

Havant Thicket Reservoir

Main Works - Written Scheme of Investigation for Archaeological Mitigation

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1. Introduction

1.1 Project Background

- 1.1.1 This document presents a Written Scheme of Investigation (WSI) for a programme of archaeological investigation during the main works for Havant Thicket Reservoir project (hereafter ‘the Scheme’).
- 1.1.2 This WSI has been agreed with the Hampshire County Archaeologist and it relates solely to the main works envisaged by Conditions 21- 24 and the S106.
- 1.1.3 Portsmouth Water secured a hybrid planning permission for the reservoir on 15 October 2021, subject to conditions (REF 51680/001 and APP/20/00990). As part of Condition 21, Archaeological Evaluation (Written Scheme), an Archaeological Management Plan (AMP; Atkins 2021) has been produced, which outlines the scope and requirements for written schemes of investigation for evaluation and mitigation. This Written Scheme of Investigation has been prepared reflecting the AMP. Following discussions with the Hampshire County Archaeologist phases of archaeological investigation during main works, corresponding to each construction phase, were agreed to mitigate the impact of the main works comprising the excavation of borrow pits, associated drainage, embankment areas and site compounds through the identification, recording and assessment of heritage assets; achieving ‘preservation by record’.
- 1.1.4 The archaeological investigations will be maintained during the groundworks, which have the potential to impact archaeological remains, as outlined within the draft Archaeological Management Plan and Heritage Assessment, prepared to support the outline planning application (Atkins 2021).
- 1.1.5 This WSI outlines the methodology to be employed during the archaeological investigations during the main phase of works. The site location and proposed works layout is provided in Figure 1.
- 1.1.6 The fieldwork and reporting will conform to current national guidelines as set out in Standard and Guidance for an archaeological excavation and watching brief (ClfA 2020a and 2020d).

1.2 Site Description

- 1.2.1 The Scheme is largely grassland covering an area of c.160 ha centred on NGR SU



7109 4189, and lying at 26 m aOD in the southeast of the site and rising to 40 m aOD in the north west. The site is bounded by Red Hill to the east, Leigh Park to the south and Havant Thicket to the north and west. The underlying geology comprises Tarrant Chalk and Whitecliff Sand overlain by clay, flint, sand and gravel (British Geological Survey 2021).

1.3 Historic and Archaeological Background

- 1.3.1 The historic and archaeological background of the Site was detailed within the draft Archaeological Management Plan submitted as part of the planning application (Atkins 2021). The following is a summary of the historic and archaeological background as it relates to the site as a whole, inclusive of the geographical area of the works.

Prehistoric

- 1.3.2 The study area would have offered prehistoric peoples a rich range of resources including higher areas for agriculture and a reliable water supply. Woodland provided food, fuel, and materials.
- 1.3.3 The Atlas of Hampshire's Archaeology shows that there is a higher frequency of Mesolithic sites on the margins of the chalk downland on the clays close to the coast and reveals a group of settlement sites and findspots that cluster around the water courses north of Hayling Island (HCC). These remains include pits, and rare (Hey et. al. 2010) evidence of possible tent-like structures in the form of stakeholes (HER 22917 and 23407) containing flint and charcoal, hearths, and a floor level (HER 23407). At Wakeford's Copse, charcoal from the hearth was radiocarbon dated to the mid-6th to mid-5th millennium BC. Closer to the Scheme, a hearth with associated flint tools and debris (HER 23384) was found in a builder's trench in Leigh Park in 1968, and a Mesolithic occupation site (HER 22917) was uncovered at Rowland's Castle during a watching brief in 1970.
- 1.3.4 Evidence for later prehistoric occupation of the Study Area includes three late Bronze Age hearths found during excavations at Wakeford's Copse (HER 23407).
- 1.3.5 To the west of the Scheme, the enclosure at Dunsbury Hill (HER 64922 and 64687) comprises cropmarks that were observed during aerial survey. These appear to extrapolate to a large enclosure circumventing a site in an elevated position in the landscape. Archaeological excavations both north and south of the enclosure identified Late Iron Age and Roman occupation evidence and an Anglo-Saxon Charter of 935 refers to 'dundeburnam', suggested to be a name associated with the hill or sometimes



with a fortified settlement. This archaeological and historical evidence suggests that the enclosure is a later prehistoric settlement or hillfort, with later Roman occupation.

- 1.3.6 Much of the evidence for prehistoric use of the study area from the Mesolithic onwards is in the form of isolated finds. These include a Neolithic axe hoard found in 1976 on the south-western edge of the reservoir site (HER 23472), various flints and flint tools recovered from gardens or during watching brief activities near Dunsbury Park. While useful for confirming the presence of prehistoric groups in the general vicinity, these find spots are not considered heritage assets, and cannot be used to accurately assess potential impacts to the historic environment.

Romano- British

- 1.3.7 There is considerable evidence of Romano-British occupation within the Study Area, including a possible road, two possible villas and associated remains, a kiln, trackways and a burial.
- 1.3.8 A Roman Road (HER 23355) was identified during trenching in at Oak Park School in 1974, which may represent a segment of the road purported to extend between Rowlands Castle and Havant, and then onto Hayling Island. A Roman villa near Rowlands Castle (HER 23477) was excavated in the early 19th century.
- 1.3.9 Possibly associated within the wider villa estate, scattered Roman pottery and wasters (HER 26718) were found at the suggested site of a Roman tile kiln site (HER 70210; 70211; 70209). Excavation of another kiln site (HER 55706) to the north of the Scheme identified a linear feature containing both late 2nd century - early 3rd century pottery, a large quantity of ceramic building material and roof tile, and a possible kiln lining formed of large fragments of cracked and chemically weathered ceramic roof tile. A high proportion of these displayed evidence of being exposed to high temperatures and they have been interpreted as the vestigial remains of a furnace chamber and flue. A third associated feature comprises of a possible floor or working surface.
- 1.3.10 A Romano-British inhumation burial (HER 23394) was sectioned by road widening on the Petersfield Road. Although it is no longer in-situ it is indicative of further potential for human remains close by, and of settlement.
- 1.3.11 An 11 ft wide trackway (HER 23417) of unknown date was excavated during work on a Roman site at Wakesford's Copse (HER 23407). The trackway was associated with a Roman building which was identified in 1961 from probing and some trial trenching in 1963. More detailed examination in 1968 showed a flint-footed, single roomed



structure 15 ft (4.57 m) by 25 ft (7.62 m). Finds of painted plaster, pottery and a cameo ornament were made. (1961 evidence confirmed by 1969 excavation).

- 1.3.12 Five separate findspots of Roman pottery scatters have been identified within the study area, along with other Roman era finds such as coins, a brooch, and an iron knife.

Medieval

- 1.3.13 Possible archaeological evidence of Saxon activity (HER 23464) has been identified within Leigh Park with the identification of an undated ditch and postholes, with Saxon pottery also found in the vicinity. Whilst the asset is no longer in situ, its former presence suggests that there is potential for Saxon occupation evidence to survive within the area.
- 1.3.14 During the medieval period, the study area was associated with the Forest of Bere, though it is unclear as to whether or not it was incorporated into the Forest boundaries or lay just outside of it. Havant Chase (HER 34198), the Bishop of Winchester's hunting grounds within the Forest of Bere, is recorded as having included an area known as 'Havant Thicket', suggesting that at least this part of the study area was within the royal Forest. Warren Deer Park (HER 54151), to the west of the Scheme, is first mentioned in 1334 and its associated medieval hunting lodge (HER 38753) was found during fieldwork. Other known evidence for a deer park comprise a causeway and a dam, both thought to be connected to fishponds. A substantial causeway (HER 38751), which may be connected to medieval fishponds further to the south, is probably associated with the same medieval landscape.
- 1.3.15 Three Scheduled Monuments dating to the medieval period are located within the study area: Motte Castle at Motley's Copse (NHLE 1019111), Ringwork and Bailey at Motley's Copse (NHLE 1019110), and The Castle at Rowlands Castle (NHLE 1001923). All three medieval fortification structures and earthworks date from the 11th to 14th centuries.
- 1.3.16 Evidence for clearing of a medieval hamlet in what is now Leigh Park during the 19th century was identified during excavations in 1992 (HER 32423). It was probably a roadside hamlet alongside a minor Roman road running between Havant and Rowlands Castle (Cousins 2017).
- 1.3.17 Other medieval evidence within the study area includes a circular ditch observed near Leigh Park Gardens (HER 23418) during roadworks in 1971, and the site of St Chad's well (HER 65094), which may have its origins in the medieval period.



Post-medieval

- 1.3.18 The post-medieval historic environment within the study area builds on its medieval uses. The Forest of Bere continued to be used as a hunting ground, as well as producing timber for revenue.
- 1.3.19 The most noticeable change to the landscape was the creation of Leigh Park (NHLE 1000112) by Sir George Staunton. The area was initially enclosed and improved in 1802 by William Garrett, but it was Staunton's purchase of the estate in 1820 and subsequent landscaping that created the current Grade II* Registered Park and Garden (RPG). The tithe map of 1842 shows Staunton's development of Leigh Park, with the reservoir site to the north depicted as open land with scattered trees.

Designated assets

- 1.3.20 Leigh Park is a Grade II* Registered Park and Garden (RPG), which is also designated as the Sir George Staunton Conservation Area. A detailed analysis of the history and significance of the RPG and Conservation Area is provided in the Statement of Heritage Significance presented in Appendix A8.1 in volume 4 of the Environmental Statement (ES) prepared to support the outline planning application. Please refer to this report for a detailed discussion of these assets.
- 1.3.21 The value of both the RPG and Conservation Area has been assessed to result from their preservation of the expressions of the design and maintenance of the early 19th century landscape gardens associated with George Staunton, focused around what remains and has been restored of the walled garden and glass-houses near the original Leigh Park Farm, as well as the landscape design and contributing features of the parkland and pleasure-grounds around Leigh Water. The only part of the RPG that will be impacted by the HTWSR is a portion of The Avenue, a late 19th century feature created by William Stone towards the end of his tenure at the property.

Non-designated assets

- 1.3.22 In addition to Leigh Park RPG and the Sir George Staunton Conservation Area, two non-designated heritage assets are recorded within the reservoir footprint.
- 1.3.23 Close to Wells Meadows, Roman materials (HER 62022) were discovered comprising pieces of tesserae. Tesserae were used to create Roman mosaics, usually arranged into representational designs and geometric patterns. This asset is unlikely to survive but suggests that Roman remains could survive within the Scheme's extent.



- 1.3.24 Havant Chase (HER 34198) now known as Havant Thicket was part of the Forest of Bere, it lay at the northern extremity of the Bishops Manor of Havant. Hunting within its bounds was reserved for the Bishop of Winchester who also owned most of the land that was to become Leigh Park; it was not relinquished until the early 19th century. The Chase was not enclosed as a Deer Park but covered a defined area with features such as banks, ditches, and/or pales to keep the prey animals ready for the chase and prevent escape into the wider landscape. It does not appear that such landscape features were common, or even present, in the Forest of Bere during the medieval period, suggesting that it was not as heavily used during the period as other forests in the region, such as the New Forest. Whilst the Chase location is mapped by the HER as a point within the Scheme boundary, this asset covered a large area within the Forest of Bere.
- 1.3.25 An area of iron slag, clinker and pieces of iron (HER 23391) were found on Gipsies' Plain in the early 1960s. The remains are of unknown date but could suggest that metallurgical processes were being undertaken close by, either relating to smelting or another industrial process. No traces of these surface finds were visible when the site was visited following ploughing in the late 1960s.

1.4 Previous Archaeological Work

- 1.4.1 Ecus Ltd undertook an archaeological watching brief during the enabling works on site. The watching brief identified a concentration of archaeological features on the higher areas of the landscape, on the solid silt and gravel geology, and away from the clay river valley that is more prone to flooding (Ecus 2022).
- 1.4.2 Relatively few features contained any dateable material. Those of note include two discrete features within OTP 6, which appeared to contain burnt deposits and sherds of a vessel base in local fabric, dated to the mid to late Saxon period, and may be the remains of midden debris.
- 1.4.3 The watching brief also identified evidence of woodland, agricultural and water management across all areas investigated to date, predominantly of post medieval and modern date.
- 1.4.4 Intensive agricultural activity revealed by plough scars and ridge and furrow type features, some extant in the landscape and captured on the LiDAR survey, has been confirmed during the excavations.



2. Archaeological Investigation

2.1 Aims and Objectives of the Archaeological Investigation

2.1.1 The principal aim of the archaeological investigation is to mitigate the impact of the main works comprising the creation of site compounds and haul roads, excavation of drainage ditches and borrow pits, and areas of embankment through the identification, recording and assessment of heritage assets; thus achieving ‘preservation by record’.

2.1.2 The specific aims of the archaeological recording are:

- to identify and record any archaeological deposits, structures or built fabric within the identified areas of interest;
- to determine the extent, condition, character, significance and date of any encountered or exposed archaeological remains;
- in particular to identify the presence of Mesolithic artefacts within the Scheme;
- to accurately record the location and stratigraphy of areas excavated during groundworks;
- to recover artefacts disturbed by the site works.
- to recover samples from sealed waterlogged contexts for environmental processing; and
- to prepare a comprehensive record and report of archaeological observations during the site work.

2.1.3 The objectives of the project are:

- to preserve through record any archaeological remains that have the potential to be impacted by the proposed works;
- to identify, record and preserve in situ any structural archaeological remains; and
- to contribute to the understanding of the use and development of the Site.

2.2 Methodology for Archaeological Investigation

2.2.1 The mitigation work is separated into four distinct methodologies, with each methodology bespoke to the specific ground works being undertaken in that area.



Details for each methodology can be found below and the location of the various activities are shown on Figures 1, 2, 3, 4, 5 and 6.

Method 1

- 2.2.2 An experienced Ecus project archaeologist will monitor the removal of the Topsoil by Bulldozer, down to the archaeological horizon, or level of the natural geology, whichever is reached first. Should any features or areas of archaeological interest be identified, an exclusion zone will be set up and a mechanical excavator, equipped with a toothless bucket, will re-strip the area under archaeological supervision.
- 2.2.3 The works due to be undertaken under the Method 1 watching brief conditions, are the excavations associated with the construction of the Borrow Pits, the Embankments, the Crane Platform, Utilities Corridor, Compounds, some drainage ditches and Haul Roads.

Method 2

- 2.2.4 An experienced Ecus project archaeologist will monitor the removal of the Topsoil by a mechanical excavator equipped with a toothless grading bucket. The excavator will be under the control of the client at all times. Monitoring will cease at the archaeological horizon, or level of the natural geology, whichever is reached first.
- 2.2.5 In the event that archaeological features are identified, an exclusion zone will be set up and if necessary further mechanical excavation will be undertaken, under the control of the archaeologist. Sufficient time will be provided for the excavation and recording of any features identified.
- 2.2.6 The main works due to be undertaken under Method 2 conditions are the excavations associated with the construction of some of the drainage ditches.

Method 3

- 2.2.7 Two areas of Strip, Map and Sample (SMS) within the footprint of the south western embankment will be undertaken. These areas will target archaeology identified during previous mitigation phases. Although initially limited to the areas highlighted in figure 5, should archaeology be shown to continue into the adjacent Method 1 areas, then the Method 3 areas will be expanded accordingly. To prevent large scale excavation of areas devoid of archaeology, should the SMS reveal a blank area that is at least 10m from the excavation edge to the nearest archaeological feature, then the excavation will revert to Method 1 conditions.



- 2.2.8 The SMS areas will involve the machine stripping of the overburden under archaeological control, down to the archaeological horizon, or the level of the natural geology. Any archaeological features will be excavated and recorded as set out in section 2.3 of this document.

Method 4

- 2.2.9 Due to the topographic nature of part of the site, an area has been highlighted as having high Mesolithic potential. In order to mitigate this fully, any site works that occur within the area shown on figures 2, 4, 5 and 6 will be subject to archaeologically controlled mechanical excavation of the overburden, down to the archaeological horizon, or the level of the natural geology. The machines will be monitored by archaeologists experienced in lithic identification. Should archaeology be shown to continue into the adjacent Method 1 areas, then the Method 4 area will be expanded accordingly.

General Watching Brief Methodology

- 2.2.10 The experienced Ecus project archaeologist monitoring the ground works will be positioned at a safe distance, beyond the limits of the working area of any mechanical excavator or bulldozer. Should access to the machined area be required, the machine will cease operations and if necessary, relocate to ensure safe access. 4x4s will be used to traverse areas actively being stripped by the Bulldozers and ground inspections will be carried out only once the clients contractors have said that it is safe to do so.
- 2.2.11 Any machining undertaken under archaeological monitoring will be done, where practicable, with a flat bladed bucket (toothless) and in horizontal spits. Machining shall cease at the upper archaeological horizon, or level of the natural geology, whichever is reached first.
- 2.2.12 The machined area should be exposed to a 'clean' state which allows for the identification, definition and investigation of any archaeological remains. Any surfaces/features will be cleaned by hand sufficient to enable an assessment of the characterisation, date and condition of the remains.
- 2.2.13 In the event of the discovery of archaeological remains which are of a greater number or extent than anticipated, work will cease and the Hampshire County Archaeologist will be notified immediately. An assessment will be made of the importance of the remains and any provision for their recording, as appropriate.
- 2.2.14 At all times health and safety will take priority over archaeological matters.



2.2.15 In the event that significant archaeological remains are revealed, additional excavation staff will be made available. The ground work in the location of the archaeology can be temporarily halted in order to determine the extent and character of any remains revealed. The degree of further work will be defined in discussions with the Client and the Hampshire County Archaeologist, where applicable. Delays to development can be minimised by continuing to monitor areas of watching brief while the archaeological resource is recorded.

2.2.16 A full written and photographic record of the on-site works should be maintained at all times.

2.3 Excavation and Recording Methodology

2.3.1 Decisions made on the methods and strategies for sampling features will be based upon the nature and extent of any deposits which are revealed. However, all archaeological deposits are to be recorded using a continuous numbered context system on Ecus pro-forma recording system. Recording will follow those standards as set out by the Chartered Institute for Archaeologists (CIfA) in their standards and Guidance for Archaeological Watching Brief (CIfA, 2020a) and Excavation (CIfA, 2020b).

2.3.2 All archaeological features will be sampled sufficiently to characterise and date them. However, the following strategy will be employed as a minimum sample level:

- 5% to 10% hand excavation of all linear features, specifically all terminals and all interrelationships with other features would be investigated, and sufficient samples taken to characterise the linear along its length, and that sample excavation would be taken where the fill is demonstrated to be unusual in character to the rest of the linear;
- 50% hand excavation of discrete cut features (with provision to increase that to 100% if extraordinary deposits are encountered that would require full excavation to enable full understanding); and
- 100% excavation of structural and industrial deposits.

2.3.3 All archaeological features and deposits will be excavated by hand unless otherwise agreed with the Hampshire County Archaeologist.

2.3.4 Excavated features will appear on at least one detailed plan at 1:50 or 1:20 scale and/or



one section at 1:20 or 1:10 and co-ordinated on to an overall site plan. Drawings will be made in pencil on permanent drafting film or through means of a GPS in accordance with Historic England recommendations (Historic England 2015) and tied into the National Grid.

- 2.3.5 The spot height of all principal features and levels shall be established in metres relative to Ordnance Datum, correct to two decimal places. Plans, sections and elevations will be annotated with spot heights as appropriate.
- 2.3.6 A full photographic record will be maintained, using a digital camera equipped with an image sensor of not less than 10 megapixels. Digital images will be subject to managed quality control and curation processes which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Output will be in TIFF/JPEG format. Digital records created as part of the project should comply with specific data standards (Historic England 2015).

2.4 Finds

- 2.4.1 Finds will be treated and cleaned in accordance with the relevant guidance given the Chartered Institute for Archaeologists' Standard and Guidance (2020a-d), the UK Institute and Conservators Guidelines Conservation Guideline No.2 and the Museums and Galleries Commissions Standards in the Museum Care of Archaeological Collections (1992) excepting where they are superseded by statements made below.
- 2.4.2 All finds will be treated in accordance with Historic England (2011; 2018) and ClfA (2020b) guidance, and the requirements of Hampshire Museum Services.
- 2.4.3 The relevant museum will be contacted for a mid-project review following the completion of fieldwork to revise basic information about the Archive, and to agree a policy for retention.
- 2.4.4 All artefacts from excavated contexts will be retained and recorded by context, except those from features or deposits of obviously modern date. In such circumstances, sufficient artefacts will be retained in order to elucidate the date and/or function of the feature or deposit. Any earlier residual artefacts of potential archaeological/historical value from modern features will be retained.
- 2.4.5 All finds and samples will be exposed, lifted, processed, cleaned, conserved, marked, bagged and boxed in accordance with the requirements of the relevant museum.



- 2.4.6 Any artefacts requiring conservation or specific storage conditions will be dealt with immediately in line with First Aid for Finds (Watkinson and Neal 1998).

2.5 Human Remains

- 2.5.1 In the unlikely event of discovery of any human remains, it is proposed that they will be left in situ, covered and protected until the Client, Coroner and the Hampshire County Archaeologist have been informed. Where groundworks will unavoidably disturb them they will be fully recorded, excavated and removed from the site subject to compliance with the relevant Ministry of Justice Licence which will be obtained by the archaeological contractor under the Burial Act 1857.
- 2.5.2 Should it be necessary to excavate human remains, all excavation and post-excavation will be in accordance with the standards set out in ClfA Technical Paper 13 Excavation and post-excavation treatment of cremated and inhumed remains (McKinley and Roberts 1993). The final placing of human remains following analysis will be subject to the requirements of the Ministry of Justice Licence.

2.6 Treasure

- 2.6.1 All finds identified in the Treasure Act (1996) and the Treasure (designation) Order (2002) as being treasure will be recorded, removed to a safe place and reported to the local Finds Liaison Officer or Coroner according to the procedures relating to the Act. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.

2.7 Environmental Sampling

- 2.7.1 The development of an appropriate sampling strategy will depend upon the survival and condition of the deposits identified. If necessary the Historic England Regional Science Advisor will be consulted for site-specific guidance at the earliest possible opportunity. In general terms, it is anticipated that the following strategies will be followed.
- 2.7.2 Bulk environmental soil samples for plant macro-fossils, small animal and fish bones and other small artefacts will be taken from appropriate well-sealed and dated/datable archaeological deposits. The collection and processing of environmental samples will be undertaken in accordance with Historic England guidelines (Historic England 2011).
- 2.7.3 If industrial activity of any scale is detected, industrial samples and process residues



will also be collected. Separate samples (c. 10 ml) will be collected for micro-slugs (hammer-scale and spherical droplets).

- 2.7.4 The residues and sieved fractions of the bulk environmental soil samples will be recorded and retained with the project archive. For charred material, bulk samples of 40-60 litres in volume will be taken for processing by flotation. All samples will be floated on a 250-300 mm mesh and the heavy residues washed over a 0.5-1 mm mesh. The heavy residues will be scanned with a magnet to recover micro-slugs. A statement on the environmental potential of excavated deposits will be appended to the final report. Samples identified of further analysis will be fully processed.

2.8 Report

- 2.8.1 Following completion of the fieldwork a brief interim report summarising the results will be prepared and submitted to the client who will submit the report to the Hampshire County Archaeologist for their review.
- 2.8.2 Within twelve months of completion of the final fieldwork element, a full report setting out the results will be prepared and submitted to the client who will submit the report to the Hampshire County Archaeologist for approval.
- 2.8.3 The report will be prepared in accordance with the guidance given in the Chartered Institute for Archaeologist's Standards and guidance: archaeological excavation (2020d) except where superseded by statements below.
- 2.8.4 The report will include the following as a minimum:
- the planning application number, OASIS reference number and an 8 figure grid reference;
 - a location plan of the site at an appropriate scale of at least 1:10,000;
 - a location plan of the extent of the excavated area. This must be at a recognisable planning scale, and located with reference to the national grid, to allow the results to be accurately plotted on the Sites and Monuments Record;
 - plans and sections of archaeology located at a recognisable planning scale (1:10, 1:20, 1:50 or 1:100, as appropriate);
 - a summary statement of the results of the archaeological monitoring;



- a table summarising the deposits, features, classes and number of artefacts encountered and spot dating of significant finds; and
- any specialist reports associated with further analysis of find and environmental samples from the archaeological monitoring.

2.9 Dissemination

- 2.9.1 Once approved the report will be issued as a final document, and a hard copy and PDF (of PDF/A standard) will be submitted to the Hampshire Historic Environment Record for file within their HER within two months of completion.
- 2.9.2 Details of the Site will be submitted online to the OASIS (Online Access to the Index of Archaeological Investigations) database within two months of completion.
- 2.9.3 Publication of the results, at least to a summary level (to a relevant journal) and beyond if justified, shall take place in the year following the archaeological fieldwork.



3. Monitoring

- 3.1.1 Access will be permitted to the Hampshire County Archaeologist to monitor any field work, as well as the progress of any agreed post-fieldwork analysis and reporting programmes (at the Archaeological Contractor's premises or that of their specialist subcontractors as appropriate).
- 3.1.2 The work shall be carried out by appropriately qualified and experienced staff. Details of staff and their relevant experience will be discussed and agreed prior to the work being carried out.



4. Archive Deposition

- 4.1.1 It is noted that archival recording of The Avenue and associated features is being undertaken separately by Portsmouth Water and do not form part of this main works phase.
- 4.1.2 The contractor will either arrange for copyright on the deposited material to be assigned to the archive, or will licence the archive to use the material, in perpetuity; this licence would allow the archive to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.
- 4.1.3 Ecus will liaise with the relevant archive prior to the commencement of fieldwork to establish the detailed curatorial requirements of the museum and discuss archive transfer and to complete the relevant museum forms.
- 4.1.4 A digital, paper and artefactual archive will be prepared, consisting of all primary written documents, plans, sections, photographs and electronic data arising from the archaeological monitoring in accordance to industry standards (ClfA 2020c). This will be offered to the relevant archive for deposition.
- 4.1.5 All artefacts and associated material will be cleaned, recorded properly stored and deposited in the archive (see above). If any specialist assessment and further analysis is required of artefactual or environmental material, an appropriate specialist will undertake the work. Full details of all appointed specialists will be provided to the Hampshire County Archaeologist.
- 4.1.6 Written confirmation of the archive transfer arrangements, including a date (Confirmed or projected) for the transfer, will be included as part of the assessment report or final report, if further analysis is required.
- 4.1.7 At the start of work (immediately before fieldwork commences) an OASIS online record (<http://ads.ahds.ac.uk/project/oasis/>) will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the Hampshire Historic Environment Record / Archaeological Data Service. This will include an uploaded .pdf version of the assessment report and any subsequent reports (a paper copy will also be included within the archive).



5. Access, Security and Health & Safety Arrangements

- 5.1.1 Health and Safety considerations will be of paramount importance in conducting all fieldwork. Safe working practices will override archaeological considerations at all times.
- 5.1.2 All work will be carried out in accordance with the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety Regulations 1992, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time for the fieldwork.
- 5.1.3 A Risk Assessment and Method Statement (RAMS) for the work will be prepared by the Contractor prior to the commencement of fieldwork.
- 5.1.4 Full Personal Protective Equipment (PPE) will be worn by all archaeologists and monitoring visitors while on site and in line with Health & Safety requirements.
- 5.1.5 All archaeological contractor staff attending site will attend a site induction by the Principal Contractor and sign in and out of site during each visit.
- 5.1.6 The archaeological contractor will provide all relevant Risk Assessments, Method Statements and Health and Safety Plans to the Client and Principal Contractor as required.
- 5.1.7 The archaeological contractor will ensure that all staff have had sufficient training in order to be able to undertake the role safely.
- 5.1.8 The client will be responsible for ensuring site access has been secured prior to the commencement of site works, and that the perimeter of the site is secure.



6. Confidentiality and Copyright

6.1 Paper and Digital Archive

- 6.1.1 The copyright and ownership of the paper and digital archive from the archaeological work will rest with the originating body (the archaeological organisation undertaking the work). The originating body will deposit the material with the recipient museum or repository on completion of the contracted works, whereupon and to whom they will transfer title and/or licence the use of the records.

6.2 Report

- 6.2.1 The copyright of any written, graphic or photographic records and reports rest with the originating body. Agreements on copyright will be agreed with the client at the outset of the project. The circumstance under which the report or records can be used by other parties will be identified at the commencement of the project.

7. References

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NOTES

ALL LEVELS—COORDINATES RELATE TO FCC
PERMANENT SITE CONTROL STATIONS

Legend

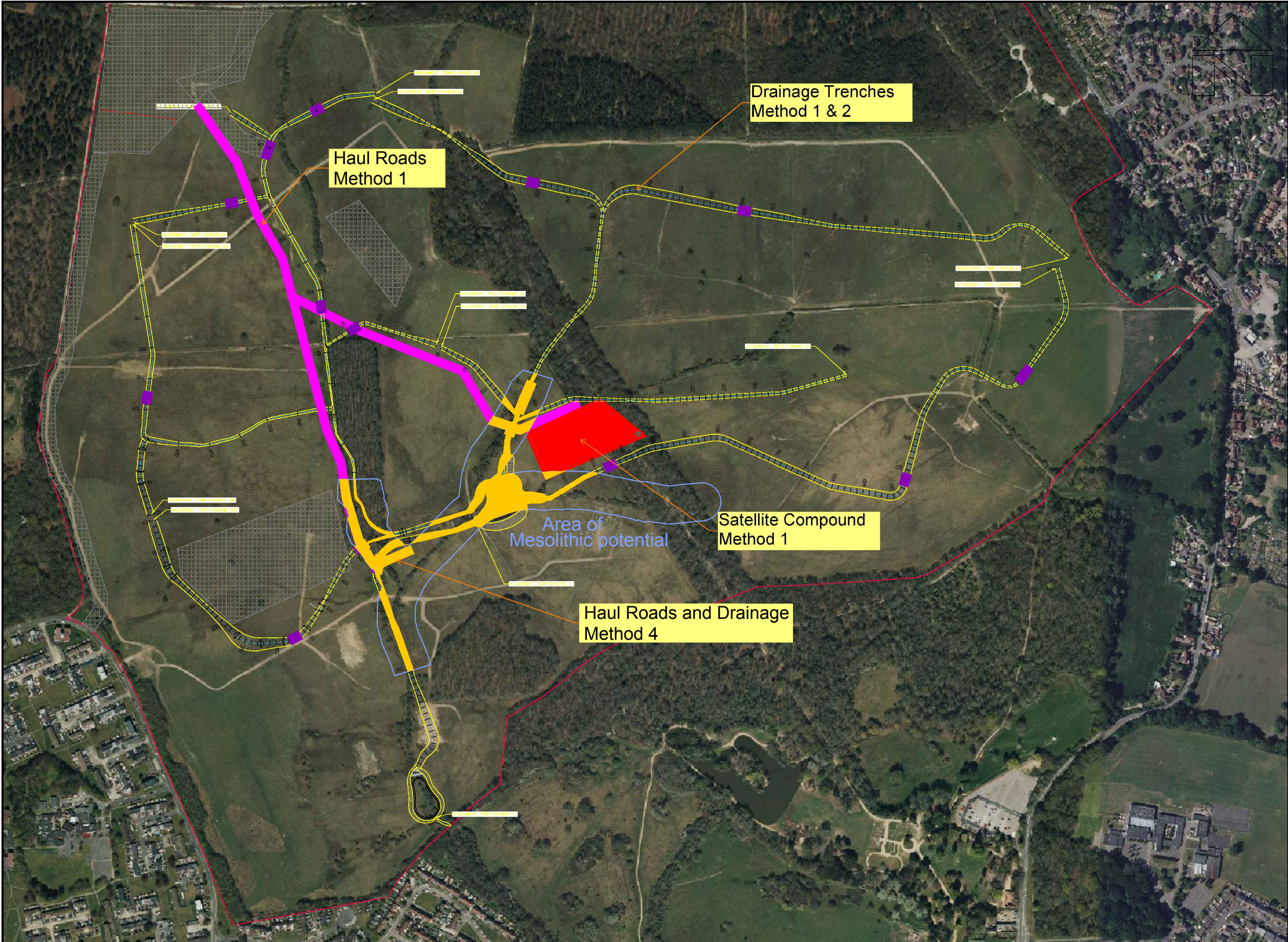
- Top of Bank
- Bottom of Bank
- Spot Level
- Main Compound
- Harwich Cut Off
- Southern Access Route/Service Corridor
- Drainage
- Access Tracks
- Satellite Compound
- Archaeology (Cleared)

Future Water -
Construction Phase -
March 2023

A	Draft Drawing	12/22	GL
Rev	Description	Date	Initial



Client Portsmouth Water			
Site Havant Thicket Reservoir			
Drawing Construction Phase - March 2022			
Drawn By	Date	Checked By	
GL	12/12/2022	DA	
Scale	Provision	Rev	Checked By
1:1000			
Plot File Name	000000		



NOTES
ALL LEVELS—COORDINATES RELATE TO FCC
PERMANENT SITE CONTROL STATIONS

Legend

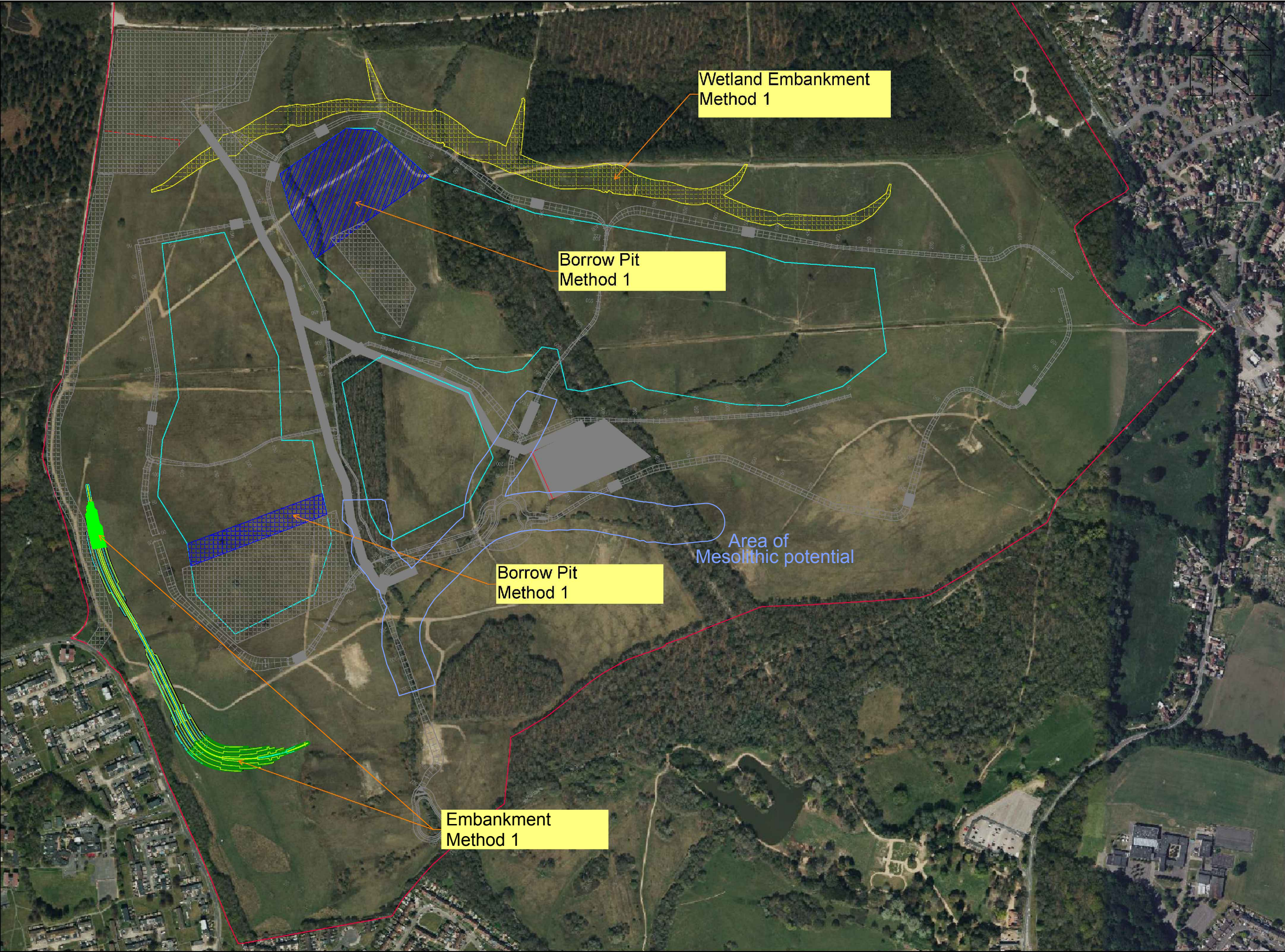
- Top of Bank
- Bottom of Bank
- Spot Level
- Main Compound
- Harwich Cut Off
- Southern Access Route/Service Corr
- Drainage
- Access Tracks
- Satellite Compound
- Archaeology (Cleared)

Future Water -
Construction Phase -
June 2023

A	Draft Drawing	12/22	GL
Rev	Description	Date	Initials



Client Portsmouth Water			
Site Havant Thicket Reservoir			
Drawing Construction Phase - June 2023			
Drawn By GL	Date 12/08/2022	Checked By DA	
Scale NTS	Revision	Rev Checked By	
End Plot Date	End Plot Name		



NOTES

ALL LEVELS—COORDINATES RELATE TO FOC
PERMANENT SITE CONTROL STATIONS

Legend

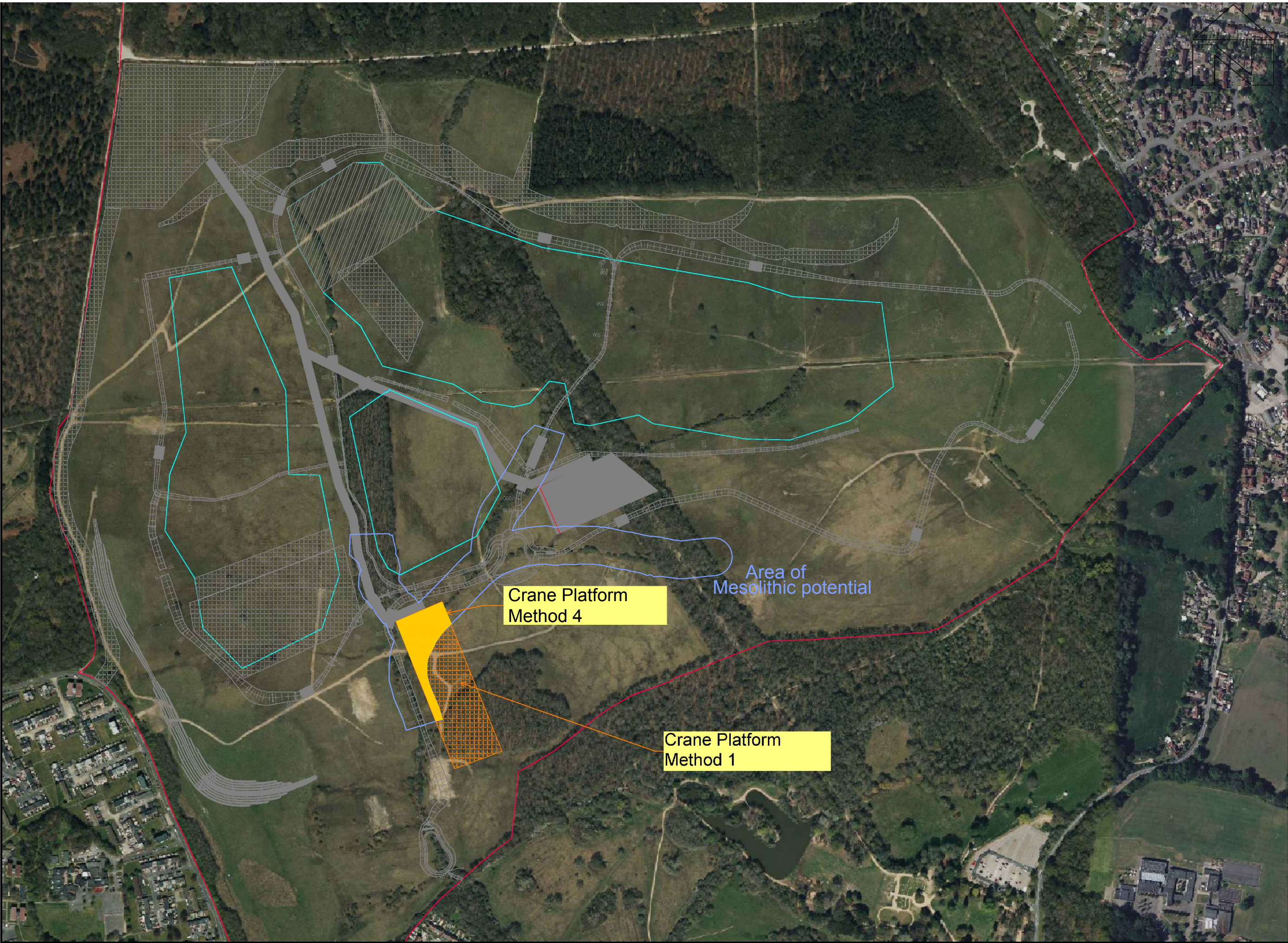
- Top of Bank
- Bottom of Bank
- Spot Level
- Main Compound
- Harwich Cut Off
- Southern Access Route/Service Co
- Drainage
- Access Tracks
- Satellite Compound
- Archaeology (Cleared)

Future Water -
Construction Phase -
July 2023

A	Draft Drawing	12/22	G
Rev	Description	Date	Init



Client Portsmouth Water			
Site Havant Thicket Reservoir			
Drawing Construction Phase - July 2023			
Drawn By NTS	Date 12/12/2022	Checked By DA	Rev Checked By
Est Plot Date 000000	Est Plot Name 000000		



ALL LEVELS-COORDINATES RELATE TO FCC PERMANENT SITE CONTROL STATIONS

Legend

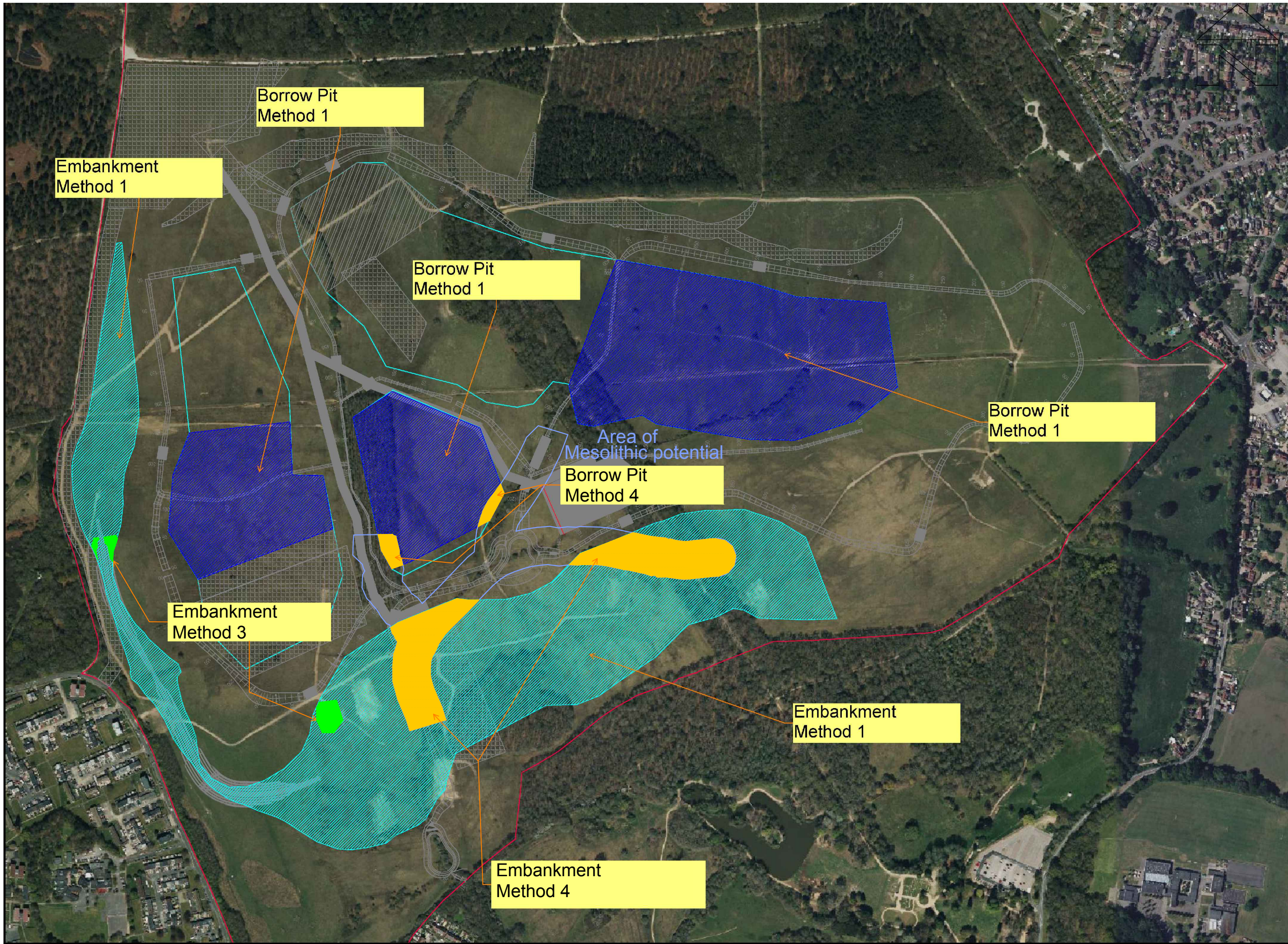
- Top of Bank
- Bottom of Bank
- Spot Level
- Main Compound
- Harwich Cut Off
- Southern Access Route/Service Corridor
- Drainage
- Access Tracks
- Satellite Compound
- Archaeology (Cleared)
- Culvert Temporary Works

Future Water -
Construction Phase -
September 2023

A	Draft Drawing	12/22	GL
Rev	Description	Date	Initial



Client Portsmouth Water			
Site Havant Thicket Reservoir			
Drawing Construction Phase - September 2023			
Drawn By GL	Date 20/12/2022	Checked By DA	Rev Checked By
Scale NTS	Proj No 000000	Proj Name 000000	



Embankment
Method 1

Borrow Pit
Method 1

Borrow Pit
Method 1

Borrow Pit
Method 1

Area of
Mesolithic potential
Borrow Pit
Method 4

Embankment
Method 3

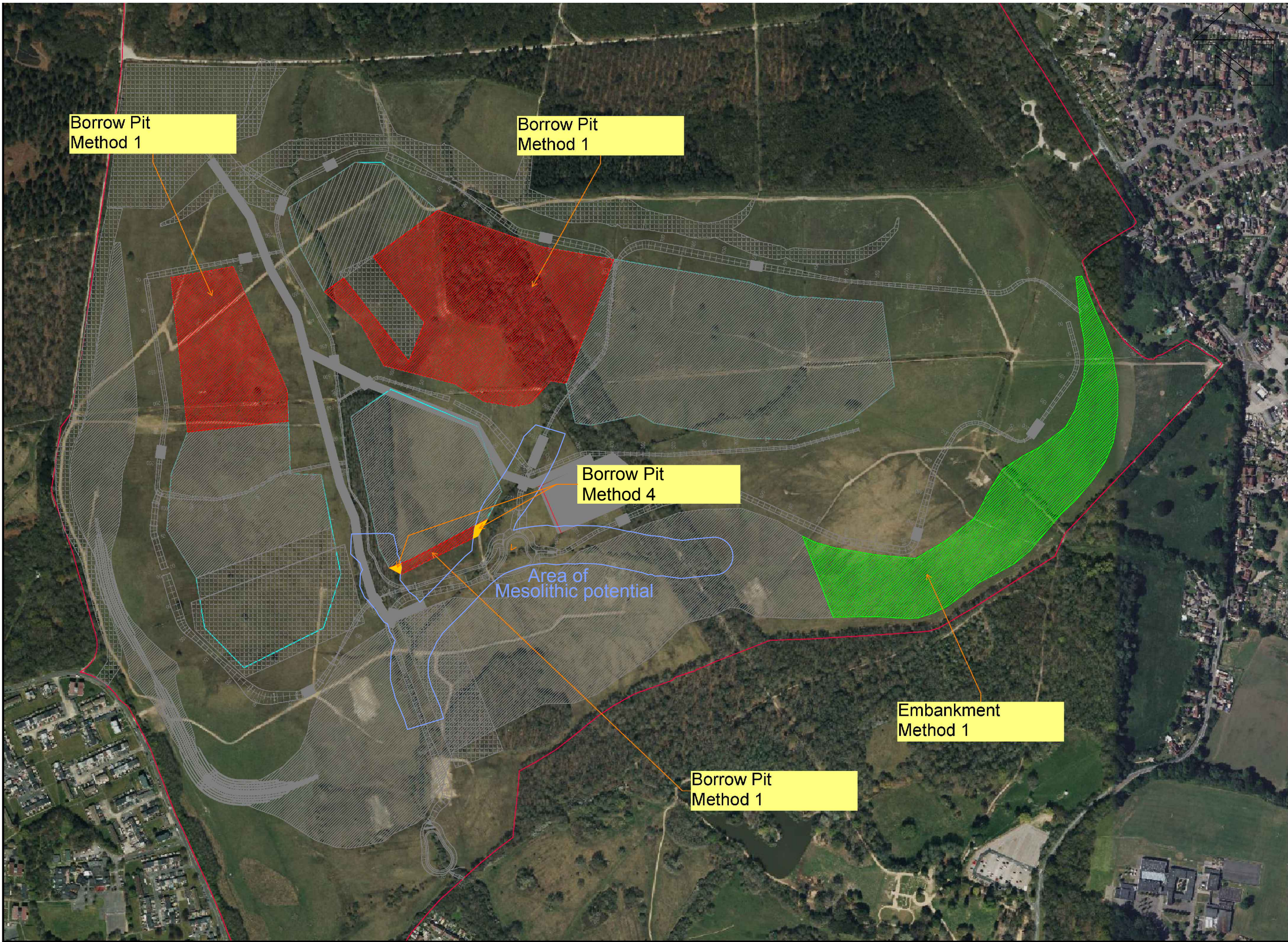
Embankment
Method 1

Embankment
Method 4

- ALL LEVELS—COORDINATES RELATE TO FCC
PERMANENT SITE CONTROL STATIONS
- Legend
- Top of Bank
 - Bottom of Bank
 - Spot Level
 - Main Compound
 - Harwich Cut Off
 - Southern Access Route/Service Corridor
 - Drainage
 - Access Tracks
 - Satellite Compound
 - Archaeology (Cleared)
 - Culvert Temporary Works
 - Embankment 2024
 - Borrowpit 2024

Future Water -
Construction Phase -
March 2024

A	Draft Drawing	12/22	GL
Rev	Description	Date	Initial
			
Client Portsmouth Water			
Site Havant Thicket Reservoir			
Drawing Construction Phase - March 2024			
Drawn By GL	Date 20/12/2022	Checked By DA	Rev Created By
Scale NTS	Grid 000000	Grid 000000	



Borrow Pit
Method 1

Borrow Pit
Method 1

Borrow Pit
Method 4

Area of
Mesolithic potential

Embankment
Method 1

Borrow Pit
Method 1

- ALL LEVELS-COORDINATES RELATE TO FCC
PERMANENT SITE CONTROL STATIONS
- Legend
- Top of Bank
 - Bottom of Bank
 - Spot Level
 - Main Compound
 - Harwich Cut Off
 - Southern Access Route/Service Corridor
 - Drainage
 - Access Tracks
 - Satellite Compound
 - Archaeology (Cleared)
 - Culvert Temporary Works
 - Embankment 2024
 - Borrowpit 2024
 - Embankment 2025
 - Borrowpit 2025

Future Water -
Construction Phase -
March 2025

A	Draft Drawing	12/22	GL
Rev	Description	Date	Initial



Client Portsmouth Water			
Site Havant Thicket Reservoir			
Drawing Construction Phase - March 2025			
Drawn By GL	Date 20/12/2022	Checked By DA	Rev Created By
Scale NTS	East Point Data 000000	East Point Name 000000	