



# Eaton Leys substation and pumping station areas at Bletchley Milton Keynes

Archaeological Strip, Map and Record Extension



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## Summary

Wessex Archaeology was commissioned by RPS Consulting to undertake an extension to a previous, strip, map and record area to accommodate a subsequent design change. The work was carried out as a condition of planning permission for a residential development.

Two areas were opened to extend the pump station footprint and realign its service trench and a small rectangular area was opened to accommodate the substation. The areas are centred on NGR 488839 233273 and covered 232m<sup>2</sup>.

The larger extension to the pumping station area revealed the continuation of the Late Iron Age/Romano-British co-axial grid field system identified in the previous phase of works, and a pit and gully. The smaller pumping station area and substation contained no archaeological features.

The results of this phase of works will be incorporated into the forthcoming publication report for the site. Buckinghamshire County Museum has agreed in principle to accept the archive which will be deposited with the full mitigation archive upon completion of the project, under the accession code AYBCM:2018.84.

## Acknowledgements

Wessex Archaeology would like to thank the RPS Consulting, for commissioning the archaeological works, in particular Nick Cooke. Wessex Archaeology is also grateful for the advice of Nick Crank, Milton Keynes Senior Archaeological Officer and to Barratt Homes for their cooperation and help on site.



# Eaton Leys Substation and Pumping Station Areas at Bletchley, Milton Keynes

## Archaeological Strip, Map and Record Extension

### 1 INTRODUCTION

#### 1.1 Project and planning background

- 1.1.1 Wessex Archaeology was commissioned by the RPS group, to undertake an archaeological strip, map and record extension. The works covered 232m<sup>2</sup>, centred on NGR 488839 233273, at Eaton Leys, Buckinghamshire, MK17 9RB (**Fig. 1**).
- 1.1.2 The works were carried out as a condition of planning permission, granted by Milton Keynes Council as part of a programme of archaeological works, which had included two programmes of evaluation trenching and six strip, map and record area excavations. The current works involved an extension to the previous strip, map and record area to accommodate a subsequent change of design.
- 1.1.3 The strip, map and record was undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed (CgMs Heritage 2018). The Milton Keynes Senior Archaeological Officer approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing. The archaeological works were undertaken 20 – 22 April 2020.

#### 1.2 Scope of the report

- 1.2.1 The purpose of this report is to provide the results of the excavation, to interpret the results within their local or regional context (or otherwise), and to assess their potential to address the aims outlined in the WSI, thereby making available information about the archaeological resource (a preservation by record).

#### 1.3 Location, topography and geology

- 1.3.1 The watching brief was located at NGR 488839 233273.
- 1.3.2 Existing ground levels measured 74 m aOD at the easterly substation falling to 69 m aOD at the western side of the site, the location of the pumping station.
- 1.3.3 The underlying geology is mapped as Oxford Clay Formation - Mudstone (British Geological Survey online viewer).

### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

#### 2.1 Introduction

- 2.1.1 There is evidence for activity on or near the site from nearly all historical periods. With the exception of the Romano-British period, this appears to be largely background or agricultural activity. More significantly, the site encompasses part of the Roman town of Magiovinium (SAM1006943) and the agricultural hinterland surrounding the urban centre.
- 2.1.2 The current programme of archaeological works attached to the planning permission for the development include an archaeological desk-based assessment (CgMs Heritage 2015),



geophysical survey (MOLA 2014 & 2015a), fieldwalking (MOLA 2015b), two phases of trial trenching (MOLA 2016, CA 2017) and a programme of strip, map and record excavations (Wessex Archaeology 2019). These are discussed below.

## 2.2 Previous investigations related to the development

### *Geophysical survey (2014)*

- 2.2.1 Geophysical survey conducted on the site identified the southern extent of Magiovinium (MOLA 2014 & 2015a). It revealed an extensive urban sprawl south of Watling Street initially unenclosed with evidence of later contraction and fortification in the form of multivallate defences. It also identified evidence of possible Roman activity 1 km south of Magiovinium with dispersed boundary ditches and trackways in the agricultural land south of the town (MOLA 2014).

### *Heritage desk-based assessment (2015)*

- 2.2.2 A desk-based assessment was conducted in association with the development. It informed the development plan so as to negate damage to the settlement of Magiovinium and minimise the impact to other non-designated Roman strata (CgMs Heritage 2015).

### *Fieldwalking survey (2015)*

- 2.2.3 The site was fieldwalked during 2015 (MOLA 2015b). The survey identified finds from the Neolithic through to the modern period. With the exception of the Romano-British and post-medieval periods, the volume of finds was consistently low, suggesting background prehistoric activity and agricultural activity throughout the medieval period. Outside the scheduled monument there was a medium scatter of Romano-British pottery across the fields that became the target of the mitigation works. A single sherd was identified further south. Medium levels of post-medieval pottery were identified across the site.

### *Trial trench evaluation phase 1 (2016)*

- 2.2.4 A programme of trial trenching targeting anomalies identified by the geophysical survey was undertaken in August 2016 (MOLA 2016). Of the total of 22 trenches, 10 were located within the jurisdiction of Milton Keynes Council. Of these trenches, only one contained archaeological remains: an unurned deposit of cremated bone.

### *Trial trench evaluation phase 2 (2017)*

- 2.2.5 A second, more substantial, programme of trial trenching was undertaken in 2017 (CA 2017). A total of 108 trenches were excavated; 60 of these contained archaeological features. The features were broadly concentrated in the north-west of the site, in close proximity to Magiovinium but became more dispersed away from the town. A single feature yielded prehistoric pottery; the bulk of the dateable features were late Iron Age or Romano-British. These features included two possible trackways running south of Magiovinium, possible enclosures, pits and gullies. Further ditches were also dated to the Roman period. Nine possible cremation burials were identified from seven trenches distributed across the site, indicating that the cremation excavated by MOLA was not an isolated example. The cremation-related features were left unexcavated and tentatively dated to the early–mid Romano-British period.

### *Strip, Map and Record excavation (2018)*

- 2.2.6 The final stage of investigation included the excavation of six areas informed by the result of the earlier evaluations (Wessex Archaeology 2019). South of Magiovinium two Iron Age–Romano-British driveways and a coaxial field system were identified alongside a number of pits and smaller ditches and gullies. South-east of Magiovinium an Anglo-Saxon





cremation cemetery was excavated. A number of smaller areas identified scattered ditches, pits, gullies and cremation related deposits.

## **2.3 Archaeological and historical context**

2.3.1 The following background material primarily derives from the archaeological desk-based assessment (CgMs Heritage 2015) for the site.

### *Prehistoric*

2.3.2 No evidence of Palaeolithic activity was identified within the study site.

2.3.3 A Palaeolithic axe was retrieved from dredging deposits following cleaning of the River Ouzel adjacent to the site (MMK1083 at SP88520 33300). Three Palaeolithic axes were found 1.3 km to the north of the site in similar circumstances (MMK1102, MMK1103 and MMK1104).

2.3.4 There are no references to the Mesolithic period either within the site or the study area.

2.3.5 Approximately 100 m to the south of the study site and located within an Archaeological Notification Area (0186400000), a ring ditch identified on an aerial photograph was tentatively dated to the Neolithic/Bronze Age. Within the study area and the Archaeological Notification Area, an undated enclosure was identified on the same aerial photograph (0187200000). The recent geophysical survey (MOLA 2014) identified an enclosure in the approximate position for the enclosure mentioned above, however, the regular internal divisions identified by the survey implies a later Roman date.

2.3.6 There are no entries on either the Milton Keynes or Buckinghamshire HERs for artefacts or sites dating to the Bronze Age within the site.

2.3.7 Within the wider study area all entries dating to the Bronze Age relate to metal finds and flint arrowheads. These are located to the west of the study area on better drained land. A collection of arrowheads was found at SP85400 33400 (MMK1085) approximately 200 m from the site boundary.

2.3.8 An arrowhead was found at SP88300 33480 (MMK1088) 400 m from the site's western boundary. Metal fragments, possibly a hoard, were found 1 km north-west of the site's centre (MMK1084). Bronze Age arrowheads were also found 1.3 km to the west of the site boundary (MMK1086).

2.3.9 There are no entries on either the Milton Keynes or the Buckinghamshire HER for artefacts or structures belonging to the Iron Age. It is possible that evidence for Iron Age settlement may be located beneath the Roman occupation levels of the scheduled monument but this has yet to be proven.

2.3.10 An early Iron Age settlement was identified on the opposite bank of the River Ouzel 50 m from the western boundary of the site (MMK1166 to MMK1172).

2.3.11 An enclosure, dated to the Iron Age, was found during excavations 1.5 km to the south of the study site (0612300000).

### *Romano-British*

2.3.12 The northern part of the development site lies over a scheduled monument (1006943). The scheduled area covers the Roman town of Magiovinium, which straddles Watling Street and



an earlier fort (MMK684), the latter located to the south of Watling Street. Based on minor investigations in the past, the area also includes an extensive industrial area outside the town (MMK688) and cemeteries. The enclosed town covers 0.8 ha of the scheduled area.

- 2.3.13 HER entries within the scheduled area relate to numerous artefacts recovered during watching briefs, small evaluations and fieldwalking. The majority of the finds are coins spanning the Romano-British period from the 1st to 4th centuries, however large amounts of pottery spanning the period have also been retrieved.
- 2.3.14 Immediately outside the town (to the east) and adjacent to the south side of Watling Street a possible Roman temple was excavated (MMK693 to MMK700).
- 2.3.15 Roman buildings and enclosures are located further east adjacent to Watling Street (MMK690 and MMK691).
- 2.3.16 A pair of parallel ditches observed on an aerial photograph within the site (MMK7684) was thought to mark the course of a Roman road leading south from the town of Magiovinium. The area is regarded as an Archaeological Notification Area. The northern end of this road has been detected by geophysical survey (MOLA 2014) emanating from the southern edge of Magiovinium.
- 2.3.17 The geophysical survey identified five concentric defensive ditches protecting the southern edge of Magiovinium. The ditches, believed to be late 2nd or 3rd century AD, protect the core of the previously undefended Roman town and have cut through and destroyed earlier phases of buildings and activities associated with the much larger original town footprint. These later defences of the reduced town area suggest suburban contraction (Hunn et al 1997) in the later Roman period. However, the brutal nature and extent of the defensive works that carved through the town footprint is more indicative of hasty defences against some unknown, but archaeologically well documented, civil unrest that occurred in eastern England around AD 170 (Brown 1995).
- 2.3.18 A Roman road (Buckinghamshire HER, 0297910000) is believed to leave Watling Street at SP232850 490500 and head in a gentle south-west curve to the eastern boundary of the site and then follow the line of the drain that bisects the site. The recent geophysical survey did not identify this road.

#### *Anglo-Saxon and medieval*

- 2.3.19 No Anglo-Saxon or medieval sites or finds are recorded within the study site although it is likely that the area would have been farmed.
- 2.3.20 To the east of the site, centred on SP90100 32500, a metal detector survey retrieved numerous metal objects dating to the medieval and post-medieval periods. The artefacts are not necessarily indicative of a settlement or building, for which no evidence exists, but they may have been deposited as a result of 'manuring' (rubbish from nearby settlements ploughed into fields).
- 2.3.21 To the west of the River Ouzel, approximately 100 m from the site boundary, a complex of features may represent the site of an early medieval manor. MMK2133 (also MMK2134) marks the site of Water Hall; MMK2135–6 marks the site of a moated enclosure and a fishpond.
- 2.3.22 Earthworks interpreted as evidence of the shrunken medieval village of Water Eaton are located in the same area (MMK2137 at SP88200 33200).



- 2.3.23 Water Eaton Mill (MMK2018 at SP88300 32900) may be located on the site of an Early Medieval mill.
- 2.3.24 Ridge and furrow, which can date to the medieval period, was recorded in the centre of the site in 1995. The upstanding earthworks are no longer observable although the recent geophysical survey (MOLA 2014) recorded weak signals of their former extent. The ridge and furrow has been destroyed by modern farming methods.
- Post-medieval and modern*
- 2.3.25 Small villages existed at Water Eaton and Fenny Stratford, with isolated dwellings and farms dotted across the landscape to the east. Land within the study site and the study area had an agricultural focus throughout the post-medieval and modern periods.
- 2.3.26 Jeffery's map dated 1768 shows the site as a large open space bisected by the east–west aligned drain still visible today. The area of the Roman settlement, although not labelled, is depicted as higher ground; the southern edge corresponding to the southern edge of the Roman town and fort. A mill, presumably Eaton Leys mill, is annotated.
- 2.3.27 The 1772 Great Brickhill and Little Brickhill Enclosure maps show the southern half of the site as an open field and the northern half as Great Tithes. The existing east–west drain divides the site and forms the boundary between the two parishes.
- 2.3.28 The Grand Union Canal (Buckinghamshire HER 0411900000) was commissioned in 1793 and completed in 1805. The canal is located to the west of the River Ouzel and runs roughly parallel at a distance of 150m to the west of the site boundary.
- 2.3.29 The Ordnance Survey map, dated 1813, shows the area in low detail, however, the northern part of the site is located within an open area, and the southern part of the site is divided, presumably into arable fields. The road forming the eastern boundary of the site is labelled as Galley Lane. Eaton Leys Farm is shown toward the middle of the site's western boundary. The small settlement of Water Eaton is shown to the west of the site boundary, separated by the Grand Union Canal.
- 2.3.30 Bryant's Map shows the site in poor detail. Eaton Leys Farm and Water Eaton Mill are shown.
- 2.3.31 The 1898, 1923–24, 1950 and 1967 Ordnance Survey maps show an unchanged landscape within the study area. On the western bank of the River Ouzel an earthwork, later labelled fishpond, is annotated. On the 1923–24 map the site of Water Hall, a manor, is depicted to the west of the fishpond. The 1950 and 1967 maps show the rapid development of Fenny Stratford but the site remains unchanged. All of the maps show the site of the Roman town (Magiovinium) centred adjacent to Watling Street opposite the north-west tip of the study site.
- 2.3.32 The 1982–83 and 2010 Ordnance Survey maps shows no change within the study site although residential infill to the west (Fenny Stratford) abuts the west bank of the Grand Union Canal.
- 2.3.33 The 2007 Ordnance Survey plan and Google Image shows the site as arable fields, unchanged from the present (CgMs Heritage 2018).



### 3 AIMS AND OBJECTIVES

#### 3.1 Aims

3.1.1 The general aims of the excavation, as stated in the WSI (CgMs Heritage 2018) were:

- To establish a broad phased plan of the archaeology revealed following the stripping of the site;
- To seek a better understanding of the resource;
- To compile a lasting record of the resource; and
- To analyse and interpret the results of the excavation and disseminate them.

#### 3.2 Objectives

3.2.1 Following consideration of the archaeological potential of the site and the regional research framework (Hey & Hind 2014), the research objectives of the excavation defined in the WSI (CgMs Heritage 2018) were:

- To establish the presence or otherwise of activity dating to the prehistoric period. Can the period and type of activity be defined? Is there any evidence which can be attributed to settlement activity? How does the pattern of activity identified relate to the scatter of prehistoric artefacts recovered during the programme of fieldwalking?
- To better define through excavation the nature, extent, character and chronology of the Late Iron Age and Roman utilisation of the site. Can the evolution of the established system of enclosures and trackways be traced? What is the pattern of Roman activity like to the south of the Scheduled Roman town? Can the nature of such activity be fully characterised?
- How does the pattern of Late Iron Age and Roman activity relate to the scatter of cremations identified during the previous phases of evaluation?
- To determine the presence of any Anglo-Saxon or medieval activity on site.

3.2.2 In addition, the following research aims were drawn from the Solent-Thames Research Framework for the Historic Environment (Hey and Hind 2014):

##### *Late Iron Age/Roman*

- Sites with well-preserved deposits of both late Iron Age and Roman date should be given careful attention in order to investigate continuity of local tradition at these sites. Sampling strategies should ensure that as wide a range of contexts are sampled as possible. Excavations of deep, well-sealed features are required (as opposed to buildings) (Hey & Hind 2014, p179);
- Environmental evidence should be collected and analysed to help identify how field systems operated and developed (Hey & Hind 2014, p179);
- Breed improvement for cattle and sheep, and variation in the proportions of the principal domestic animals in relation to the socioeconomic status of the producer (Hey & Hind 2014, p180);



- The careful excavation of burials and cemeteries in association with their parent towns and settlements can also shed important light on social organisation (Hey & Hind 2014, p180);
- The hinterland settlement and mortuary landscape of both 'large' and 'small' towns require further research. Examples with hinterlands relatively untouched by modern development offer major opportunities for research (Hey & Hind 2014, p181).

## 4 METHODS

### 4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methodology set out within the WSI (CgMs Heritage 2018) and in general compliance with the standards outlined in ClfA guidance (ClfA 2014a). The methods employed are summarised below.

### 4.2 Fieldwork methods

#### *General*

4.2.1 The watching archaeologist monitored all mechanical excavations within the specified area. Where necessary, the surfaces of uncovered archaeological deposits were cleaned by hand to aid visual definition. A sample of archaeological features and deposits was hand-excavated, sufficient to address the aims of the strip, map and record.

4.2.2 Spoil from machine stripping and hand-excavated archaeological deposits was visually scanned for the purposes of finds retrieval. Artefacts were collected and bagged by context. All artefacts from excavated contexts were retained.

#### *Recording*

4.2.3 All exposed archaeological deposits and features were recorded using Wessex Archaeology's pro forma recording system. A complete record of excavated features and deposits was made, including plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections) and tied to the Ordnance Survey (OS) National Grid.

4.2.4 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.

4.2.5 A full photographic record was made using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

### 4.3 Finds and environmental strategies

4.3.1 Strategies for the recovery, processing and assessment of finds and environmental samples were in line with those detailed in the WSI (CgMs Heritage 2018). The treatment of artefacts and environmental remains was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014b) and *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011).



#### 4.4 Monitoring

- 4.4.1 The Milton Keynes Senior Archaeological Officer monitored the watching brief on behalf of the LPA. Any variations to the WSI, if required to better address the project aims, were agreed in advance with the consultant and the Senior Archaeological Officer.

### 5 STRATIGRAPHIC EVIDENCE

#### 5.1 Introduction

- 5.1.1 The works involved the extension of the area previously known as Aii to accommodate a redesign of the pumping station. A large area, was stripped to the north of the previous area with a re-route of the attached trench. Another small area, was excavated to the south west (**Fig. 2, PI. 1-2**).

- 5.1.2 A third area, the substation footprint, was opened between areas A and B of the previous phase of work (**Fig. 1, PI. 3**).

#### 5.2 Soil sequence and natural deposits

- 5.2.1 The natural substrate took the form of a stony, gravel-rich brownish-grey sandy silt. The ploughsoil was greyish brown silty sand, approximately 0.25 m deep, with an underlying subsoil of orangey-brown silty sand between 0.14 and 0.20 m in depth. These were present in both the smaller excavation of the pumping station and the substation (**PI. 4**). The material overlying the larger pumping station area comprised a recently redeposited mix of subsoil and natural.

#### 5.3 Pumping station

- 5.3.1 The larger excavation area, to the north of the previous phase of works, encompassed a re-route of the trench and an enlargement of the pumping station footprint.
- 5.3.2 The continuation of the Late Iron Age/Romano-British co-axial grid field system was traced through the new area. This included the north-north-east to south-south-west aligned western boundary and the perpendicular continuation of the internal 'rung' division.
- 5.3.3 The north-north-east to south-south-west ditch, 6508, measured 0.44 m wide and 0.09 m deep with a fill of greyish brown silty sand. It continued beyond the limits of excavation to the north and south.
- 5.3.4 The east-south-east to west-north-west ditch, 6512, was 0.8 m wide and 0.15 m deep with a greyish-brown silt fill that contained assumed Iron Age or early Romano-British pottery. It continued beyond the limit of excavation westward where it was previously observed in the former trench. Within the excavation it became increasingly diffuse and is tentatively observed to terminate within the stripped area, however, whether this was a true terminus and field entrance, or rather poor preservation, was difficult to determine (**PI. 5**).
- 5.3.5 A pit, 6510, was partially exposed on the north-eastern limit of excavation. The visible portion had a width of 1.63 m and depth of 0.29 m with a grey sandy silt fill containing assumed Iron Age or early Romano-British pottery (**PI. 6**).
- 5.3.6 At the western extent of the rerouted trench a gully was excavated (6514). Aligned east-south-east to west-north-west it had a width of 0.55 m and depth of 0.09 m with an artefactually sterile fill of greyish brown sandy silt. It continued beyond the limit of excavation





to the east but petered out to the east where it was disturbed by the previous phase of stripping. This feature was not identified during the previous works.

- 5.3.7 The smaller southern extension excavation area was stripped to the natural substrate but no archaeological features were observed.

## 5.4 Substation

- 5.4.1 A small rectangular area was stripped to accommodate the new substation. The natural substrate was exposed but no archaeological features were observed (**PI. 3**).

## 6 FINDS EVIDENCE

### 6.1 Summary

- 6.1.1 The assemblage recovered from the site was modest (Table 1). A number of pottery sherds were recovered from the overburden (6500); a small round stone possibly natural was recovered from ditch 6508; assumed Iron Age or early Romano-British pottery and fired clay was recovered from pit 6510 and pottery from ditch 6512.

**Table 1** Finds by context and material type

Deposit Context	Material	Finds Count	Finds Weight (g)	Description
6500	Pottery	22	103	
6509	Stone	1	1	Round, possibly natural
6511	Pottery	4	19	
6511	Fired Clay	1	6	
6513	Pottery	2	22	Refit

- 6.1.2 Due to the small size of the assemblage it is recommended that the pottery be sent for analysis with the bulk material from the previous phase of works. It will be considered as a whole and the results presented in the forthcoming publication.

## 7 CONCLUSIONS

### 7.1 Summary

- 7.1.1 Archaeological features in the form of three ditches or gullies and a single pit were recorded in the northern pumping station extension. The southern pump station extension and substation produced negative results.

### 7.2 Discussion

- 7.2.1 The results of the excavation support the outcome of earlier phases; the northern continuation of the Iron Age–Romano-British co-axial field system was recorded. The pit observed against the north-eastern boundary was similar in form to those previously recorded in the area. A linear feature was also revealed that had not been observed before but respects the alignment of the co-axial field system.

## 8 RECOMMENDATIONS

- 8.1.1 The previous phase of works was subject to a post-excavation analysis (Wessex Archaeology 2019). Full analysis and a publication report is forthcoming; It is suggested that the results of this strip, map and record excavation are considered alongside the previous findings and integrated into the forthcoming report.



## **9 ARCHIVE STORAGE AND CURATION**

### **9.1 Museum**

- 9.1.1 The archive resulting from the works is currently held at the offices of Wessex Archaeology in Sheffield. The archive from this phase will be combined with that of the previous phase of works and will be deposited as a whole.
- 9.1.2 Buckinghamshire County Museum has agreed in principle to accept the archive on completion of the project, under the accession code AYBCM:2018.84. Deposition of any finds with the museum will only be carried out with the full written agreement of the landowner to transfer title of all finds to the museum.

### **9.2 Preparation of the archive**

- 9.2.1 The archive, which includes paper records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Buckinghamshire County Museum, and in general following nationally recommended guidelines (SMA 1995; ClfA 2014c; Brown 2011; ADS 2013).
- 9.2.2 All archive elements are marked with the accession code, and a full index will be prepared.

### **9.3 Selection policy**

- 9.3.1 Wessex Archaeology follows national guidelines on selection and retention (SMA 1993; Brown 2011, section 4). In accordance with these, and any specific guidance prepared by the museum, a process of selection and retention will be followed so that only those artefacts or ecofacts that are considered to have potential for future study will be retained. The selection policy will be agreed with the museum, and is fully documented in the project archive.

### **9.4 Security copy**

- 9.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

### **9.5 OASIS**

- 9.5.1 An OASIS (online access to the index of archaeological investigations) record (<http://oasis.ac.uk/pages/wiki/Main>) has been initiated, with key fields completed (Appendix 2). A.pdf version of the final report will be submitted following approval by the Senior Archaeological Officer on behalf of the LPA. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

## **10 COPYRIGHT**

### **10.1 Archive and report copyright**

- 10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was





produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.

- 10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

## **10.2 Third party data copyright**

- 10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.



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-



*Wessex Archaeology 2019 Land at Eaton Leys, Milton Keynes, Buckinghamshire: Post-excavation  
Assessment and Updated Project Design unpubl rep 207761.01*



## APPENDICES

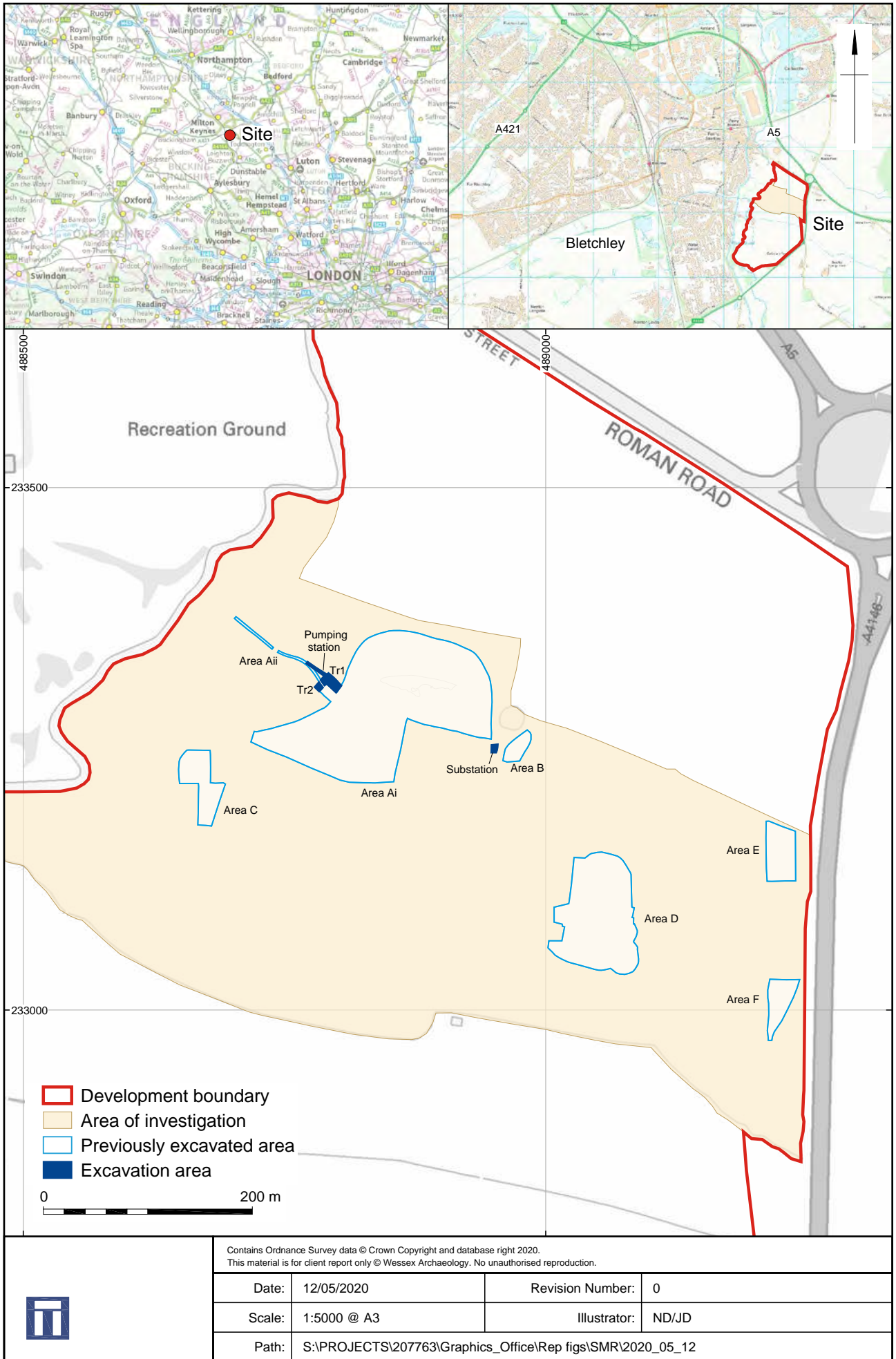
### Appendix 1: Context Summary

Pumping Station					
Area 1		Length 38.0 m		Width 10.0 m	Depth 0.40 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL	
6500		Deliberate backfill	Largely formed of subsoil mixed with some topsoil and natural. Mid greyish brown silt with abundant coarse gravel and sub-angular stones <120mm. Moderate compaction.	0 - 0.35	
6501		Natural	Mid greyish brown silt with abundant coarse gravel and sub-angular stones <120mm. Moderate compaction.	0.35+	
6508	6509	Ditch	Linear ditch with irregular, straight sides and a flat base. Length: >2.00 m. Width: 0.44 m. Depth: 0.09 m.	0.48 - 0.53	
6509	6508	Secondary fill	Dark slightly greyish brown silty sand with fairly frequent, ~20%, small sub-angular inclusions, scattered throughout.	0.48 - 0.53	
6510	6511	Pit	Circular pit with shallow, stepped sides and a concave base. Length: >0.64 m. Width: 1.63 m. Depth: 0.29 m.	0.55 - 0.84	
6511	6510	Deliberate backfill	Dark grey sandy silt with very few, ~10%, small sub-rounded inclusions scattered throughout and less frequent larger, sub-angular inclusions found towards base.	0.55 - 0.84	
6512	6513	Ditch	Linear ditch with moderate, concave sides and a concave base. Length: >6.00 m. Width: 0.80 m. Depth: 0.15 m.	0.35 - 0.57	
6513	6512	Secondary fill	Mid brownish grey silt with 20% common sub-angular rock <150mm inclusions.	0.35 - 0.57	
6514	6515	Gully	Linear gully with shallow, straight sides and a flat base. Length: >2.00 m. Width: 0.55 m. Depth: 0.09 m.	0.35 - 0.44	
6515	6514	Secondary fill	Mid greyish brown sandy silt with clay and sand pockets with 5% sparse sub-angular stone <60mm inclusions.	0.35 - 0.44	



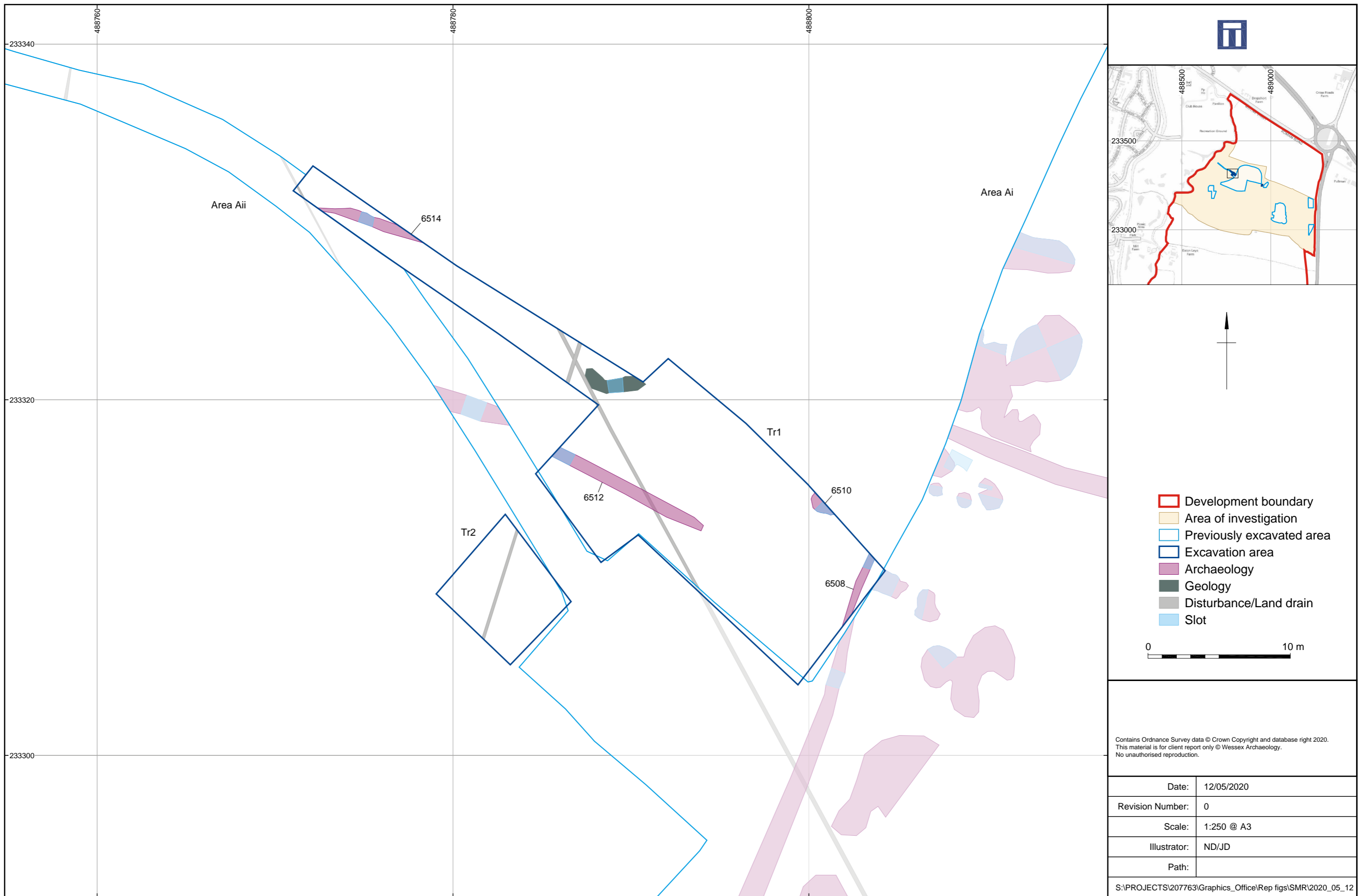
Pumping Station				
Area 2		Length 6.0 m	Width 5.50 m	Depth 0.50 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
6502		Topsoil	Mid greyish brown silty sand with 5% sparse subangular stones and flints <80mm and rooting. Moderate compaction.	0 - 0.25
6503		Subsoil	Mid orangish brown silty sand with 15% common subangular stones and flints <120mm and rooting. Moderate compaction.	0.25-0.45
6504		Natural	Natural. Mid greyish brown sandy silt with abundant coarse gravel and sub-angular stones <120mm. Moderate compaction.	0.45+

Substation				
Area 3		Length 7.0 m	Width 5.70 m	Depth 0.40 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth BGL
6505		Topsoil	Dark greyish brown silty sand with 3% sparse subangular stones <80mm and rooting. Moderate compaction.	0 - 0.24
6506		Subsoil	Mid orangish brown silty sand with 10% common sub-angular stones <120mm. Moderate compaction.	0.24 - 0.38
6507		Natural	Light orangish brown silty sand with 10% common sub-angular stones <140mm and patches of coarse gravel and stone. Moderate compaction.	0.38+



Site location

Figure 1



Pumping station extension showing the results of the previous phase of work

Figure 2

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Revision Number:	0
Scale:	1:250 @ A3
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Plate 1: Larger extension to the pumping station, viewed from the south-west



Plate 2: Smaller extension to the pumping station, viewed from the east


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Plate 3: Substation viewed from the north-west



Plate 4: South facing representative section of soil sequence


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Plate 5: Plan of ditch 6512 viewed from the north-west



Plate 6: South-west facing section of pit 6510

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