 In general, the majority of HER records within the study area comprise evidence for multi-period settlement across the landscape mainly to the west and south of the study site since at least the Bronze Age. A geophysical survey has been undertaken to support this assessment and various programmes of previous archaeological work have been undertaken in the immediate area of the site.
- 4.4 The map regression exercise has demonstrated that the study site has remained open land since the 18th century through to the present day with minor alterations to field boundaries, drainage ditches and former trackways. Ground disturbance associated with the construction of the adjacent bypass may be present within adjacent areas of the study site.
- 4.5 Chapter 5 subsequently considers the site conditions, later development and below ground impacts, and whether the proposed development is likely to impact archaeological assets and potential archaeological assets identified below.

Previous archaeological work undertaken within the immediate vicinity of the study site has included phases of geophysical survey, geoarchaeological work, evaluation trial trenching, and open area excavation. These are shown on Figure 2b and can be summarised as follows:

- Wessex 2007: A series of evaluation trenches were undertaken along the course of the Flansham to Bersted bypass prior to its construction. Trenching was undertaken to the immediate west of the site, and also to the east beyond the railway. Those trenches intended to be undertaken across that part of the bypass which now bisects the study site do not appear to have been undertaken. A single late Bronze Age ditch was identified in the trenches to the west of the site, as well as evidence for Roman period field systems and land division. These finds were made in a single trench circa 250m south west of the study site, with the majority of trenches devoid of archaeological remains.
- Cotswold 2008: A programme of 38 evaluation trenches undertaken in the area circa 280m to the south west of the study site. The work identified archaeological remains across much of the trenched area. These comprised two cremation burials at the southern end of the trenches, of middle Bronze Age and Iron Age date. Field systems dating to the middle to late Bronze Age and Roman periods were also represented.
- ArchaeoPhysica 2014: A geophysical survey was undertaken across the area to the immediate south of the site associated with the extant depot building, as well as across an area of proposed Flood Compensation to the immediate west of the site and north of the bypass road. The survey extended slightly into the study site red line boundary. The survey data was affected by electromagnetic interference although a number of weak anomalies of potential archaeological interest were identified.
- ASE 2014a: A total of 17 evaluation trenches were undertaken across the area immediately west of the site and north of the bypass, as well as to the immediate south west of the site. Archaeological features identified were dated to the late Bronze Age and the Roman period, comprising of field boundary ditches, gullies, and pits.
- ASE 2014b: A watching brief during geotechnical test pitting across areas to the west of the site and north of the bypass identified a single post hole infilled with burnt flint. A horizon of archaeological material was also recorded, from which finds comprised sherds of likely prehistoric pottery and worked flint. In addition, the work identified the edge of the Aldingbourne Rife floodplain, which was generally located to the west of the site, although the western portion of the southern site parcel was contained within the floodplain limit.
- ASE 2015: An open excavation was undertaken across a proposed Flood Compensation Area to the immediate west of the site. The work identified archaeological finds and features dated from the Mesolithic to the Post Medieval periods. Of particular note were late Neolithic or early Bronze Age pit features found with associated grooved ware pottery, extensive evidence for middle and late Bronze Age occupation, round houses, field systems, a droveway, land division, enclosures, and funerary activity, as well as middle Iron Age to late Roman drainage ditches, enclosures, and field systems. A Medieval strip field system was also identified.
- DAS 2015: A desk based assessment was undertaken for the study site's southern parcel, as well as an area of suggested Flood Compensation to the north of the bypass. As part of this work, a phase of trenching and monitoring was undertaken to the immediate west of the study site, which recorded an isolated probable Bronze Age cremation urn, and quantities of unstratified worked flint and debitage. It was concluded in this report that the results of archaeological work in the immediate area suggest that archaeological remains may be

reducing in concentration from west to east, possibly suggesting a lower incidence of archaeological remains across the study site relative to the results of previous work to the west. It was concluded that further archaeological work, subject to confirmation of development impacts, could be secured by an appropriate planning condition.

- Margetts, A. et al 2019: Post excavation publication which collated the results of earlier work including ASE 2014a, ASE 2014b and ASE 2015.
- SUMO 2021: A phase of geophysical survey was undertaken within the study site (see Appendix 1). Two enclosures were identified, of which the northernmost was in close proximity to Lidsey and was suggested as being of possibly similar date. The southernmost enclosure, identified in the centre of the northern study site parcel, is larger at c.45m x 38m, and is well-defined in the survey data. Further possible anomalies of uncertain origin were also identified. Evidence for former field boundaries corresponding to historic mapping was present. No anomalies of likely archaeological interest were identified in the southern study site parcel.

Early Prehistoric – Palaeolithic & Mesolithic

- 4.7 No evidence for Palaeolithic activity is recorded within the nearby area. Evidence for Mesolithic activity comprises a single tranche axe recorded circa 550m to the west of the study site (HER Ref: MWS4132, SU 9378 0203). Residual scatters of flintwork were found during archaeological work at Oldlands Farm to the west of the site, which was described as a very light background scatter indicative of transient activity (ASE 2015 & HER Ref: MWS12157, SU 94312 01761).
- 4.8 The presence of early Prehistoric material can be notoriously difficult to predict and is typically dependent upon the presence of an appropriate underlying geology sequence (such as terrace gravels or brickearth), as well as suitable topography and access to nearby resources and water. There have been numerous instances of archaeological fieldwork within the immediate area of the study site which have not identified any evidence for early Prehistoric remains, with only a light scatter identified during excavation to the west (see Figure 2b).
- 4.9 Therefore, overall, a generally low archaeological potential can be considered at the study site for the Palaeolithic and Mesolithic periods.

Later Prehistoric – Neolithic, Bronze Age & Iron Age

- 4.10 Late Neolithic or early Bronze Age grooved ware pottery was found in large pit features to the west of the site at a previous Flood Compensation Area associated with development at Oldlands Farm (ASE 2015, HER Ref: MWS12157, SU 94132 01761).
- 4.11 Archaeological works to the immediate west and south of the study site have identified evidence for Bronze Age occupation, structures, cremations, field systems, stock enclosures, linears and pits (DAS 2015, ASE 2015, ASE 2014a, ASE 2014b, Cotswold 2008 & HER Refs: MWS14430, SU 94222 01687; MWS9845, SU 94194 01521; MWS12157, SU 94312 01761).
- 4.12 Work at Richmond Lodge circa 500m to the west revealed a single pit which contained an assemblage of Bronze Age pottery, fragments of fire-cracked flint, and a single worked flint (HER Ref: MWS11277, SU 93914 01925).
- 4.13 Further evidence for Bronze Age settlement was identified along the course of the A259 to the east of the study site. This was generally located beyond the 1km study area to the south east, those trenches located within the study area were located to the west and to the east of the site. The only evidence for Bronze Age activity in these trenches comprised a single late Bronze Age ditch in the area c.250m to the south west of the site (Wessex 2007 & HER Ref: MWS12237, SU 9531 0129).

- 4.14 The works to the south and west of the site identified more limited evidence for Iron Age activity, comprising a number of drainage ditches and occasional pits (ASE 2015, ASE 2014a, ASE 2014b, Cotswold 2008 & MWS 12157, SU 94312 01761). A single cremation burial was also identified (HER Ref: MWS9845, SU 94194 01521).
- 4.15 A small number of linear ditches and discrete features dated to the Iron Age period were identified during archaeological work at the Saltbox site circa 500m to the west of the study site (HER Ref: MWS15091, SU 93823 01642). Iron Age pottery has also been found at Shripney in the same area (HER Ref: MWS2369, TQ 9380 0201).
- 4.16 These areas of identified later Prehistoric activity to the south and west of the site have generally been included within a locally defined Archaeological Notification Area for multi-period settlement at North Bersted (HER Ref: DWS8448).
- 4.17 The results of previous archaeological work within the nearby area suggest a settled landscape, potentially from the late Neolithic period onwards. Finds within the immediate area of the site have included evidence for late Neolithic pitting and pottery, extensive Bronze Age occupation including structures, enclosures, field systems and cremations, as well as drainage ditches and occasional pitting dated to the Iron Age. Overall, a generally moderate archaeological potential is considered for the Neolithic period, with a high potential considered for the Bronze Age and for the Iron Age periods.

Roman

- 4.18 Archaeological remains identified within close proximity to the study site seem to be limited to evidence of field systems and land division (HER Refs: ASE 2015, ASE 2014a, ASE 2014b, Cotswold 2008, Wessex 2007 & HER Refs: MWS14430, SU 94222 01687; MWS9845, SU 94194 01521; MWS12157, SU 94312 01761, MWS12237, SU 9531 0129). A single curvilinear ditch was identified which was posited as evidence of possible occupation (HER Ref: MWS9845). Pottery sherds have been identified at Shripney circa 500m to the west (HER Ref: MWS2370, SU 9380 0201).
- 4.19 The study site is located circa 8.3km to the south east of the Roman town at Chichester. There are no known major Roman routeways within proximity to the site (Margary 1955).
- 4.20 Overall, the site appears to have been located away from areas of occupation during the Roman period, with numerous archaeological events within the nearby area generally locating evidence for an agricultural landscape. Therefore, the archaeological potential at the site for the Roman period is considered to be high for evidence of field systems but low for evidence of settlement.

Saxon/Early Medieval & Medieval

- 4.21 No finds of Saxon date have been recorded within the vicinity of the study site despite numerous archaeological events.
- 4.22 There are no early Medieval estates recorded in close proximity to the study site by the Domesday Survey of 1086, with the nearest at Felpham to the south, Middleton to the south east, and Bilsham to the east (Open Domesday Online 2021).
- 4.23 The possible site of an early Medieval chapel is recorded at Lidsey to the north of the study site, represented by a locally defined Archaeological Notification Area (HER Ref: MWS3484, SU 9460 0245 & DWS8469).
- 4.24 Medieval strip field systems have been identified to the west of the site during previous archaeological work (ASE 2015). Further Medieval period finds in the area are limited to pottery

sherds found at Shripney circa 500m to the west of the study site (HER Ref: MWS2368, SU9380 0201).

- 4.25 On balance, it is likely that the study site comprised areas of open land utilised for pasture or agriculture during the Saxon and Medieval periods. A focus of settlement appears to have been located to the north at Lidsey during the Medieval period, although there were no major estates within close proximity. No evidence for Saxon or Medieval remains have been identified during nearby works. Therefore, overall, a generally high archaeological potential can be identified at the study site for evidence of Saxon and Medieval period agricultural activity, with a low potential considered for settlement evidence.

Post Medieval & Modern (including map regression exercise)

- 4.26 A number of the HER records within the study area refer to Post Medieval and Modern archaeological remains which are not discussed in detail here unless relevant to the study site.
- 4.27 During the later Post Medieval and Modern periods, our understanding of settlement, land-use and the utilisation of the landscape is enhanced by cartographic and documentary sources, which can give additional detail to data contained within the HER.
- 4.28 The earliest such cartographic source is the 1724 Budgen Map of Sussex (Fig. 4), which shows the study site within open land. Settlement at Lidsey is shown to the north, with the Lidsey Rife watercourse shown to the east.
- 4.29 A similar situation is shown on a 1778 map (Fig. 5), with the southern part of the site possibly located within pasture near to the Lidsey Rife watercourse to the east. The northern part of the site appears to comprise open fields adjacent to a collection of cottages in the area of what is now Sack Lane at Lidsey to the immediate north. Possible trackways are shown within the site itself. The site is similarly shown on an 1805 Ordnance Survey Drawing (Fig. 6) when Oldlands Farm (HER Ref: MWS12726) was also shown to the south of the site. A number of HER records correspond to Post Medieval outfalls at Lidsey to the north of the site, which may be shown on these maps (HER Refs: MWS13133, MWS11973, MWS13090).
- 4.30 The 1842 South Bersted and 1846 Aldingbourne Parish Tithe Maps (Fig. 7) show the site in more detail than earlier mapping. It appears that the site is generally unchanged and utilised as arable and pastoral land. Alterations to internal field boundaries are shown on the 1876 Ordnance Survey plan (Fig. 8) whilst changes throughout the 20th century are generally limited to further minor field boundary changes and infilling of former drainage ditches. The trackway in the southern parcel had been removed by this time.
- 4.31 The Flansham to Bersted bypass was constructed circa 2012 (Fig. 9) and bisected the study site into its two land parcels. Excavation works can be seen along the route of the bypass, including potentially within bordering areas of the study site. Additional development is shown to the south of the site by 2015 (Fig. 10), with further groundworks shown to the west in association with flood compensation schemes, and to the east as the bypass was extended. Possible ground disturbance or spoil bunds are shown in the south west part of the southern site parcel. Evidence for construction activity has been removed from the site by the present day and the site utilised for mixed arable and pastoral use.
- 4.32 Historic mapping has demonstrated that the study site has remained open land since the 18th century through to the present day with minor alterations to field boundaries, drainage ditches and former trackways. Ground disturbance associated with the construction of the adjacent bypass may be present within adjacent areas of the study site.

- 4.33 Therefore, a generally low archaeological potential is considered at the study site for currently unknown evidence dating to the Post Medieval and Modern periods.

Historic Landscape Characterisation

- 4.34 The available Historic Landscape Characterisation (HLC) data records the study site within an area of fieldscapes (Fig. 2c).

LiDAR Plot

- 4.35 The Environment Agency LiDAR data was captured in 2013 and at a time when the Flansham to Bersted bypass was under construction (Fig. 3).
- 4.36 Evidence for agricultural activity is shown across the study site, whilst various land boundary and drainage ditches are shown. A number of features are also shown which are likely to correspond with bypass construction activity and can be matched to the 2012 Google Earth Image (Fig. 10).

Undated Evidence

- 4.37 Geophysical survey across the study site has identified evidence for a rectilinear enclosure in the central area of the northern study site parcel, as well as a further possible enclosure to the north in proximity to Lidsey (SUMO 2021).

Assessment of Significance

- 4.38 Existing national policy guidance for archaeology (the NPPF as referenced in section 2) enshrines the concept of the 'significance' of heritage assets. Significance as defined in the NPPF centres on the value of an archaeological or historic asset for its 'heritage interest' to this or future generations.
- 4.39 No relevant nationally significant designated heritage assets as defined in the NPPF are recorded within, or within the vicinity of, the study site.
- 4.40 The study site is not located within a locally defined Archaeological Notification Area, although it is located to the immediate north of one such ANA associated with a multi-period archaeological landscape at North Bersted, as well as to the south of a further ANA associated with Medieval settlement at Lidsey.
- 4.41 Previous archaeological work within the study site has comprised geophysical survey, which has identified a rectilinear enclosure in the central area of the northern site parcel, as well as a further possible enclosure to the north of the site in proximity to Lidsey. No anomalies of likely archaeological interest were identified in the southern site parcel.
- 4.42 Based on current evidence, including the results of geophysical survey and previous work in the immediate area, a high archaeological potential has been identified at the study site for the Bronze Age and Iron Age, as well as for Roman, Saxon and Medieval period agricultural activity. A moderate potential is suggested for the Neolithic period, and a low archaeological potential has been considered for all other past periods of human activity within the study site.
- 4.43 The significance of any archaeological remains which may be present would be derived from their evidential value and contributions that could be made towards local research agendas, as well as potentially regional research objectives in the case of well-preserved Bronze Age settlement evidence.
- 4.44 Whilst it is possible that archaeological remains could be present within the site, on the basis of the above, any remains, should they occur on the study site, would in the context of the Secretary of

State's non-statutory criteria for Scheduled Monuments (DCMS 2013) most likely be of local or perhaps regional significance.

- 4.45 As identified by desk based work and the results of geophysical survey and nearby archaeological work, archaeological potential by period and the likely significance of any archaeological remains which may be present within the study site is summarised in table form below:

Period:	Identified Archaeological Potential and Likely Significance (if present):
Early Prehistoric (Palaeolithic & Mesolithic)	Low potential, Low (Local) Significance;
Neolithic	Moderate potential, Low (Local) Significance;
Bronze Age	High potential for evidence which may include occupation evidence, field systems, and funerary activity, generally Low (Local) Significance, with well-preserved occupation evidence of possible Regional Significance;
Iron Age	High potential for evidence likely to comprise of drainage features and pitting, Low (Local) Significance;
Roman	High potential for evidence for land division and agricultural activity with a low potential for settlement evidence, Low (Local) Significance;
Saxon & Medieval	High potential for evidence of land division and agricultural activity with a low potential for settlement evidence, Low (Local) Significance;
Post Medieval & Modern	Low potential (likely to be entirely invested in evidence of former land boundaries, drainage ditches, and former trackways), likely to be of Negligible to Low (None/Local) Significance.
Undated	A rectilinear enclosure has been identified in the central area of the northern study site parcel during geophysical survey. The character and dating of this anomaly are currently unknown.

5 SITE CONDITIONS, THE PROPOSED DEVELOPMENT & REVIEW OF POTENTIAL DEVELOPMENT IMPACTS ON ARCHAEOLOGICAL ASSETS

Site Conditions

- 5.1 The study site currently comprises open land divided into separate field parcels (Fig. 12).
- 5.2 Possible ground disturbance is shown within parts of the study site adjacent to the bypass road which indicate possible disturbance in those areas as a result of construction. Such disturbance would have likely been localised but severe.
- 5.3 Past agricultural land use will have had a moderate but widespread archaeological impact as a result of past ploughing.

Proposed Development

- 5.4 The southern study site parcel is proposed for commercial development with associated landscaping and access hardstanding (see Figure 13). It is understood that the northern site parcel will be utilised for flood compensation measures, which will involve areas of excavation as yet to be defined. This additional excavation fill is understood to be utilised to build up the southern study site parcel.

Review of Potential Development Impacts on Archaeological Assets

- 5.5 The proposed development will not impact on any designated archaeological assets.
- 5.6 The site is not located within an Archaeological Notification Area as defined locally by Arun District.
- 5.7 A programme of geophysical survey across the site has identified a rectilinear enclosure in the northern study site parcel as well as a possible further enclosure to the north at Lidsey. No anomalies of likely archaeological interest were identified in the southern site parcel.
- 5.8 This assessment has collated the results of previous work at the site and within the immediate area and has concluded a high archaeological potential at the site for the Bronze Age and Iron Age periods, as well as for Roman/Saxon/Medieval agricultural activity. A moderate potential is considered for the Neolithic period. A low potential has been considered for all other past periods of human activity. If remains were present at the site, these have been considered most likely to be of local or perhaps regional significance.
- 5.9 Past ground disturbance at the site is likely to have been widespread as a result of agricultural activity, with specific areas of disturbance identified in proximity to the Flansham and Bersted bypass which bisects the site. Whilst archaeological remains are likely to have been subject to some truncation as a result of this disturbance, the results of previous archaeological work in the immediate area would suggest that survival of remains is likely to be good.
- 5.10 Given the site's archaeological potential, it is possible that the proposed development of the study site could have an impact upon archaeological remains of most likely a local or perhaps regional significance. Highly significant remains which could preclude development are not anticipated.

6 SUMMARY AND CONCLUSIONS

- 6.1 Land at Oldlands Farm, Bognor Regis is under consideration for commercial development with associated hardstanding access and landscaping, as well as additional areas proposed flood compensation measures. Therefore, in accordance with relevant government planning policy and guidance, a desk based assessment has been undertaken to clarify the below ground archaeological potential of the study area.
- 6.2 In terms of relevant designated heritage assets, no designated World Heritage Sites, Scheduled Monuments, Historic Battlefield sites or Historic Wreck sites lie within the vicinity of the study site.
- 6.3 In terms of relevant local designations, the study site is not located within an Archaeological Notification Area as defined locally by Arun District. However, the Archaeological Notification Area associated with a multi-period site at Bersted is located immediately to the south of the study site and a further ANA associated with Medieval settlement at Lidsey is located to the immediate north.
- 6.4 Previous archaeological work within the study site has comprised geophysical survey, which has identified a rectilinear enclosure in the central area of the northern site parcel, as well as a further possible enclosure to the north of the site in proximity to Lidsey. No anomalies of likely archaeological interest were identified in the southern site parcel.
- 6.5 As identified by desk based work and the results of geophysical survey and nearby archaeological work, archaeological potential by period and the likely significance of any archaeological remains which may be present within the study site is summarised in table form below:

Period:	Identified Archaeological Potential and Likely Significance (if present):
Early Prehistoric (Palaeolithic & Mesolithic)	Low potential, Low (Local) Significance;
Neolithic	Moderate potential, Low (Local) Significance;
Bronze Age	High potential for evidence which may include occupation evidence, field systems, and funerary activity, generally Low (Local) Significance, with well-preserved occupation evidence of possible Regional Significance;
Iron Age	High potential for evidence likely to comprise of drainage features and pitting, Low (Local) Significance;
Roman	High potential for evidence for land division and agricultural activity with a low potential for settlement evidence, Low (Local) Significance;
Saxon & Medieval	High potential for evidence of land division and agricultural activity with a low potential for settlement evidence, Low (Local) Significance;
Post Medieval & Modern	Low potential (likely to be entirely invested in evidence of former land boundaries, drainage ditches, and former trackways), likely to be of Negligible to Low (None/Local) Significance.
Undated	A rectilinear enclosure has been identified in the central area of the northern study site parcel during geophysical survey. The character and dating of this anomaly are currently unknown.

- 6.6 Past ground disturbance at the site is likely to have been widespread as a result of agricultural activity, with specific areas of disturbance identified in proximity to the Flansham and Bersted bypass which bisects the site. Whilst archaeological remains are likely to have been subject to some truncation as a result of this disturbance, the results of previous archaeological work in the immediate area would suggest that survival of remains is likely to be good.
- 6.7 Given the site's archaeological potential, it is possible that the proposed development of the study site could have an impact upon archaeological remains of most likely a local or perhaps regional significance.

- 6.8 It is anticipated that the archaeological advisor to Arun District will require further archaeological work in advance of development at the study site, likely to comprise of evaluation trenching and mitigation as appropriate. Further details are required confirming the extent of proposed development impact, including cut and fill excavations, which would then inform the extent of further archaeological work.
- 6.9 The results of previous archaeological work in the immediate area have identified locally to regional significant archaeological remains, with archaeological works undertaken to preserve those remains by record. It is therefore considered that the site's archaeological character can be similarly characterised, and that highly significant remains which might preclude development are not anticipated. Therefore, any further archaeological work could reasonably be secured by attaching an appropriately worded planning condition to the granting of planning consent.

Sources Consulted

General

British Library

The National Archive

West Sussex Historic Environment Record

Internet

British Geological Survey – <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>

British History Online – <http://www.british-history.ac.uk/>

Domesday Online – <http://www.domesdaybook.co.uk/>

Historic England: The National Heritage List for England – <http://www.historicengland.org.uk/listing/the-list/>

Portable Antiquities Scheme – www.finds.org.uk

Bibliographic

Archaeology South-East *Archaeological Evaluation Report, Oldlands Farm, Bognor Regis, West Sussex* 2014a

Archaeology South-East *Archaeological Watching Brief Report, Oldlands Farm, Bognor Regis, West Sussex* 2014b

Archaeology South-East *A Post Excavation Assessment and Updated Project Design Report, Oldlands Farm, Bognor Regis, West Sussex* 2015

ArchaeoPhysica *Oldlands Farm, Bognor Regis, West Sussex Geophysical Survey Report* 2014

Bridgland, D. *Quaternary River Terrace Deposits as a Framework for the Lower Palaeolithic Record (In Gamble and Lawson)* 1996

Chartered Institute for Archaeologists *Standard & Guidance for historic environment desk based assessment* 2014, revised 2020

Cotswold Archaeology *Oldlands Farm, Bognor Regis, West Sussex, Archaeological Evaluation* 2008

DCMS *Scheduled Monuments and Nationally Important Non-Scheduled Monuments* 2013

Department of Communities and Local Government *National Planning Policy Framework* 2012 (revised February 2019)

Department of Communities and Local Government/Department of Culture Media and Sport/English Heritage *National Planning Practice Guidance* 2014 (revised 2019)

Development Archaeology Services *Assessment of the Archaeological Potential of Proposed Development Site known as Oldlands Farm Site (Phase 2)* 2015

Historic England *Archaeological Priority Area Guidelines* July 2016 unpublished document

Historic England (formerly English Heritage) *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* 2008 (new draft 2017)

Historic England *Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans* July 2015 unpublished document

Historic England Historic Environment *Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment* July 2015 unpublished document

Historic England Historic Environment *Good Practice Advice in Planning: 3 The Setting of Heritage Assets* December 2017 unpublished document

Historic England *Understanding Historic Buildings. A Guide to Good Recording Practice*. 2016

Hydrock *Proposed Commercial Development Phase 1a and 2, Oldlands Farm, Bognor Regis, Desk Study and Ground Investigation* 2017

Margary I. D. *Roman Roads of Britain* 1955

Margetts, A. et al, *On the Verge of Wessex? A prehistoric landscape at Oldlands Farm, Bognor Regis, West Sussex* 2019

Mills, A.D. *A Dictionary of British Place Names* 1991

SUMO *Land at Oldlands Farm, Bognor Regis, Geophysical Survey Report* 2021

Sussex County Council *Archaeological Standards* 2019

Victoria County History *A History of the County of Sussex Volume 4*, 1953

Wessex Archaeology *Land between Felpham and Flansham, Bognor Regis, West Sussex, Archaeological Evaluation Report* 2007

Wymer *The Lower Palaeolithic Occupation of Britain* 2 volumes 1999

Cartographic

1724 Budgen Map of Sussex

Circa 1740 Overton & Bowles Map of Sussex

1778 Yeakell & Gardner Map of Sussex

1795 Gardner & Gream Map of Sussex

1805 Ordnance Survey Drawing

1813 Ordnance Survey Old Series

1825 C&J Greenwood Map of Sussex

1842 South Bersted Parish Tithe Map

1846 Aldingbourne Parish Tithe Map

1866 Aldingbourne Parish Tithe Map (altered apportionment)

1876 Ordnance Survey (1:2500)

1898 Ordnance Survey (1:2500)

1912 Ordnance Survey (1:2500)

1939 Ordnance Survey (1:2500)

1974 Ordnance Survey (1:2500)

1976 Ordnance Survey (1:2500)

1980 Ordnance Survey (1:2500)

1985 Ordnance Survey (1:2500)

1994 Ordnance Survey (1:2500)

2001 Google Earth Image

2007 Google Earth Image

2012 Google Earth Image

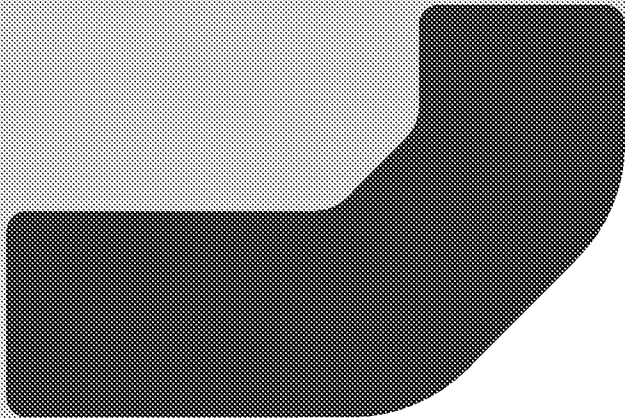
2013 Google Earth Image

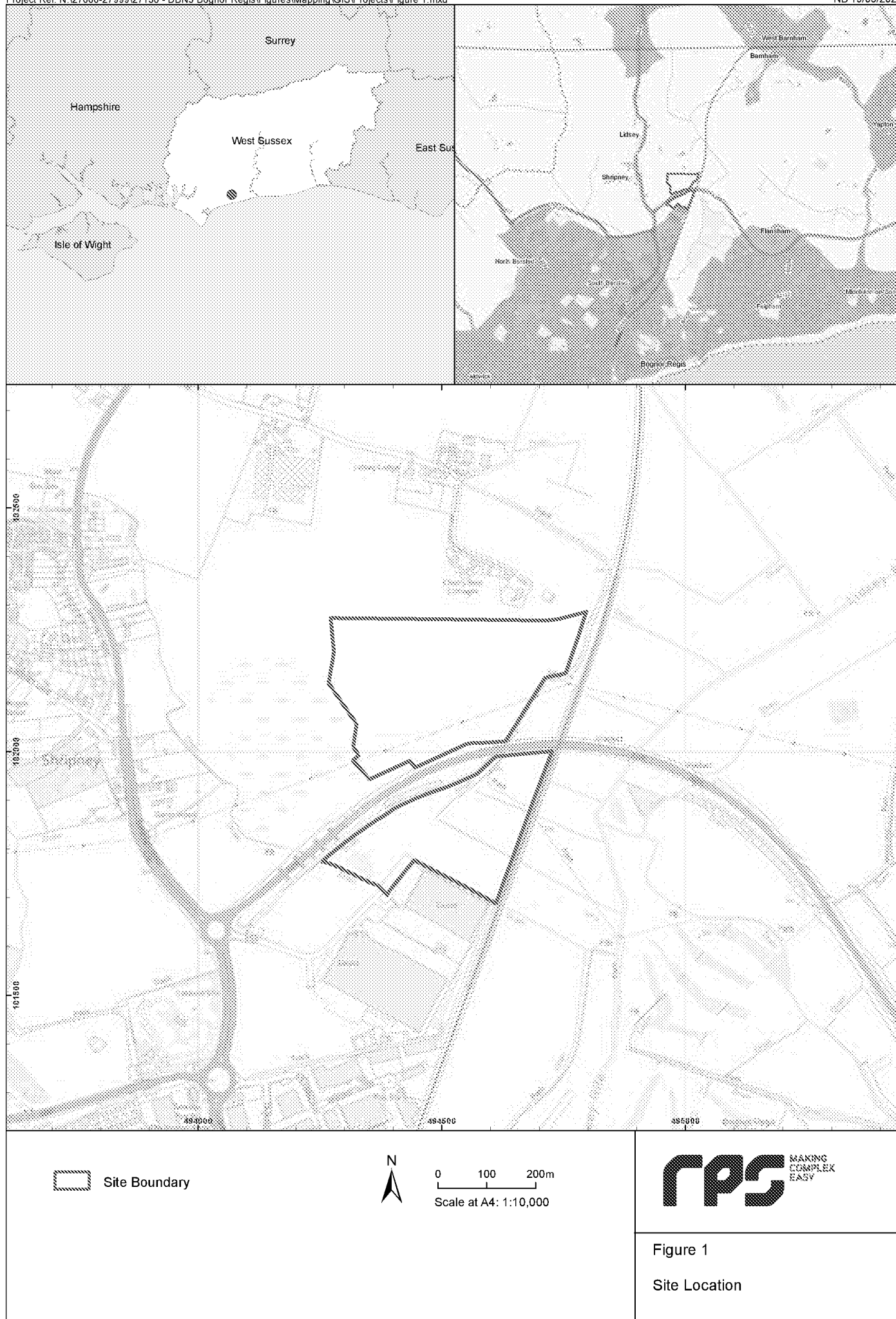
2015 Google Earth Image

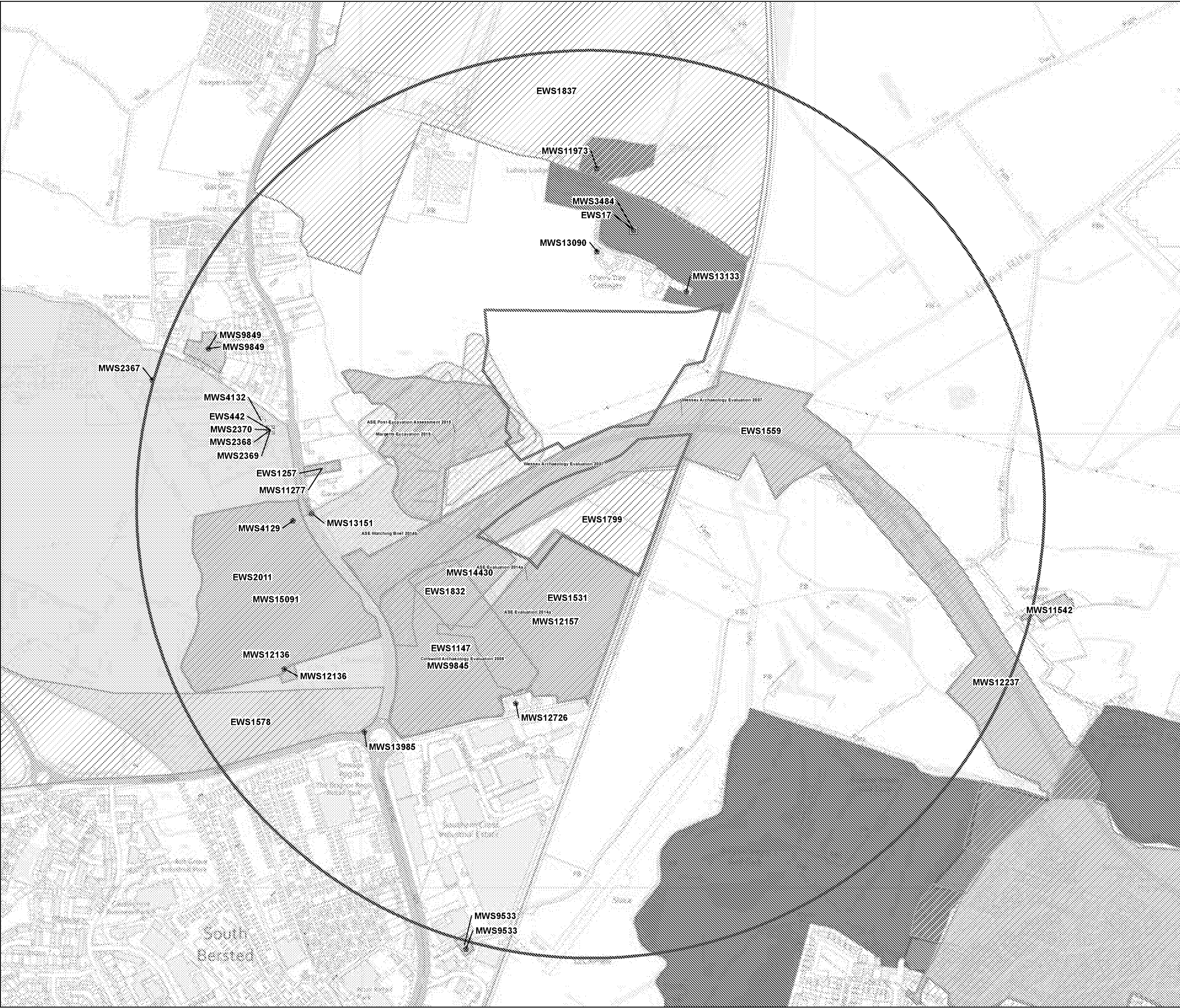
2019 Google Earth Image

2020 Google Earth Image

FIGURES







Legend

Site Boundary

1km search radius

Non-designated Heritage Assets:

HER Records Points

Monuments

Findspots

HER Records Polygons

Monuments

Archaeological Notification Areas

DWS8448 - Multi-Period Site, North Bersted, Bersted

DWS8461 - Prehistoric Flint Working Area, Felpham and Yapton

DWS8469 - Site of an Early English Chapel, Sack Lane, Aldingbourne

Previous Archaeological Work:

HER Events Points

HER Events Polygons

Additional event details



0 100 200m
Scale at A3: 1:8,000



Figure 2a

HER Plot (Data from West Sussex HER)



Legend

- Site Boundary
- 1km search radius
- Previous Archaeological Work:
 - ASE Evaluation 2014a
 - ASE Post-Excavation Assessment
 - ASE Watching Brief 2014b
 - ArchaeoPhysica 2014
 - Cotswold Archaeology Evaluation
 - Development Archaeological Services Evaluation 2018
 - Margetts assessment 2019
 - Wessex Archaeology Evaluation

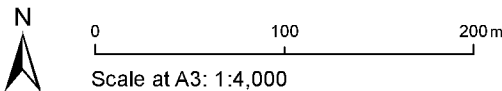


Figure 2b
Plan of Previous Archaeological Work Within Immediate Area of Site



Legend

- Site Boundary
- 1km search radius
- Historic Landscape Characterisation:
 - Communications
 - Fieldsapes
 - Horticulture
 - Industry
 - Recreation
 - Settlement

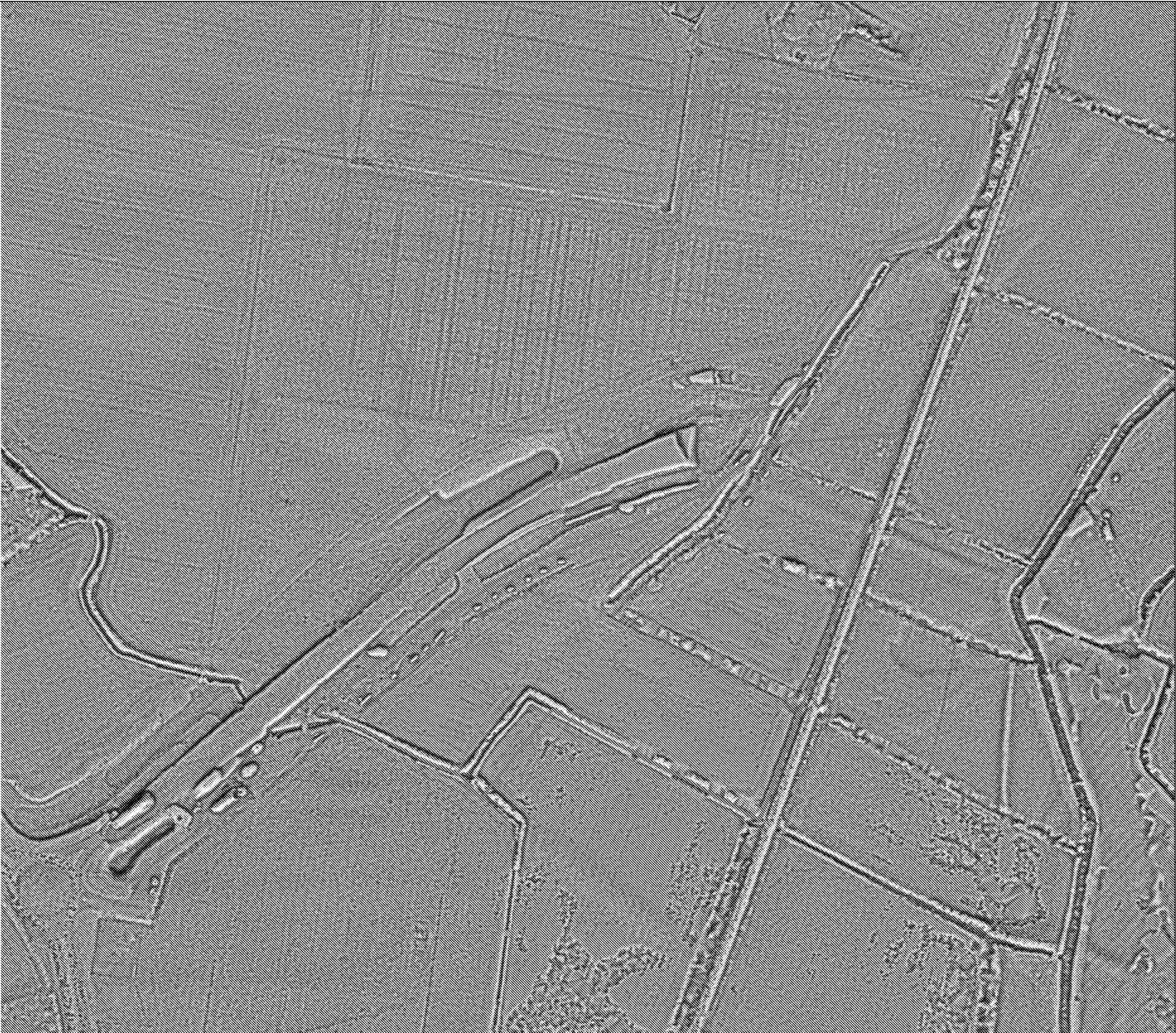


0 100 200m
Scale at A3: 1:8,000



Figure 2c
HLC Plot (Data from West Sussex
HER)

Project Ref: N127000-27999/27136 - DBN5 Bognor Regis\Figures\Mapping\GIS\Projects\Figure 3 LiDAR.mxd



Legend

 Site Boundary

LiDAR DATA

Source:
Environment Agency

Data Type: DTM

Resolution: 0.25m

Date Captured:
17/01/2013 - 16/02/2013

Processing:
Multi-direction Hillshade overlaid on
simple Local Relief Model



0 62.5 125m
Scale at A3: 1:3,000



Figure 3

LiDAR Plot





Approximate site location



Not to Scale
Illustrative Only



Figure 5

1778 Yeakell & Gardner Ma of
Sussex



Site Boundary (approximate)



0 100 200m
Scale at A4: 1:10,000
(approximate)



Figure 6

1805 Ordnance Survey Drawing



 Site Boundary



0 50 100m
Scale at A4: 1:5,000



Figure 7

1842 South Bersted and 1846
Aldingbourne Parish Tithe Maps



 Site Boundary



0 50 100
Scale at A4: 1:4,000



Figure 8

1876 Ordnance Survey Map



 Site Boundary



0 50 100
Scale at A4: 1:4,000



Figure 9

2001 Google Earth Image



Site Boundary



0 50 100

Scale at A4: 1:4,000



Figure 10

2012 Google Earth Image



 Site Boundary



0 50 100
Scale at A4: 1:4,000



Figure 11

2015 Google Earth Image



 Site Boundary



0 50 100
Scale at A4: 1:4,000



Figure 12

2020 Google Earth Image

 Site Boundary


0 25 50m
Scale at A4: 1:2,000

rps MAKING
COMPLEX
EASY

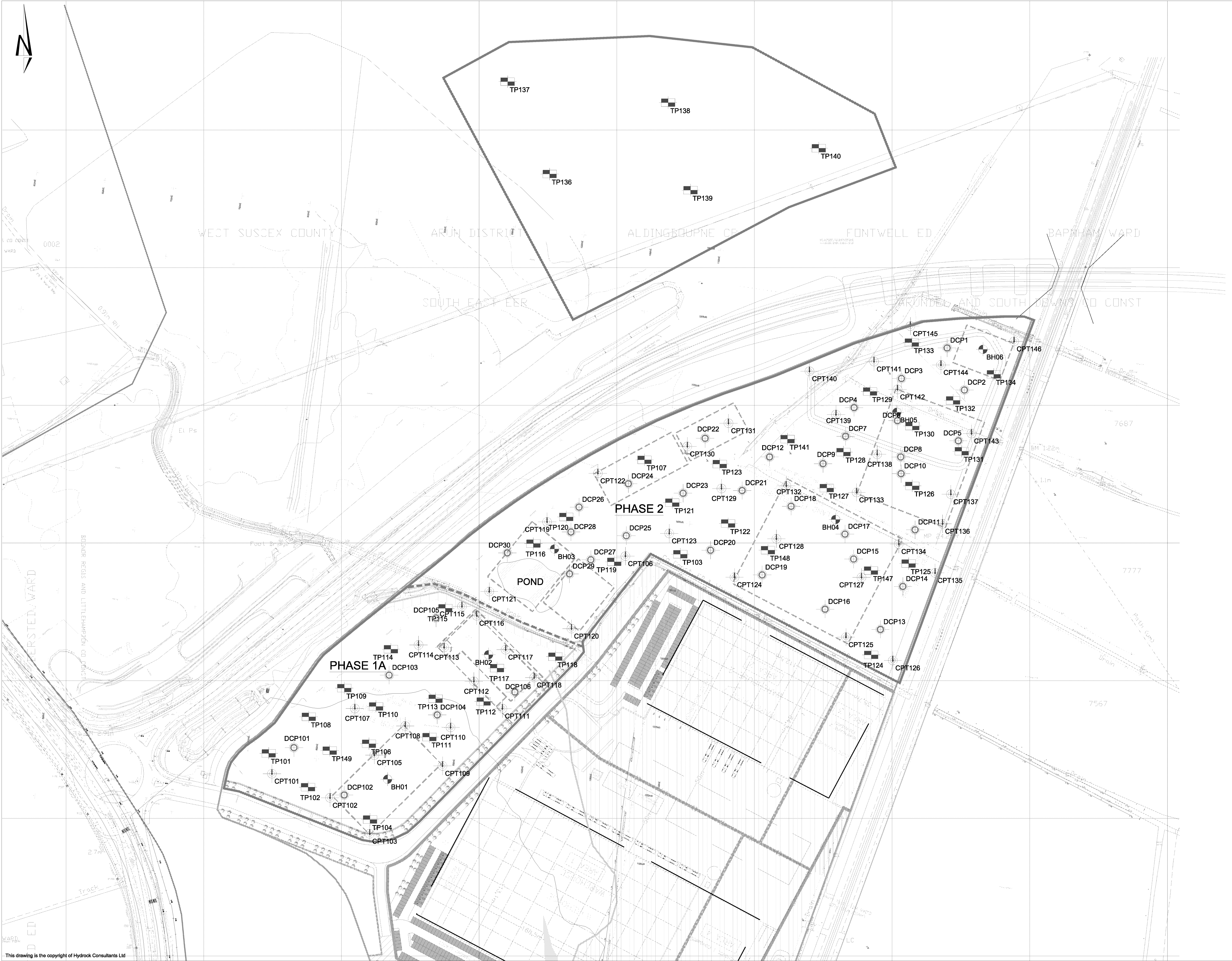
Figure 13

Proposed Development

APPENDICES

Appendix 1

Site Geotechnical Data



- Notes:
1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
 2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.

Legend

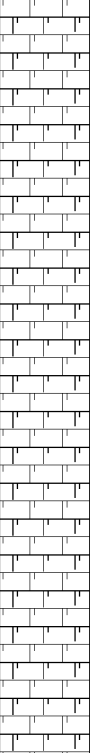
- Approximate Site Boundary
- Cable Percussion Borehole (BHXX)
- Trial Pit (TPXX)
- CPT Test Location (CPT##)
- DCP Test Location (DCP##)

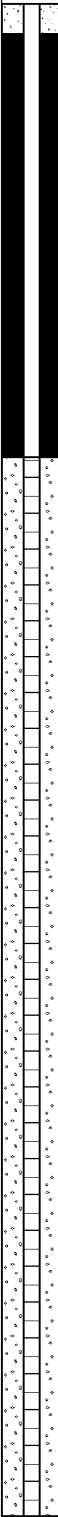
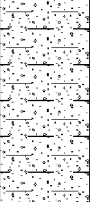
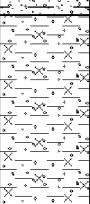
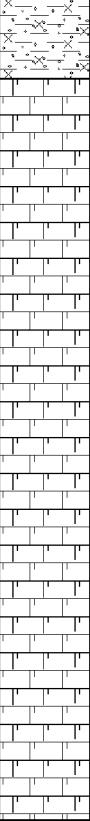
Rev	Date	Description	By	Ckd
Architect				
Client:				
HANBURY PROPERTIES				
Project Title:				
OLDLANDS FARM BOGNOR REGIS				
Drawing Title:				
Exploratory Hole Location Plan (Phases 1A & 2)				
Reference:				
BOG-HYD-XX-ZZ-DR-GE-0002				
Hydrock Job No:				
C-06566-C				
Drawn	Checked	Scale of A1	Date	Issue Date
AB	CV	1:1250	31/05/17	31/05/17
Revision:		Status:		
P1.1		S0		

Hydrock						Cable Percussion		Borehole No. BH01			
								Sheet 1 of 2			
Project Name: Oldlands Farm, Phase 1a and 2						Co-ords: 494233E, 101630N		Hole Type: CP			
Location: Bognor Regis				Project No: C-06566-C		Ground Level: 2.10m OD		Scale: 1:50			
Client: Hanbury Properties						Date(s): 09/05/17		Hole Diameter: 150mm			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	D	N=6 (1,2/2,1,2,1)	0.90	1.20		Light grey to brown very gravelly slightly clayey SAND. Gravel is fine to coarse angular to subrounded flint and chalk. Some rare brick fragments. (MADE GROUND)			
		0.50-1.00	B								
		1.00	D				N=5 (2,1/1,1,1,2)	4.00	-1.90		Soft to firm light grey to brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium angular to subrounded of flint and chalk. (RIVER TERRACE DEPOSITS - COHESIVE)
		1.20-1.65	D								
		1.20	SPT								
		2.00-2.45	B								
		2.00	SPT	N=24 (5,3/3,7,6,8)	becoming firm to stiff.						
		3.00-3.45	B								
		3.00	SPT	N=35 (2,4/7,7,10,11)	Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)						
		4.00-4.45	B								
		4.00	SPT			N=34 (3,5/6,9,10,9)					
		5.00-5.45	B								
		5.00	SPT	N=31 (6,7/7,7,7,10)							
		6.00	D								
		6.50-6.95	D								
		6.50	SPT								
7.00	D	N=32 (6,4/3,7,9,13)									
7.00	D										
8.00-8.45	D										
8.00	SPT										
9.00	D	N=13 (2,3/2,3,4,4)									
9.50-9.95	D										
9.50	SPT										
10.00	D										
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-10.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 5.50m bgl.						Logged: JEH Checked: JC			

Hydrock						Cable Percussion		Borehole No. BH01			
								Sheet 2 of 2			
Project Name: Oldlands Farm, Phase 1a and 2						Co-ords: 494233E, 101630N		Hole Type: CP			
Location: Bognor Regis				Project No: C-06566-C		Ground Level: 2.10m OD		Scale: 1:50			
Client: Hanbury Properties						Date(s): 09/05/17		Hole Diameter: 150mm			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		11.00-11.45 11.00	D SPT	N=20 (2,2/8,5,4,3)				Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)			
		12.00 12.00-12.45	B D B	N=21 (3,4/5,5,5,6)							
		12.50-12.95 12.50	B SPT								
		13.00 13.00-13.45	B B								
		14.00-14.45 14.00	D SPT	N=33 (4,7/5,6,11,11)							
		15.00-15.45 15.00	D SPT	N=27 (4,6/6,7,6,8)	15.00	-12.90		End of Borehole at 15.00m			
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-10.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 5.50m bgl.						Logged:	JEH	Checked:	JC

Hydrock						Cable Percussion		Borehole No. BH02 Sheet 1 of 2							
Project Name: Oldlands Farm, Phase 1a and 2						Co-ords: 494307E, 101719N		Hole Type: CP							
Location: Bognor Regis				Project No: C-06566-C		Ground Level: 2.07m OD		Scale: 1:50							
Client: Hanbury Properties						Date(s): 09/05/17 - 10/05/17		Hole Diameter: 150mm							
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description							
		Depth (m)	Type	Results											
		0.20	D		1.00	1.07		Orange brown very gravelly SAND. Gravel is fine to coarse angular to subrounded brick, flint, limestone and occasional metal. (MADE GROUND) <i>At 0.20m bgl: Becoming slightly clayey.</i>							
		1.00-1.45 1.00-1.45 1.00	B B SPT	N=10 (2,2/3,2,2,3)				Soft to firm dark brown to orange brown sandy gravelly CLAY. Gravel is fine to coarse angular to subrounded of flint and chalk. (RIVER TERRACE DEPOSITS - COHESIVE)							
		2.00-2.45 2.00	B SPT	N=15 (2,4/3,4,4,4)	3.30	-1.23		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)							
		3.00-3.45 3.00	B SPT	N=5 (1,1/2,1,1,1)											
		4.00-4.45 4.00	B SPT	N=10 (1,2/1,1,2,6)											
		5.00-5.45 5.00	B SPT	N=35 (3,5/4,8,10,13)											
		6.00 6.00-6.45	B B												
		6.50-6.95 6.50	D SPT	N=32 (7,7/8,9,7,8)											
		7.00	B												
		8.00-8.45 8.00	D SPT	N=22 (3,3/3,6,6,7)											
		9.00	D												
		9.50-9.95 9.50	D SPT	N=16 (2,2/4,4,3,5)											
		10.00	D												
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-10.00m								B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample					
Groundwater:		Groundwater encountered at 4.50m bgl.								Logged: JEH Checked: JC					

Hydrock							Cable Percussion		Borehole No. BH02 Sheet 2 of 2	
Project Name: Oldlands Farm, Phase 1a and 2							Co-ords: 494307E, 101719N		Hole Type: CP	
Location: Bognor Regis					Project No: C-06566-C		Ground Level: 2.07m OD		Scale: 1:50	
Client: Hanbury Properties							Date(s): 09/05/17 - 10/05/17		Hole Diameter: 150mm	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		11.00-11.45 11.00	D SPT	N=10 (2,3/3,2,3,2)	15.00	-12.93		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
		12.00-12.45	B							
		12.50-12.95 12.50	D SPT	N=19 (2,3/3,4,5,7)						
		13.00-13.45	B							
		14.00 14.00-14.45 14.00	D D SPT	N=20 (3,4/3,5,6,6)						
		15.00-15.45 15.00	D SPT	N=22 (4,4/5,5,6,6)						
								End of Borehole at 15.00m		
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-10.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample		
Groundwater:		Groundwater encountered at 4.50m bgl.						Logged: JEH Checked: JC		

Hydrock							Cable Percussion		Borehole No. BH03				
Project Name: Oldlands Farm, Phase 1a and 2							Co-ords: 494358E, 101778N		Sheet 1 of 2				
Location: Bognor Regis					Project No: C-06566-C		Ground Level: 1.11m OD		Hole Type: CP				
Client: Hanbury Properties							Date(s): 10/05/17		Scale: 1:50				
							Date(s): 10/05/17		Hole Diameter: 150mm				
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description					
		Depth (m)	Type	Results									
		0.15	D		0.30	0.81		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. (TOPSOIL)					
		1.00	D								Loose orange brown and grey slightly gravelly slightly clayey SAND. Gravel is fine to medium angular to subrounded of flint and chalk. (RAISED MARINE DEPOSIT)		
		1.00-1.45	B										
		1.00	SPT	N=4 (2,1/1,1,1,1)									
		1.50-1.95	B										
		1.50-1.95	D										
		2.00-2.45	B		2.00	-0.89		Soft to firm light grey and brown slightly gravelly silty CLAY. Gravel is fine to coarse angular to subrounded of flint and chalk. (RAISED MARINE DEPOSIT)					
		2.00	SPT	N=3 (1,1/1,0,1,1)									
		3.00-3.45	B										
		3.00	SPT	N=2 (0,0/0,0,1,1)									
		4.00-4.45	B										
		4.00-4.45	D										
		4.00	SPT	N=7 (1,0/2,1,2,2)									
		5.00-5.45	D		5.10	-3.99		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)					
		6.00	D										
6.50-6.95	D												
6.50	SPT	N=16 (3,3/3,4,4,5)											
7.00	B												
7.00-7.45	B												
8.00-8.45	D												
8.00	SPT	N=20 (3,5/5,6,4,5)											
9.00	B												
9.00	B												
9.50-9.95	D												
9.50	SPT	N=13 (2,3/3,3,3,4)											
10.00	D												
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-10.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample					
Groundwater:		Groundwater encountered at 5.40m bgl.						Logged: JEH Checked: JC					

Borehole No.

Sheet 2 of 2

Hole Type:
CP

Scale:
1:50

Hole Diameter:
150mm

HYD-BH-V1.1

Hydrock							Cable Percussion		Borehole No. BH04 Sheet 1 of 2		
Project Name: Oldlands Farm, Phase 1a and 2							Co-ords: 494559E, 101817N		Hole Type: CP		
Location: Bognor Regis					Project No: C-06566-C		Ground Level: 0.88m OD		Scale: 1:50		
Client: Hanbury Properties							Date(s): 11/05/17		Hole Diameter: 150mm		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	D		0.40	0.48		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)			
		1.00 1.00-1.45 1.00	D B SPT	N=4 (2,1/1,0,2,1)				Soft orange brown mottled grey silty sandy CLAY. Rare gravel of fine to coarse angular flint and chalk. (RAISED MARINE DEPOSIT)			
		2.00 2.00-2.45 2.00	B B SPT	N=2 (1,0/0,0,1,1)	1.80	-0.92		Very soft, becoming firm with depth, blue grey slightly gravelly silty CLAY. With peat fragments. Gravel is fine to coarse angular to subrounded of flint and chalk. (RAISED MARINE DEPOSIT)			
		3.00-3.45 3.00	D SPT	N=18 (2,5/4,4,4,6)				Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)			
		4.00-4.45 4.00	D SPT	N=6 (2,1/2,1,1,2)	3.90	-3.02		Structureless CHALK recovered as off white sandy silty, subangular to subrounded mainly medium and coarse Gravel. Gravel is weak to moderately weak, medium density with black specks on clasts. Matrix is off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)			
		5.00-5.45 5.00	B SPT	N=8 (2,1/1,2,2,3)	5.40	-4.52					
		6.00	D								
		6.50-6.95 6.50	D SPT	N=13 (2,3/2,3,5,3)							
		7.00 7.00-7.50	B B								
		8.00-8.45 8.00	D SPT	N=13 (3,3/3,3,3,4)							
		9.00 9.00-9.50	B B								
		9.50-9.95 9.50	D SPT	N=13 (2,2/2,4,4,3)							
		10.00 10.00	D D								
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 2.00-10.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 3.00m bgl.						Logged:	JEH	Checked:	JC

Hydrock						Cable Percussion		Borehole No. BH04			
Project Name: Oldlands Farm, Phase 1a and 2						Co-ords: 494559E, 101817N		Sheet 2 of 2			
Location: Bognor Regis				Project No: C-06566-C		Ground Level: 0.88m OD		Hole Type: CP			
Client: Hanbury Properties						Date(s): 11/05/17		Scale: 1:50			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		11.00 11.00-11.45 11.00	B B SPT	N=33 (4,6/7,9,8,9)				Structureless CHALK recovered as off white sandy silty, subangular to subrounded mainly medium and coarse Gravel. Gravel is weak to moderately weak, medium density with black specks on clasts. Matrix is off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)			
		12.00	D								
		12.50-12.95 12.50	D SPT	N=40 (5,6/9,12,12,7)							
		13.00 13.00	D D								
		14.00-14.45 14.00	D SPT	N=33 (8,7/7,8,9,9)							
		15.00-15.45 15.00	B SPT	N=33 (4,6/8,7,10,8)	15.00	-14.12		End of Borehole at 15.00m			
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 2.00-10.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 3.00m bgl.						Logged:	JEH	Checked:	JC

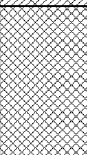
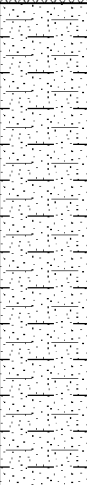
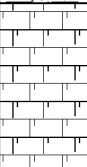
Hydrock							Cable Percussion		Borehole No. BH05			
Project Name: Oldlands Farm, Phase 1a and 2							Co-ords: 494603E, 101895N		Sheet 1 of 2			
Location: Bognor Regis					Project No: C-06566-C		Ground Level: 0.89m OD		Hole Type: CP			
Client: Hanbury Properties							Date(s): 11/05/17		Hole Diameter: 150mm			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description				
		Depth (m)	Type	Results								
		0.20	D		0.25	0.64		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. With rootlets. (TOPSOIL)				
	1.20-1.65 1.20-1.65	U U	0 Blows 22 Blows (100% rec)			Soft, becoming very soft at 2.0m bgl, orange brown to grey brown sandy silty slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded of flint and chalk. (RAISED MARINE DEPOSIT)						
	2.00-2.45 2.00	B SPT	N=1 (1,0/0,0,1,0)			From 1.90m to 2.80m bgl: Peat lenses.						
			3.00-3.45 3.00-3.45 3.00	B B SPT	N=1 (1,0/0,1,0,0)	2.80	-1.91		Very soft blue grey slightly gravelly silty CLAY. Gravel is fine to coarse angular to subrounded flint. (RAISED MARINE DEPOSIT)			3.0
			4.00 4.00-4.45 4.00	D D SPT	N=1 (0,0/1,0,0,0)	4.00	-3.11		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderately dense, white chalk with occasional black specks and recovered as subrounded to angular medium to coarse gravel sized fragments with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)			4.0
			5.00-5.45 5.00	B SPT	N=0 (0,0/0,0,0,0)							5.0
			6.00 6.00	D D								6.0
			6.50-6.95 6.50	D SPT	N=2 (1,1/0,1,0,1)							7.0
			7.00	D								
			8.00-8.45 8.00	B SPT	N=11 (2,2/2,2,4,3)	8.00	-7.11		Structureless CHALK recovered as off white sandy silty, subangular to subrounded mainly medium and coarse gravel. Gravel is weak to moderately weak, medium density with black specks on clasts. Matrix is off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)			8.0
			9.00	D								9.0
			9.50-9.95 9.50	D SPT	N=22 (2,4/4,5,7,6)							
			10.00 10.00	D D								10.0
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-5.00m							B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 3.60m bgl.							Logged: JEH Checked: JC			

Hydrock Cable Percussion Borehole No. BH05											
Project Name: Oldlands Farm, Phase 1a and 2							Co-ords: 494603E, 101895N	Sheet 2 of 2			
Location: Bognor Regis					Project No: C-06566-C		Ground Level: 0.89m OD	Hole Type: CP			
Client: Hanbury Properties							Date(s): 11/05/17	Hole Diameter: 150mm			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		11.00 11.00-11.45 11.00	D D SPT	N=19 (3,7/4,5,5,5)				Structureless CHALK recovered as off white sandy silty, subangular to subrounded mainly medium and coarse gravel. Gravel is weak to moderately weak, medium density with black specks on clasts. Matrix is off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)			
		12.50-12.95 12.50	D SPT	N=38 (8,8/9,10,10,9)							
		13.00 13.00	D D								
		14.00-14.45 14.00	D SPT	N≥50 (10,12/40 for 265mm)							
		15.00-15.45 15.00	D SPT	N=49 (10,11/11,15,13,10)							
					15.00	-14.11		End of Borehole at 15.00m			
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 3.00-5.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 3.60m bgl.						Logged:	JEH	Checked:	JC

Hydrock							Cable Percussion		Borehole No. BH06 Sheet 1 of 2	
Project Name: Oldlands Farm, Phase 1a and 2							Co-ords: 494666E, 101941N		Hole Type: CP	
Location: Bognor Regis					Project No: C-06566-C		Ground Level: 0.89m OD		Scale: 1:50	
Client: Hanbury Properties							Date(s): 12/05/17		Hole Diameter: 150mm	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
		Depth (m)	Type	Results						

Hydrock						Cable Percussion		Borehole No. BH06			
Project Name: Oldlands Farm, Phase 1a and 2						Co-ords: 494666E, 101941N		Sheet 2 of 2			
Location: Bognor Regis				Project No: C-06566-C		Ground Level: 0.89m OD		Hole Type: CP			
Client: Hanbury Properties						Date(s): 12/05/17		Scale: 1:50			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		11.00-11.45 11.00	B SPT	N=15 (2,3/3,3,4,5)				density with black specks on clasts. Matrix is off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)			
		12.00	D								
		12.50-12.95 12.50	D SPT	N=20 (2,4/4,4,5,7)							
		13.00 13.00-13.50	B B								
		14.00-14.45 14.00	B SPT	N=13 (2,2/3,3,4,3)							
		15.00-15.45 15.00	D SPT	N=5 (2,2/1,1,1,2)	15.00	-14.11		End of Borehole at 15.00m			
Remarks:		Borehole installed with gas and groundwater monitoring well. Response zone: 2.00-6.00m						B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample			
Groundwater:		Groundwater encountered at 4.50m bgl.						Logged:	JEH	Checked:	JC

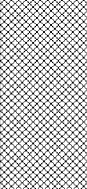
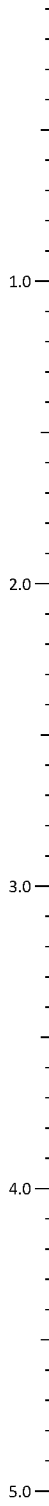
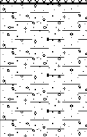
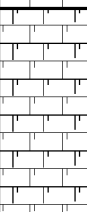
Hydrock						Trial Pit		Trial Pit No: TP101 Sheet 1 of 1			
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP			
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494147E, 101647N		Scale: 1:25			
Client: Hanbury Properties						Date(s): 18/05/17		Plant Used: 8T JCB			
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description				
	Depth (m)	Type	Results								
	0.15	D		0.50	2.03		Dark brown clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded asphalt, concrete and flint. (MADE GROUND)				
	0.15	ES					Orange brown clayey SAND. (RIVER TERRACE DEPOSITS - GRANULAR) At 1.50m bgl: Becoming very clayey.				
	0.80	B									
	0.80	B									
	1.00	D									
1.00	D	1.0									
	2.30	B					Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks chalk and subrounded to subangular with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)				
	2.80	D		2.70	-0.17		2.0				
				3.00	-0.47		3.0				
							4.0				
							5.0				
Remarks:		Trial pit encountered slight spalling of sides.Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample				
Stability:		Unstable									
Groundwater:		Groundwater not encountered.					Logged:		JEH	Checked:	JC

Hydrock						Trial Pit		Trial Pit No: TP102 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494176E, 101620N Ground Level: 3.03m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 18/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
				0.60	2.43		Dark brown clayey gravelly SAND. Gravel is fine to coarse angular to subrounded chalk, flint and brick. (TOPSOIL)		
	0.70 0.70	B B					Light grey brown sandy GRAVEL of fine to coarse angular to subrounded brick, chalk, wood, glass flint cloth, tile, metal, concrete and ash. (MADE GROUND)		
				1.10	1.93				
	1.30	D					Orange brown clayey SAND. (RIVER TERRACE DEPOSITS - GRANULAR)		
	2.00	D							
				2.70	0.33		Structureless CHALK composed of light grey sandy slightly gravelly SILT. Gravel is weak, moderate density white with black specks and subrounded to subangular. With occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	3.00 3.00	D D		3.25	-0.22		End of Trial Pit at 3.25m		
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater encountered at 2.80m bgl rising fast.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP103 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494446E, 101792N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 12/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20 0.20	D ES		0.35	0.80		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded chalk and flint with rootlets. (TOPSOIL)		
	0.60	D					Light grey orange brown clayey slightly gravelly SAND. Gravel is fine to coarse subrounded flint with cobble sized clay pockets. (RAISED MARINE DEPOSIT)		
	1.20	D		1.10	0.05		Structureless CHALK composed of light grey to cream gravelly sandy silt. Gravel is weak, moderate density, white with black specks subrounded chalk. (Grade Dm) (UNDIFFERENTIATED CHALK)		
				2.00	-0.85		End of Trial Pit at 2.00m		
Remarks:		Trial pit collapsed on both sides from 1.20m bgl. Trial pit backfilled with arisings upon completion.						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.60m bgl.						Logged: JEH Checked: JC	

Hydrock						Trial Pit		Trial Pit No: TP104 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494221E, 101598N Ground Level: 2.95m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 18/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20	ES		0.50	2.45		Dark brown clayey slightly gravelly SAND. Gravel is fine to coarse angular flint and chalk. (TOPSOIL)		
	0.70 0.70	B B					Orange brown gravelly SAND. Gravel is fine to coarse angular flint, ash, glass, cloth and geotextile. (MADE GROUND)		
				1.00	1.95		Orange brown clayey SAND. (RIVER TERRACE DEPOSITS - GRANULAR)		
	1.50 1.50	B B		1.80	1.15		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	2.40	B					At 2.90m bgl: Becoming gravelly.		
			3.00	-0.05		End of Trial Pit at 3.00m			
Remarks:		Trial pit backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater encountered at 2.90m bgl rising moderately.					Logged: JEH Checked: JC		

Hydrock					Trial Pit		Trial Pit No: TP107 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis			Project No: C-06566-C		Co-ords: 494420E, 101860N		Scale: 1:25	
Client: Hanbury Properties					Date(s): 12/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
	Depth (m)	Type	Results					
	0.20	ES		0.30	1.64		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded chalk and flint with frequent rootlets. (TOPSOIL)	
	0.60	D					Orange brown clayey SAND. (RAISED MARINE DEPOSIT)	
	1.00	D		1.20	0.74		Structureless CHALK composed of light grey to cream gravelly sandy silt. Gravel is weak, moderate density, white with black specks and subrounded chalk. With an increase in gravel below 2.40m bgl (Grade Dm) (UNDIFFERENTIATED CHALK)	
	1.50	D						
	2.00	D						
	2.50	D						
			2.90	-0.96		End of Trial Pit at 2.90m		
Remarks:		Slight spalling of sides from 1.80m bgl. Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Unstable						
Groundwater:		Groundwater encountered at 1.80m bgl.					Logged: JEH Checked: JC	

Hydrock						Trial Pit		Trial Pit No: TP108 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494176E, 101674N Ground Level: 2.12m OD		Scale: 1:25		
Client: Hanbury Properties						Date(s): 18/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
	Depth (m)	Type	Results							
	0.30	B		0.65	1.47		Orange brown gravelly SAND. Gravel is fine to coarse angular to subangular flint, chalk and brick. (MADE GROUND)			
	0.30	B								
	0.50	ES								
	0.80	B		1.10	1.02		Firm friable sandy slightly gravelly orange brown mottled grey CLAY with occasional black streaks. Gravel is fine to coarse angular flint. (RIVER TERRACE DEPOSITS - COHESIVE)			
	0.80	B								
	0.80	D								
	1.40	B		2.20	-0.08		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with occasional nodules of flint. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)			
	1.40	D								
	1.40	D								
	2.30	D		2.90	-0.78		Structureless CHALK composed of off white very sandy silty, subangular to subrounded mainly medium and coarse gravel of weak, medium density with frequent black specks chalk. Matrix is uncompact off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)			
2.80	B									
End of Trial Pit at 2.90m										
Remarks:		Trial pit backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample			
Stability:		Stable								
Groundwater:		Groundwater encountered at 2.70m bgl rising fast.					Logged: JEH Checked: JC			

Hydrock						Trial Pit		Trial Pit No: TP109 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494202E, 101695N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 18/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.50	D	53	0.70	1.41		Orange brown gravelly SAND. Gravel is fine to coarse angular to subrounded flint, chalk and brick. (MADE GROUND)		
				0.80	1.31		Firm friable blue black sandy organic rich CLAY. (RIVER TERRACE DEPOSITS - COHESIVE)		
	1.20	D					Firm friable orange brown sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded flint. (RIVER TERRACE DEPOSITS - COHESIVE)		
	1.50	HSV							
	2.00	D			1.90	0.21		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with occasional nodules of flint. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)	
	2.90	D		3.20	-1.09		End of Trial Pit at 3.20m		
Remarks:		Trial pit collapsed at 1.40m bgl to base of pit at 3.20m bgl. Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 2.80m bgl rising fast.					Logged: JEH Checked: JC		

Hydrock					Trial Pit		Trial Pit No: TP110 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494222E, 101676N		Scale: 1:25	
Client: Hanbury Properties					Date(s): 18/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.00	B		0.70	1.41		Orange brown gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk with occasional gravel sized clay pockets. (MADE GROUND)		
	0.40	B							
	0.80 0.80 0.80	B B ES							
	1.20	B		1.10	1.01		Firm friable dark brown and orange, mottled with black streaks, sandy gravelly CLAY. Gravel is fine to coarse angular to subangular chalk. (RIVER TERRACE DEPOSITS - COHESIVE)		
	2.30	D		3.20	-1.09		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with rare flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	2.80	B							
End of Trial Pit at 3.20m									
Remarks:		Trial pit encountered slight collapse of sides at 2.40m bgl.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 2.40m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP111 Sheet 1 of 1			
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP			
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494264E, 101659N Ground Level: 2.13m OD		Scale: 1:25			
Client: Hanbury Properties						Date(s): 17/05/16		Plant Used: 8T JCB			
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description				
	Depth (m)	Type	Results								
	0.30 0.30	B ES		1.00	1.13		Orange brown gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. (MADE GROUND)				
	1.30 1.30	B B					Firm friable orange brown mottled yellow sandy CLAY. (RIVER TERRACE DEPOSITS - COHESIVE)				
				1.90	0.23		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with rare flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)				
							End of Trial Pit at 2.70m				
				2.70	-0.57						
Remarks:		Trial pit encountered collapse at 1.90m bgl and was backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample				
Stability:		Unstable									
Groundwater:		Groundwater encountered at 2.20m bgl rising exponentially.					Logged:		JEH	Checked:	JC

Hydrock						Trial Pit		Trial Pit No: TP112 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494292E, 101665N Ground Level: 2.12m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 16/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.30 0.30	B B		0.70	1.42		Orangey brown very gravelly SAND. Gravel is fine to coarse angular to subrounded flint, chalk and brick. (MADE GROUND)		
	0.90 0.90 1.00	B B D					Dark brown clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint with relict rootlets. (RIVER TERRACE DEPOSITS - GRANULAR) <i>At 1.00m bgl: Slight black colouring and clay pockets.</i>		
	1.30 1.30	B D		1.10	1.02		Firm friable orange brown slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded flint and occasional cobbles. (RIVER TERRACE DEPOSITS - COHESIVE)		
							Structureless CHALK composed of off-white sandy gravelly silt. Gravel is fine to medium (coarsening with depth) chalk. Some flint nodules and off white orange staining. (UNDIFFERENTIATED CHALK)		
		2.00	B		2.90	-0.78		End of Trial Pit at 2.90m	
	2.50	D							
Remarks:		Trial pit sides collapsed at 2.00m to base of pit at 3.00m bgl. Trial pit backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC		

Hydrock				Trial Pit			Trial Pit No: TP114 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494236E, 101723N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 16/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20 0.20	B ES					Orange brown gravelly SAND. Gravel is fine to coarse angular to subrounded flint, chalk, brick and asphalt. (MADE GROUND)		
	0.70	D		0.65 0.80	1.44 1.29		Soft dark grey mottled orange slightly gravelly CLAY. Gravel is fine to coarse angular to subangular chalk and flint. (RIVER TERRACE DEPOSITS - COHESIVE)		
	1.40 1.40	B D					Firm friable orange brown mottled grey silty sandy CLAY. Rare flint gravel. (RIVER TERRACE DEPOSITS - COHESIVE)		
	2.50 2.50	D D					From 2.00m bgl: Becoming very grey.		
				3.00	-0.91		End of Trial Pit at 3.00m		
Remarks:		Trial pit collapsed on both sides at 2.00m bgl to base					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 2.20m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP115	
								Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494275E, 101753N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 16/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20 0.20	D ES	93	0.60	1.47		Light orange brown sandy GRAVEL of fine to coarse angular to subrounded flint and chalk. Occasional tiles and plastic caps. (MADE GROUND)		
	0.80 1.00	D ES					Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. Strong odour of rotten vegetation. (RIVER TERRACE DEPOSITS - GRANULAR)		
	1.40 1.50	HSV D					Firm to stiff high shear strength blue grey mottled orange silty CLAY. (RIVER TERRACE DEPOSITS - COHESIVE)		
	2.30 2.80	D D					Structureless CHALK composed of light grey sandy slightly gravelly SILT. Gravel is weak, moderate density white with black specks and subrounded to subangular. With rare flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	End of Trial Pit at 3.00m								
Remarks: Trial pit backfilled with arisings upon completion						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample			
Stability: Stable									
Groundwater: Groundwater not encountered.						Logged: JEH Checked: JC			

Hydrock					Trial Pit		Trial Pit No: TP116	
							Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis			Project No: C-06566-C		Co-ords: 494333E, 101792N		Scale: 1:25	
Client: Hanbury Properties					Date(s): 12/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
	Depth (m)	Type	Results					
	0.20	D		0.30	0.81		Dark orange brown slightly clayey SAND. (TOPSOIL)	
	0.20	ES						
	0.35	ES						
	0.60	D	70			Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk with red staining and occasional rootlets. (RAISED MARINE DEPOSIT)		
	0.70	HSV						
	1.00	D	36			Firm becoming soft low to medium shear strength light grey and orange brown silty CLAY. Rare fine to medium flint and chalk gravel. (RAISED MARINE DEPOSIT)		
	1.10	HSV						
	1.90	D				At 1.90m bgl: Band of flint. Becoming blue grey and soft.		
3.00	D		2.80	-1.69		Structureless CHALK of off white sandy silty, subangular to subrounded mainly medium and coarse gravel is weak, medium density with frequent black specks. Matrix is uncompact off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)		
3.00	D							
			3.20	-2.09		End of Trial Pit at 3.20m		
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Stable						
Groundwater:		Groundwater encountered at 1.60m bgl.					Logged: JEH Checked: JC	

Hydrock						Trial Pit		Trial Pit No: TP117	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Sheet 1 of 1	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494326E, 101709N		Hole Type: TP	
Client: Hanbury Properties						Ground Level: 2.07m OD		Scale: 1:25	
						Date(s): 16/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.35 0.35	B B		0.50	1.57		Orangey brown very gravelly SAND. Gravel is fine to coarse angular to subrounded brick, flint with occasional metal. (MADE GROUND)		
	0.70	D					Dark brown clayey slightly gravelly SAND. Gravel is fine to medium angular to subangular flint and chalk. Odour of rotten vegetation. (RIVER TERRACE DEPOSITS - GRANULAR)		
	1.40	HSV	90	1.30	0.77		Firm high shear strength blue grey mottled orange silty CLAY. (RIVER TERRACE DEPOSITS - COHESIVE)		
	1.60	D					Firm medium shear strength orange brown CLAY. (RIVER TERRACE DEPOSITS - COHESIVE)		
	2.20 2.20	D HSV	45	2.30	-0.23		Structureless CHALK of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with rare flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
						End of Trial Pit at 3.00m			
				3.00	-0.93				
Remarks:		Trial pit undertaken in stockpile. Trial pit backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP118 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494355E, 101717N Ground Level: 2.03m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 16/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.30	ES					Orange brown very gravelly SAND. Gravel is fine to coarse angular to subangular flint, brick, glass, wire and chalk. (MADE GROUND)		
				0.90	1.13		Dark brown clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint. Occasional chalk. (RAISED MARINE DEPOSIT)	1.0	
	1.50	HSV	39	1.30	0.73		Soft low shear strength blue grey sandy silty CLAY with relict rootlets. (RAISED MARINE DEPOSIT)		
	1.90	HSV	64	1.70	0.33		Soft to firm medium shear strength orange brown CLAY. (RAISED MARINE DEPOSIT)	2.0	
				2.40	-0.37		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk with rare flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)	3.0	
				3.20	-1.17		At 3.10m bgl; Becoming blue white End of Trial Pit at 3.20m	4.0	
								5.0	
Remarks:		Trial pit backfilled with arisings upon completion						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Stable							
Groundwater:		Groundwater not encountered.						Logged: JEH Checked: JC	

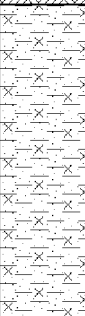
Hydrock					Trial Pit		Trial Pit No: TP119													
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Sheet 1 of 1													
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494398E, 101786N		Hole Type: TP												
Client: Hanbury Properties					Ground Level: 1.37m OD		Scale: 1:25		Plant Used: 8T JCB											
Date(s): 12/05/17																				
<table><tr><td rowspan="2">Water Strikes</td><td colspan="3">Sample and In Situ Testing</td><td rowspan="2">Depth (m)</td><td rowspan="2">Level (m OD)</td><td rowspan="2">Legend</td><td rowspan="2">Stratum Description</td></tr><tr><td>Depth (m)</td><td>Type</td><td>Results</td></tr></table>										Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	Depth (m)	Type	Results
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description													
	Depth (m)	Type	Results																	
0.30 ES 0.80 0.57 1.00 0.27 1.40 HSV 68 1.40 HSV 25 1.80 D 2.00 2.90 D 3.30 -1.93 Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint. Occasional chalk. (TOPSOIL) Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular flint. Occasional rootlets. (RAISED MARINE DEPOSIT) Firm becoming soft low to medium shear strength grey mottled orange brown CLAY. (RAISED MARINE DEPOSIT) At 2.00m bgl: Some flint gravel and occasional sand pockets. At 2.90m bgl: Blue black plant fragments and wood End of Trial Pit at 3.30m 1.0 2.0 3.0 4.0 5.0																				
Remarks:		Trial pit excavated from stockpile.Trial pit backfilled with arisings upon completion.						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample												
Stability:		Stable																		
Groundwater:		Groundwater encountered at 1.40m bgl.						Logged: JEH Checked: JC												

Hydrock						Trial Pit		Trial Pit No: TP120	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Sheet 1 of 1	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494363E, 101819N Ground Level: 1.23m OD		Hole Type: TP	
Client: Hanbury Properties						Date(s): 12/05/17		Scale: 1:25	
Client: Hanbury Properties						Date(s): 12/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results				Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. Occasional rootlets. (TOPSOIL)		
							Firm orange brown and grey silty CLAY. Occasional rootlets to 0.80m. (RAISED MARINE DEPOSIT)		
							Light grey clayey sandy GRAVEL. Gravel is fine to coarse angular to subrounded flint. (RAISED MARINE DEPOSIT)		
							Soft orange brown silty CLAY. (RAISED MARINE DEPOSIT)		
							Structureless CHALK composed of off-white gravelly sandy silt. Gravel is weak, moderate density, white with black specks and subrounded chalk. Light brown and blue pockets of clay. Occasional flint cobbles. (Grade Dm) (UNDIFFERENTIATED CHALK)		
							Structureless CHALK composed of off white sandy silty, subangular to subrounded mainly medium and coarse gravel of weak, medium density with frequent black specks chalk. Matrix is uncompact off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)		
							End of Trial Pit at 2.70m		
Remarks:		Trial pit collapsed at 1.30m bgl from base of pit at 2.70m bgl.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.70m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP122 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494481E, 101814N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 12/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
				0.30	0.73		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. (TOPSOIL)		
	0.50	HSV	51				Soft to firm orange brown and grey sandy silty CLAY. Black streaks at 0.90m bgl. (RAISED MARINE DEPOSIT)		
	0.80	HSV	45						
	1.30	B		1.10	-0.07		Light grey mottled orange brown clayey SAND. Occasional gravel of coarse flints. (RAISED MARINE DEPOSIT)		
	1.30	B		1.50	-0.47		Very soft orange brown sandy CLAY. (RAISED MARINE DEPOSIT)		
				1.90	-0.87		Structureless CHALK composed of light grey to cream gravelly sandy silt. Gravel is weak, moderate density, white with black specks and subrounded chalk. (Grade Dm) (UNDIFFERENTIATED CHALK)		
			2.60	-1.57		End of Trial Pit at 2.60m			
Remarks:		Trial pit collapsed on both sides from 0.30m to 1.90m bgl. Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.70m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP123 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494475E, 101857N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 11/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20	D		0.30	1.45		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk with abundant rootlets. (TOPSOIL)		
	0.20	ES					Orange brown clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint. (RAISED MARINE DEPOSIT)		
	0.50	D		0.90	0.85		Structureless CHALK composed of light grey to cream gravelly sandy silt. Gravel is weak, moderate density, white with black specks and subrounded chalk. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	0.80	B							
0.80	B								
1.80	D		2.20	-0.45		End of Trial Pit at 2.20m			
1.80	D								
Remarks:		Trial pit collapsed from 0.90m to bas of pit at 2.20m bgl. Trial pit backfilled with arsings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.90m bgl rising fast.					Logged: JEH Checked: JC		

Hydrock					Trial Pit		Trial Pit No: TP124 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494585E, 101719N		Scale: 1:25	
Client: Hanbury Properties					Date(s): 11/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.15	D		0.30	0.71		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
	0.15	ES					Soft orangeish grey brown sandy CLAY. With occasional cobble sized sand pockets. Rootlets present. (RAISED MARINE DEPOSIT)		
	0.50	D		0.70	0.31		Orange brown mottled grey slightly clayey SAND. (RAISED MARINE DEPOSIT)		
	0.50	D					From 1.00m bgl: Becomes grey.		
	1.60	B		1.80	-0.79		End of Trial Pit at 1.80m		
	1.60	B							
Remarks:		Trial pit sides collapsed from 0.30m from base of pit at 1.80m bgl.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP125 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494625E, 101805N Ground Level: 1.09m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
				0.35	0.74		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
	0.50	D					Soft to firm orange brown slightly sandy silty CLAY. (RAISED MARINE DEPOSIT)		
	1.00	HSV	49	1.40	-0.31		Dark grey to orange SAND. (RAISED MARINE DEPOSIT)		
	1.50 - 1.70 1.50 - 1.70 1.60	B B D		3.00	-1.91		End of Trial Pit at 3.00m		
Remarks:		Trial pit collapsed from 1.60m bgl due to groundwater influence. Trial pit backfilled with arisings upon completion.						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.60m bgl as running sands.						Logged: JEH Checked: JC	

Hydrock						Trial Pit		Trial Pit No: TP126 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494611E, 101836N Ground Level: 0.97m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.15	D	39	0.30	0.67		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
	0.15	ES					Soft orange brown mottled light grey sandy silty CLAY. (RAISED MARINE DEPOSIT)		
	0.50	D		1.20	-0.23		Very soft blue grey occasionally mottled orange brown CLAY. (RAISED MARINE DEPOSIT)		
	0.50	D							
	0.80	HSV							
	1.00	D							
	1.50	D		3.20	-2.23		At 2.40m bgl: Slightly gravelly fine to coarse angular flints, with occasional cobbles.		
	2.50	D							
	2.50	D							
	2.50 - 2.80	B		End of Trial Pit at 3.20m					
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable					Logged: JEH Checked: JC		
Groundwater:		Groundwater encountered at 1.30m bgl.							

Hydrock						Trial Pit		Trial Pit No: TP127		
								Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494556E, 101838N		Scale: 1:25		
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
	Depth (m)	Type	Results							
	0.15	D	46	0.30	0.73		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)			
	0.15	ES					Soft medium shear strength orange brown mottled grey sandy silty CLAY. (RAISED MARINE DEPOSIT)			
	0.50	D	29	0.90	0.13		Very soft low shear strength orange brown slightly gravelly sandy CLAY. Gravel is fine to coarse angular to subangular flint, with occasional cobbles. Cobbles sized pockets of light grey sand. (RAISED MARINE DEPOSIT)			
	0.50	HSV					Very soft blue grey slightly gravelly silty CLAY. Gravel is fine to coarse angular to subangular flint with occasional cobbles. (RAISED MARINE DEPOSIT)			
	1.10	D	3.20	1.70	-0.67		Very soft blue grey slightly gravelly silty CLAY. Gravel is fine to coarse angular to subangular flint with occasional cobbles. (RAISED MARINE DEPOSIT)			
	1.10	D					End of Trial Pit at 3.20m			
1.50	HSV									
2.50	D									
3.00	D									
3.00	D									
Remarks:		Trial pit collapsed from surface to 1.90m bgl. Trial pit backfilled with arisings upon completion.						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable								
Groundwater:		Groundwater not encountered.						Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP128 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494565E, 101866N Ground Level: 0.93m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
				0.30	0.63		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
	0.70	HSV	43				Soft low to medium shear strength orange brown mottled grey sandy silty CLAY. (RAISED MARINE DEPOSIT)		
	1.00	HSV	33						
	1.80	HSV	21	1.70	-0.77		Very soft to soft low shear strength blue grey silty CLAY. Wet. (RAISED MARINE DEPOSIT)		
	2.50	D		2.10	-1.17		Structureless CHALK composed of off white sandy silty, subangular to subrounded mainly medium and coarse gravel of weak, medium density with frequent black specks chalk. Matrix is uncompact off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)		
				3.00	-2.07		End of Trial Pit at 3.00m		
Remarks:		Trial pit collapsed from 2.10m bgl from base of pit likely due to groundwater influence. Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 2.40m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP129 Sheet 1 of 1			
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP			
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494584E, 101910N Ground Level: 1.33m OD		Scale: 1:25			
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB			
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description				
	Depth (m)	Type	Results								
	0.20	ES	50	0.30	1.03		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint, chalk, plastic and rope. With abundant rootlets. (MADE GROUND)				
	0.70 0.70	D D					Firm medium shear strength dark grey mottled orange brown becoming orange with depth sandy CLAY. (RAISED MARINE DEPOSIT)				
	1.20	HSV				2.00	-0.67		Structureless CHALK composed of light grey to cream gravelly sandy silt. Gravel is weak, moderate density, white with black specks and subrounded chalk. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	2.50	B							End of Trial Pit at 2.90m		
Remarks:		Trial pit collapsed from surface to 2.00m bgl, with spalling of sides noted during excavation. Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample				
Stability:		Unstable									
Groundwater:		Groundwater encountered at 1.00m bgl.					Logged: JEH Checked: JC				

Dimensions: 0.60m x 2.00m

Hole Type:
TP

Project No:
C-06566-C

Co-ords: 494615E, 101885N
Ground Level: 0.80m OD

Scale:

Date(s): 10/05/17

Plant Used:
8T JCB

Trial pit backfilled with arisings upon completion.

B = Bulk Sample
D = Disturbed Sample
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
CBR = In Situ California Bearing Ratio (%)
HSV = Hand Shear Vane (kPa)
HP = Hand Penetrometer (kPa)
AB = Asbestos Bulk Sample

Stable

Groundwater:	Groundwater encountered at 1.50m bgl rising exponentially.
---------------------	--

Logged:	JEH	Checked:	JC
----------------	-----	-----------------	----

Hydrock						Trial Pit		Trial Pit No: TP131 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494650E, 101882N Ground Level: 1.00m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.15	ES	48	0.25	0.75		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL) Soft orange brown mottled grey brown sandy CLAY. (RAISED MARINE DEPOSIT)		
	0.60	D							
	0.60	D							
	0.60	HSV	37	1.00	-0.20				
	1.00	HSV							
	1.50	D		3.20	-2.20		Soft blue grey mottled orange silty CLAY. With occasional black streaks. (RAISED MARINE DEPOSIT) End of Trial Pit at 3.20m		
2.50	D								
2.50	D								
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater encountered at 1.40m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP132 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494644E, 101904N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20	D	47	0.30	0.80		Dark brown clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. (TOPSOIL)		
	0.20	ES					Firm to stiff light grey and brown sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded flint and chalk. (RAISED MARINE DEPOSIT)		
	0.50	D					Soft to firm low to medium shear strength orange brown mottled grey CLAY. With rootlets to 1.00m bgl. (RAISED MARINE DEPOSIT)		
	0.80	D		1.80	-0.70		At 1.50m bgl: Becoming silty with a gradational change to strata below.		
	1.00	HSV					Very soft grey blue silty CLAY. (RAISED MARINE DEPOSIT)		
	1.40	HSV					At 1.90m bgl: Flint gravel band, with occasional cobbles.		
1.90	D	3.00	-1.90		End of Trial Pit at 3.00m				
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater encountered at 1.20m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP133 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494614E, 101946N Ground Level: 1.33m OD		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
				0.30	1.03		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
	0.50	D					Soft to firm low shear strength light orange brown very sandy slightly gravelly CLAY. Gravel is fine to medium angular to subrounded chalk and flint. (RAISED MARINE DEPOSIT)		
	0.50	D							
	0.80	HSV	33						
	1.00	D							
	1.00	D							
				2.10	-0.77		Structureless CHALK composed of blue grey to cream sandy silty subangular to rounded fine to coarse gravel of weak, low density, white with black specks chalk. Matrix is uncompact, light brown to grey. (Grade Dc) (UNDIFFERENTIATED CHALK)		
	2.30	D					End of Trial Pit at 2.50m		
	2.30	D							
				2.50	-1.17				
Remarks:		Trial pit collapsed from surface. During excavation slight spalling from 1.90m to 2.10m bgl.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 2.10m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP134 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494674E, 101922N		Scale: 1:25		
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description			
	Depth (m)	Type	Results							
	0.15	D	44	0.30	0.64		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)			
	0.15	ES					Firm medium shear strength light grey mottled orange brown slightly gravelly slightly sandy CLAY. Gravel is fine to medium angular to subrounded chalk. (RAISED MARINE DEPOSIT)			
	0.70	D		1.20	-0.26		Very soft blue grey silty CLAY. (RAISED MARINE DEPOSIT)			
	0.80	HSV								
	1.00	D								
	1.00	D		3.00	-2.06		End of Trial Pit at 3.00m			
	1.80	D								
	2.50	D								
	2.50	D								
	2.80	D								
Remarks: Trial pit backfilled with arisings upon completion.							B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample			
Stability:		Unstable								
Groundwater:		Groundwater encountered at 1.20m bgl.					Logged: JEH		Checked: JC	

Trial Pit No:
TP136

Sheet 1 of 1

Dimensions: 0.60m x 2.00m

Hole Type:
TP

Project No:
C-06566-C

Co-ords: 494351E, 102068N
Ground Level: 3.98m OD

Scale:

Date(s): 16/05/17

Plant Used:
8T JCB

B = Bulk Sample
D = Disturbed Sample
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
CBR = In Situ California Bearing Ratio (%)
HSV = Hand Shear Vane (kPa)
HP = Hand Penetrometer (kPa)
AB = Asbestos Bulk Sample

Stability:	Stable
-------------------	--------

Groundwater:	Groundwater not encountered.
---------------------	------------------------------

Logged:	JEH	Checked:	JC
----------------	-----	-----------------	----

Hydrock					Trial Pit		Trial Pit No: TP138 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494437E, 102120N		Scale: 1:25	
Client: Hanbury Properties					Date(s): 16/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20 0.20	D ES		0.40	4.20		Dark brown slightly gravelly slightly clayey SAND. Gravel is fine to medium angular to subrounded flint. (TOPSOIL)		
	0.70 0.70	D D					Orange brown clayey SAND. Becoming very clayey at 0.80m bgl. (RIVER TERRACE DEPOSITS - GRANULAR)		
	1.50	D		1.70	2.90		Orange brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subangular flint. (RIVER TERRACE DEPOSITS - GRANULAR) At 1.40m bgl: Becoming very clayey		
	2.50	D					Structureless CHALK composed of white to light brown sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk. Occasional flint cobbles with a light brown matrix. (Grade Dm) (UNDIFFERENTIATED CHALK) At 2.60m bgl: Becomes gravelly with black specks on clasts.		
	3.50 3.50	D D		3.50	1.10		End of Trial Pit at 3.50m		
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP139 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494454E, 102056N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 16/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.60 0.60	B B		0.40	4.43		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded chalk and flint. Occasional rootlets. (TOPSOIL)		
				1.60	3.23		Orangey brown clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded chalk with occasional flint cobbles. (RIVER TERRACE DEPOSITS - GRANULAR)		
	2.50 2.50	B B					3.50	1.33	
End of Trial Pit at 3.50m									
Remarks:		Trial pit backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC		

Hydrock					Trial Pit		Trial Pit No: TP140 Sheet 1 of 1		
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP		
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494547E, 102087N		Scale: 1:25	
Client: Hanbury Properties					Date(s): 16/05/17		Plant Used: 8T JCB		
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.02	D		0.40	3.87		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint and occasional chalk. (TOPSOIL)		
	0.02	ES					Orange brown clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint. (RIVER TERRACE DEPOSITS - GRANULAR)		
	0.70	D							
	2.30	D							
				1.70	2.57		Structureless CHALK composed of light grey sandy slightly gravelly silt. Gravel is weak, moderate density white with black specks and subrounded to subangular chalk. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)		
				2.70	1.57		Structureless CHALK composed of off white sandy silty, subangular to subrounded mainly medium and coarse gravel of weak, medium density with frequent black specks chalk. Matrix is uncompact off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)		
				2.80	1.47		End of Trial Pit at 2.80m		
Remarks:		Trial pit backfilled with arisings at 2.80m bgl due to JCB struggling.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP141	
								Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494525E, 101872N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 10/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.60	D		0.40	1.05		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
							Soft orange brown mottled grey very sandy CLAY. (RAISED MARINE DEPOSIT)		
							Soft light grey mottled orange gravelly sandy CLAY. Gravel is fine to coarse angular to subrounded chalk and flint. (RAISED MARINE DEPOSIT)		
							Structureless CHALK composed of off white sandy silty, subangular to subrounded mainly medium and coarse gravel of weak, medium density with frequent black specks chalk. Matrix is uncompact off white and locally light brown. (Grade Dc) (UNDIFFERENTIATED CHALK)		
	1.50	D		2.00	-0.55				
	1.50	D							
	2.50	D		2.70	-1.25		End of Trial Pit at 2.70m		
Remarks:		Trial pit collapsed at 1.10m bgl to base of the pit. Trial pit backfilled with arisings upon completion.						B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.60m bgl.						Logged: JEH Checked: JC	

Hydrock						Trial Pit		Trial Pit No: TP147	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Sheet 1 of 1	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494556E, 101838N		Hole Type: TP	
Client: Hanbury Properties						Ground Level: 1.03m OD		Scale: 1:25	
						Date(s): 11/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	1.20	HSV	36	0.30	0.73		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
				0.40	0.63		Soft low shear strength light grey mottled orange brown slightly sandy CLAY. (RAISED MARINE DEPOSIT)		
							Soft orange brown mottled grey sandy CLAY. With light grey cobble sized sand pockets. (RAISED MARINE DEPOSIT)		
				1.60	-0.57		Very soft blue grey silty CLAY. (RAISED MARINE DEPOSIT)		
							At 2.70m bgl: Becoming slightly brown.		
				3.00	-1.97		End of Trial Pit at 3.00m		
Remarks:		Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Stable							
Groundwater:		Groundwater encountered at 1.60m bgl.					Logged: JEH Checked: JC		

Hydrock						Trial Pit		Trial Pit No: TP148 Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2						Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis				Project No: C-06566-C		Co-ords: 494565E, 101866N		Scale: 1:25	
Client: Hanbury Properties						Date(s): 11/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description		
	Depth (m)	Type	Results						
	0.20	D	53	0.30	0.63		Dark brown slightly clayey slightly gravelly SAND. Gravel is fine to medium angular to subrounded flint and chalk. With abundant rootlets. (TOPSOIL)		
	0.20	ES							
	0.50	D					Soft to firm medium shear strength orange brown slightly sandy CLAY. (RAISED MARINE DEPOSIT)		
	0.50	D							
	1.00	D					Orange brown slightly clayey slightly gravelly SAND. Gravel is fine to coarse angular to subrounded flint. (RAISED MARINE DEPOSIT) <i>At 1.20m bgl: Flint cobble band.</i>		
	1.00	HSV							
	1.30	D					Structureless CHALK composed of light grey to cream gravelly sandy silt. Gravel is weak, moderate density, white with black specks and subrounded chalk. (Grade Dm) (UNDIFFERENTIATED CHALK)		
	2.40	D					End of Trial Pit at 2.60m		
	2.40	D							
3.20	D								
Remarks:		Trial pit collapsed at surface to 1.50m bgl. Trial pit backfilled with arisings upon completion.					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) HSV = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample		
Stability:		Unstable							
Groundwater:		Groundwater encountered at 1.50m bgl.					Logged: JEH Checked: JC		

Hydrock					Trial Pit		Trial Pit No: TP149	
							Sheet 1 of 1	
Project Name: Oldlands Farm, Phase 1a and 2					Dimensions: 0.60m x 2.00m		Hole Type: TP	
Location: Bognor Regis			Project No: C-06566-C		Co-ords: -		Scale: 1:25	
Client: Hanbury Properties					Date(s): 18/05/17		Plant Used: 8T JCB	
Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
	Depth (m)	Type	Results					
				0.10			Pink sandy GRAVEL of fine to coarse ballast. (MADE GROUND)	
	0.40	B					Orange brown gravelly SAND. Gravel is fine to coarse angular to subrounded flint, chalk and brick. Occasional gravel sized clay pockets. (MADE GROUND)	
	0.40	B						
				0.65			Firm friable sandy slightly gravelly CLAY. Gravel is fine to coarse angular flint with nodules. (RIVER TERRACE DEPOSITS - COHESIVE)	
	0.80	D						
	0.80	ES						
				1.20			Structureless CHALK composed of light grey sandy slightly gravelly SILT. Gravel is weak, moderate density white with black specks and subrounded to subangular. With occasional flints. Orange brown staining and light grey matrix. (Grade Dm) (UNDIFFERENTIATED CHALK)	
	1.50	D						
	1.50	D					At 2.00m bgl: Becoming whiter in colour (grey/white)	
				2.30				
2.30	D							
2.30	D					At 2.50m bgl: Becoming whiter and more gravelly.		
			2.70			End of Trial Pit at 2.70m		
								3.0
								4.0
								5.0
Remarks:		Trial pit backfilled with arisings upon completion					B = Bulk Sample D = Disturbed Sample ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) CBR = In Situ California Bearing Ratio (%) H5V = Hand Shear Vane (kPa) HP = Hand Penetrometer (kPa) AB = Asbestos Bulk Sample	
Stability:		Stable						
Groundwater:		Groundwater not encountered.					Logged: JEH Checked: JC	

Appendix 2

Geophysical Survey Plans 2021

