

Land adjacent to Steart Village, Steart Point, Somerset, TA5 2PX

Written Scheme of Investigation for an Archaeological Watching Brief and further evaluation

Prepared for:

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On behalf of:

Environment Agency

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1 INTRODUCTION

1.1 Project Background

- 1.1.1 Wessex Archaeology has been commissioned by Team Van Oord (TVO; the Client) to carry out archaeological investigation of land proposed for a habitat creation scheme at Steart Point peninsula, near Bridgwater, Somerset (the Site centred on OS NGR 327000 145000; Figure 1).
- 1.1.2 The archaeological works are being carried out as part of a package of measures in order to mitigate the degradation of habitat as a result of the construction and repair of coastal flood defences. At Steart Point, the works will comprise construction of an artificial floodplain creek system, extending over a footprint measuring approximately 24.5ha, and associated balancing ponds totalling an additional 25.5ha.

2 SCOPE OF WORKS

2.1 Watching Brief

- 2.1.1 This Written Scheme of Investigation (the **WSI**) has been prepared by Wessex Archaeology, and sets out the proposed archaeological works currently under consideration for the scheme Area D. It has been commented upon and approved by both Somerset County Council Heritage Service, on behalf of the Local Planning Authority (LPA), and English Heritage.
- 2.1.2 The scope of works under consideration currently comprises an archaeological watching brief during the main phase of construction for the creek system (groundwork), and follows on from consultation with the Somerset Levels and Moors Heritage Officer regarding zones of enhanced archaeological potential (**Figure 1**), as informed by the results of all previous phases of archaeological investigation.
- 2.1.3 This enhanced archaeological potential is directly related to the palaeochannel network as originally identified from LiDAR data, and subsequently proven through fieldwalking, geophysical survey, evaluation and detailed excavation. In addition to the known association of 'terrestrial' archaeological activity with the palaeochannel network (as evidenced by the results from excavation Areas 500, 501, 502 and 503), groundwork impacting the palaeochannels will also afford the possibility to obtain palaeoenvironmental samples at depths that could not be attained during evaluation or excavation. Watching brief activity will be carried out with due regard to these zones of enhanced archaeological potential.
- 2.1.4 Specifically with regard to the 4 no. balancing ponds, although it is known that part of the palaeochannel system passes through at least three of the ponds, because the impact of pond construction is relatively slight (c. 1m below ground surface at the deepest point, and

- grading up from there in all directions to ground surface), it is considered that the archaeological evaluation trenches (both for this phase of investigation and previous phases), as well as the detailed excavation at Area 500, have already sufficiently mitigated the construction impact, and no further archaeological watching brief is required.
- 2.1.5 In the context of the zones of enhanced potential, and specifically the palaeochannel network, it is considered possible that (large) potentially significant waterlogged timbers, objects and/or structures may be uncovered at depth within such palaeochannels. If such are encountered and cannot be preserved *in situ*, they will be subject to full excavation, analysis and publication. In consultation with Somerset County Council Heritage Service, English Heritage, the local Museums Service and all other interested parties, consideration will also be given to conservation to a standard to permit long-term curation. Such instances will be considered and agreed on a case by case basis.

2.2 Further Evaluation

Heritage Assets – moated sites

- 2.2.1 In addition to the groundwork archaeological watching brief, this WSI also sets out a proposed array of six evaluation trenches (TR164-169 inc.), designed to mitigate the impact of the proposed creek system on the archaeological resource, through limited investigation of known heritage assets beyond the footprint of the creek system (**Figure 1**). Such heritage assets comprise moated (probable medieval) sites known from a variety of sources including LiDAR data, aerial photography and the previous geophysical survey (WA 2012a) evidence.
- 2.2.2 All work will be carried out under the methodology as set out in the original trial trench evaluation WSI (WA 2012b)
- 2.2.3 All trenches will be 30m by 1.8m, with the exception of TR166 which will be extended to 50m in length to allow the dual examination of both the principal outer enclosure ditch and what appears to represent a major internal division.
- 2.2.4 Of the trenches proposed, trenches TR164 and TR167 have already been excavated, in advance of the installation of a new cable run along the edge of Steart Drove. Note also that on the accompanying figure (**Figure 1**), TR168 and TR169 target enclosures that are known from aerial photographic evidence (and geophysical survey in the case of TR169), but which haven't at this stage been digitised and georeferenced.
- 2.2.5 This work will allow not only the results of the Steart Point archaeological investigations to be put into a wider context, but therefore by implication, allow a far more detailed understanding of the evolution of the Steart Peninsula than might be gained through just the results of the footprint mitigation measures. In addition, it is anticipated that the data gained through evaluation will also contribute significantly to the development of any future heritage management plans for the Steart peninsula, and landscapes of a similar nature elsewhere.
- 2.2.6 It should be noted that although these trenches have been termed 'evaluation' trenches, as investigations of known archaeological resources that are otherwise beyond the impact of the proposed scheme, no further fieldwork will be proposed on the basis of the results of these investigations.

Heritage Assets – former flood defences

- 2.2.7 There are a number of well-established (and apparently long-lived) principal field boundaries, embankments etc., which are likely to coincide with major phases of flood defence construction and reclamation, from the earlier medieval period onwards.
- 2.2.8 This WSI therefore also sets out a proposed array of five evaluation trenches (TR600-604 inc.), designed to mitigate the impact of the proposed creek system on such landscape features, through limited investigation both within and beyond the footprint of the creek system (**Figure 1**).
- 2.2.9 All trenches will measure 30m by 1.8m. Where feasible the trenches have been positioned to coincide with the proposed creek footprint (TR601 and TR604), though out of necessity the remainder have been positioned beyond the construction impact area. In the latter instance, it is unlikely that a complete trench through the embankment/ boundary under investigation will be feasible, though in all other respects all work will be carried out under the methodology as set out in the original trial trench evaluation WSI (WA 2012b).
- 2.2.10 As with investigation of the surrounding moated sites, it should be noted that although trenches TR600, TR602 and TR603 have been termed 'evaluation' trenches, as investigations of known archaeological resources that are otherwise beyond the impact of the proposed scheme, no further fieldwork will be proposed on the basis of the results of these investigations.

Area E

- 2.2.11 An array of evaluation trenches is proposed within Area E, in order to mitigate the impact of additional works associated with the creek construction and habitat creation scheme. There are 30 no. trenches proposed (TR300-329 inc.), comprising five trenches along the line of a new drainage ditch, and a further 25 trenches arranged across the footprint of four proposed lagoons (Figure 2). Each trench will measure 30m by 1.8m, and in total represents a 2.5% sample of the total surface area for works requiring mitigation within Area E.
- 2.2.12 All work will be carried out under the methodology as set out in the original trial trench evaluation WSI (WA 2012b)
- 2.2.13 As with the previous trial trench evaluation in Area D, archaeological remains exposed will be considered in the course of a site monitoring meeting (or meetings) attended by TVO, the Environment Agency, the Somerset Levels and Moors Heritage Officer, English Heritage and Wessex Archaeology (or nominated representatives for organisations not in attendance).
- 2.2.14 Any further mitigation considered necessary will be determined by the LPA, informed by advice from the Somerset County Council Heritage Service. Further mitigation requirements will be set out in an Interim Report prepared by Wessex Archaeology and approved by all parties, setting out the results of the evaluation, and proposals for further work. This process will aim to mirror the approach successfully adopted during previous phases of this project.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 With due regard to the IfA Standards and Guidance for archaeological watching brief (IfA 2008), the generic aims of the archaeological watching brief can be defined as;

- To enable the preservation by record of any archaeological features or deposits uncovered and to establish the extent (where possible), date, character, relationship, condition and significance of surviving archaeological features, artefacts and deposits within the area to be impacted by construction work
- Where significant archaeological remains or deposits are identified, to inform discussions on the final extent and scope of the required archaeological mitigation
- To place any identified archaeological remains within their context.

3.2 Objectives

- 3.2.1 The watching brief will therefore focus on two critical objectives:
 - Identification, recording, and if feasible, rapid excavation/ recovery of archaeological remains exposed; and
 - Recording a summary of the stratigraphic sequence encountered this data will be considered for incorporation into the overall project deposit model.

4 METHODOLOGIES

4.1 Access

- 4.1.1 Insofar as is reasonably practicable, the groundwork will be carried out within a pedestrian-free zone. Access to groundwork areas will be by 4x4 vehicle only, and along agreed traffic corridors (haul roads).
- 4.1.2 All WA personnel deployed to the project will be experienced drivers, who have passed the WA 4x4 driver assessment course. Where deployment constraints demand an unassessed driver is temporarily deployed to the project, they will be provided with a 4x4 Tool Box talk from the WA SMSTS-trained and 4x4-assessed Fieldwork Manager.
- 4.1.3 It is likely, as groundwork progresses, that new haul roads will be created, and existing haul roads re-aligned or closed. Prior to entering the groundwork zone, all personnel will obtain a verbal daily update on haul road status from the site manager or his nominated representative.

4.2 Record Photographs

4.2.1 Wessex Archaeology will take sufficient dated colour photographs of each groundwork area, including access routes, to provide a record of original condition, and condition on completion of all fieldwork.

4.3 Welfare

- 4.3.1 Welfare facilities will be obtained off-site at appropriate intervals during each day, with the exception of hot and cold drinks and hand-washing facilities, which will be carried in the project vehicle along with a first aid kit.
- 4.3.2 In particular, mixed-sex toilet facilities will be available either at the TVO static compound adjacent to Marsh Farm, or a satellite compound to be established by the earthworks contractor (to be confirmed) in the vicinity of Steart village; WA personnel will have access to both compounds.

4.4 Mechanical excavation

4.4.1 TVO will be responsible for setting out all groundwork areas.

- 4.4.2 Bulk excavation will be carried out by mechanical excavators of sufficient power to achieve their purpose in a clean, controlled manner. There will be no constraint on type of plant or type of bucket (toothed or otherwise) used during construction groundwork.
- 4.4.3 Excavation and/or recovery of any archaeological remains observed during groundwork will endeavour to achieve the minimum levels of intervention per feature type as set out below, but again it is understood that time and more importantly Health & Safety constraints may affect intervention levels. In all instances, H&S instructions will take priority over all other considerations.
- 4.4.4 With regard to recording, as a minimum all investigations will be located using GPS survey equipment, a summary of the stratigraphic sequence recorded, and photographed (digital format only).

4.5 Monitoring

Groundwork

- 4.5.1 It is likely that various constraints (not least H&S) will prevent close monitoring of groundwork in certain areas of the scheme, and particularly within the main creek at the wider/ deeper eastern end. Of particular relevance in this regard will be obtaining a suitable vantage point to carry out the archaeological watching brief, which may be constrained by the location and alignment of spoil haul roads. In groundwork zones where access H&S constraints do not allow viable monitoring with the naked eye, archaeological monitors will use binoculars (or similar remote-viewing devices) to monitor groundwork.
- 4.5.2 To ensure effective and immediate communication between archaeological monitor and mechanical excavator operator, both will be issued with hand-held two-way radios, to ensure the plant operator is provided with immediate notification of the presence of archaeological remains.
- 4.5.3 It should also be noted that in working environments where H&S constraints demand, archaeological monitoring operations may out of necessity be carried out from the safety of the project vehicle.
- 4.5.4 Prior to any archaeological operations, the archaeological monitor must:
 - A. Inform the plant operator to temporarily halt operations;
 - B. Notify TVO of the discovery; and
 - C. Obtain authorisation from TVO to enter the groundwork excavation area.
- 4.5.5 Thereafter, the hierarchical process will be as follows:
 - 1. Where feasible, examine and record observed remains without undue delay to the groundwork process, and without any H&S risk to all personnel;
 - 2. If observed remains cannot be closely examined, and represent remains of (relatively) lesser significance (e.g. field boundary ditches or similar/associated features), record location and as much supporting detail as can be allowed within the constraints relating to access, H&S etc.;
 - 3. If observed remains appear to represent remains of (relatively) greater significance (e.g. structures, waterlogged timber objects etc.), or remains covered under specific legislative constraints (primarily human remains and items covered under the Treasure Act), all groundwork in the immediate vicinity will be temporarily suspended, pending a rapid assessment of the remains exposed, and

implementation of appropriate mitigation measures, up to and including full excavation.

- 4.5.6 With regard to the communication chain for notification, Bullet #1 and #2 will be reported in summary progress reports, prepared by Wessex Archaeology and circulated to all parties. Summary progress reports will be issued on a monthly basis, though consideration will be given to the production of interim summary progress reports should it be considered appropriate to expedite the dissemination of results.
- 4.5.7 In the case of Bullet #3, Wessex Archaeology will notify TVO and the Environment Agency immediately, verbally and via e-mail of the discovery of significant remains. The Environment Agency will inform the Somerset Levels and Moors Heritage Officer and English Heritage, and co-ordinate a meeting (on site or teleconference) to discuss appropriate mitigation measures.

Post-Construction Monitoring

- 4.5.8 It is recognised that following completion of all groundwork associated with the scheme, the new creek will be a dynamic evolving system, capable of independently re-working and re-forming the landscape within which it is situated. To mitigate this impact, a regime of post-construction monitoring will be instigated.
- 4.5.9 For the first two years following completion of the scheme (i.e. 2012 to 2014), an archaeological walkover survey will be conducted at three monthly intervals, to identify and record any new exposures of archaeological significance. For the next three years (2014 to 2017), archaeological walkover survey will be conducted at six monthly intervals.
- 4.5.10 The project team will work with local heritage groups, with the intention of embedding a long-term monitoring programme for the site beyond 2017 and the lifecycle of the construction project. This would take the form of annual walkover survey (2017 to 2022) to identify any new exposures of archaeological significance.
- 4.5.11 It may be appropriate to adjust this programme to allow observation to take place immediately following significant storm events, where erosion can be accelerated.
- 4.5.12 In all instances, and where necessary, walkover survey will include provision of sufficient resources to recover any archaeological information at risk from the continuing geomorphological development of the newly built structures, including creeks and lagoons.
- 4.5.13 Any further mitigation considered necessary will be determined by the LPA, informed by advice from the Somerset County Council Heritage Service. Further mitigation requirements will be set out in an Interim Report prepared by Wessex Archaeology and approved by all parties, setting out the results of the evaluation, and proposals for further work. This process will aim to mirror the approach successfully adopted during previous phases of this project.

4.6 Recording

- 4.6.1 Prior to the commencement of groundwork, Wessex Archaeology will liaise with the Client to ensure the scheme groundwork zone reference system is incorporated into all site records, to ensure both consistency and a degree of geo-spatial referencing for the allocation of watching brief context etc. numbers.
- 4.6.2 The location of all archaeological remains will be recorded using electronic survey equipment and/or scaled or sketched hand-drawn plans. The position of identified

- archaeological remains will be compared with supporting evidence (i.e. historic mapping) as presented in the DBA.
- 4.6.3 A full record of all areas monitored, including plans, photographs and any other records considered appropriate, will be maintained at all times. This record will include comprehensive daybook entries listing:
 - Date;
 - Arrival time:
 - Personnel on-site;
 - Activity;
 - Discoveries;
 - Key discussions, instructions etc.; and
 - Departure time

4.7 Artefact recovery

- 4.7.1 With due regard to operational procedures outlined above (see **Section 3.6.1: A-C**), objects relating to human exploitation of the area that are exposed in the course of groundwork will be recovered or, where recovery is impracticable, recorded. All finds will be recorded by either context or specific groundwork watching brief zones, and significant objects will be recorded in three dimensions.
- 4.7.2 Where practicable, groundwork spoil will be scanned for objects relating to human exploitation of the area. Such objects as are visible will be recovered or their existence recorded.
- 4.7.3 All recovered objects will be retained unless they are undoubtedly of modern or recent origin. The presence of modern objects will however be noted on the appropriate site records. In these circumstances sufficient material will be retained to elucidate the date and function of the deposit from which it was recovered.
- 4.7.4 Objects that require immediate conservation treatment to prevent deterioration will be treated according to guidelines laid down in *First Aid for Finds* (Watkinson and Neal 1998). A full record will be made of any treatment given.
- 4.7.5 Finds and other items of archaeological interest removed from the site are the property of the landowner, with the exception of items that fall under the Treasure Act 1996. The Contractor will seek the landowner's permission to donate finds to the relevant local authority museum upon completion of fieldwork.
- 4.7.6 In the event of the discovery of items that fall under the Treasure Act 1996, the Contractor will notify the Curator and Client within 1 working day, notify the District Coroner of the discovery within 14 days and ensure that Treasure Act regulations are enforced. Items falling under the Treasure Act will be removed from site and stored in a secure location pending a decision by the coroner.

4.8 Environmental sampling

Introduction

4.8.1 With due regard to operational procedures outlined above (see **Section 3.6.1: A-C**), although provision will be made for the environmental sampling of (geo)archaeological

- deposits for artefactual, economic and environmental data from appropriate deposits recorded during groundwork, in practice it is considered highly unlikely under the anticipated watching brief conditions that such sampling will be readily possible.
- 4.8.2 Notwithstanding this caveat, given the clear association between archaeological activity and the palaeochannel system, special regard will be paid to opportunities to capture palaeoenvironmental samples from palaeochannel deposits exposed during groundwork.

Generic

- 4.8.3 The environmental sampling strategy will follow *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)* (English Heritage 2011).
- 4.8.4 Where deposits with potential for environmental analysis are noted, bulk samples may be taken from the spoil or from the section as appropriate. These samples will be taken by the most appropriate means (kubiena tins, contiguous columns, incremental block etc) for multi-disciplinary analysis. Samples for radiocarbon, OSL/TL, amino acid, remnant magnetism, oxygen isotope and Uranium-series dating, amongst others, will be taken if appropriate.

In situ Samples

- 4.8.5 Where required, undisturbed samples will be taken for pollen, microfossil or micromorphological study, as well as the further analysis of foraminiferas, diatoms, ostracods etc. These will be extracted in appropriately-sized Kubiena tins or monoliths with associated sequential samples taken for insect and mollusc study (English Heritage 2011). Only newly exposed or cleaned sections will be examined in order to reduce the risk of contamination or structural deterioration. The samples will be securely wrapped and clearly labelled.
- 4.8.6 The depth of the extracted sample will be recorded at the top and base of the sample. If contiguous monoliths are required to sample a deep stratigraphic sequence, a 50mm overlap will be maintained between each monolith. The position will be recorded on a section drawing with level reduced to OS datum. If the monolith crosses context boundaries, these will be recorded on the environmental sample sheet.

Bulk Samples

- 4.8.7 Any samples taken will be stored in ten litre plastic buckets with lids and handles. A waterproof label will be fixed to the bucket and will record site code, context number and sample number. A duplicate label will be retained inside the bucket. Wherever possible, samples will be protected from temperatures below 5° and above 25° celsius and will be prevented from either wetting or drying out.
- 4.8.8 Bulk samples will usually be in the range of 10-40 litres in size, depending on the likely density of macrofossils in the soil. Ten litre samples will generally only be used for the recovery of plant macrofossils from waterlogged contexts, or if insufficient archaeological material is available for larger volume samples. If bulk disturbed samples are taken, the limits of the sampled area will be indicated on a plan/ section.

Spot Disturbed Samples

4.8.9 If it is not possible to extract undisturbed monoliths, sections may be sampled by way of spot samples. These will be at 20mm vertical intervals with a maximum depth of 10mm. If contexts have a visibly low organic content, sampling could extend laterally at a given depth in 10mm deep spits.

- 4.8.10 If appropriate, contiguous column samples will be taken for the retrieval of macrofossils. Individual sub-samples will be of 1-10 kg depending on the nature of the deposit and the category of material to be retrieved. If taken for several specialist purposes, separate columns may need to be taken.
- 4.8.11 Consideration will be given to the sampling of suitable material for absolute dating purposes, though the commission of such laboratory analysis will be agreed in advance with the Client.

Sampling strategy for Holocene sequences

4.8.12 If present, fine-grained deposits may be sampled to extract palaeoenvironmental material through wet-sieving and flotation. Office-based wet-sieving will take place in order to inform the sampling strategy, particularly with regard to sample size. In general, fine-grained sediment samples will comprise a minimum of 50 litres, and doubled should the off-site processing demonstrate that significant quantities of plant macro-fossils etc. are present. Samples may also be taken for pollen, foraminiferas, diatoms, ostracods and, if appropriate, molluscs.

4.9 Human Remains

4.9.1 In the event of the discovery of human remains (inhumations, cremations and disarticulated fragments) the Client and Curator will be notified. It is considered highly unlikely that it will be necessary to disturb human remains during the course of groundwork. However, should further investigation of human remains be essential in order to fulfil the project objectives, Wessex Archaeology will obtain all appropriate licences under Section 25 of the *Burial Act* of 1857 prior to any further investigation.

4.10 Curatorial monitoring

4.10.1 With due regard to operational procedures outlined above (see **Section 3.6.1: A-C**), the Client and Curator, and/or their appointed representatives, will have unrestricted access to the site, site records or any other information as required.

5 POST-FIELDWORK

5.1 General

- 5.1.1 All finds and environmental samples will be processed according to procedures set out in the Contractor's policies and guidelines on finds analysis, environmental sampling and archive preparation, and in accordance with the Institute for Archaeologists' *Guidelines for Finds Work*. Copies of the Wessex Archaeology policies and guidelines can be supplied on request.
- 5.1.2 Analysis of finds and environmental samples will be undertaken to a level commensurate with the aims and objectives of the project. For finds, this will normally be Data Level 3 (assessment, comprising scanning and, where relevant, identification of potential for further analysis). For environmental samples, assessment will aim to provide a record of the presence and quantity of remains (microflora, faunal or charred), which will allow identification of potential for further analysis where relevant.
- 5.1.3 Any further analysis of finds and/or environmental samples will constitute a separate item(s) of work for which a new project design will be prepared for approval; it is anticipated that such analysis will normally be best undertaken where datasets are likely to be extended by further fieldwork at a later stage of the project.

- 5.1.4 Conservation will be carried out by either the Wessex Archaeology in-house conservator, or the Wiltshire Council Conservation Centre, Chippenham. Full records will be made of any conservation treatment; these records will form part of the archive. Specialist work on metalwork, bone (including worked bone, human remains and other organic remains), industrial waste, ceramic material, glass and lithic material will be carried out as necessary.
- 5.1.5 Wessex Archaeology notes that finds and other items of archaeological interest removed from the site are the property of the relevant landowner, with the exception of items that fall under the Treasure Act 1996. The Contractor will seek the landowner's permission to donate finds to the recipient museum upon completion of fieldwork.

5.2 Reporting

Summary Report

- 5.2.1 A summary report on the results of the archaeological watching brief will be presented in draft to the Client and Curator for comment/ approval, within 15 working days following the completion of the fieldwork. The report will present a factual account of the site information in sufficient detail to allow interpretation without recourse to the project archive, and inform consideration of the requirement for any further post-excavation work.
- 5.2.2 The report will not make recommendations, unless the Client instruct Wessex Archaeology accordingly.

Assessment Report

- 5.2.3 Ultimately, the results of all phases of archaeological investigation at Steart Point will be collated into a single scheme-wide post-excavation assessment (PXA) report, in a format compliant with standards set out in *Management of Research Projects in the Historic Environment* (English Heritage 2006).
- 5.2.4 The PXA will be completed within 6 months of completion of all phases of 'set-piece' archaeological investigation (i.e. excluding the construction watching brief). The watching brief results will be incorporated into the PXA report draft as they become available, but the watching brief progress will not be allowed to unnecessarily delay completion of the scheme-wide PXA. If necessary, watching brief results obtained towards the end of the assessment phase will be collated into a follow-up Interim Report, and then incorporated directly into the analysis and publication programme.
- 5.2.5 In addition to assessment of the results of the archaeological investigations, the PXA will also (with the benefit of hindsight) re-visit earlier desk-based research into the more recent historical development of the peninsula, including consultation of historic documents to compare and contrast with the results of these investigations, to inform and illuminate a more detailed consideration of the landscape development of Steart Point from the medieval periods onwards. This work will be designed to identify mapped and written sources of information relating to activity on the peninsula, and in particular sources of information that could shed light on individual farmsteads and moated enclosures, potentially including those archaeologically investigated during the current project.
- 5.2.6 The PXA will be presented as hard copy and digital copy (Word document and PDF format) and will contain as a minimum:
 - a non-technical summary;

- a site location plan;
- archaeological and historical background (see para. 5.2.5);
- methodology;
- aims and objectives;
- results (to include full description, assessment of condition, quality and significance of the remains);
- a statement of potential;
- a statement of the significance of the results in their local, regional and national context:
- details of proposed archive storage and curation;
- general and detailed plans of trenches accurately positioned on an OS base map, to a known scale:
- detailed plans and sections as appropriate, to a known scale;
- a cross-referenced index of the project archive; and
- recommendations for analysis and publication of the archaeological results, to a level appropriate to the significance of the results, and accompanied by a task breakdown and Programme of Works for the proposed further analysis and dissemination.
- 5.2.7 A minimum of three bound copies of the draft PXA will be submitted to the Client for comment. Six bound copies, one unbound master copy and a digital copy (on CD, with complete report in PDF, text in MS Word and mapping in AutoCAD) of the final report will be produced within two weeks of receipt of comments on the draft report.
- 5.2.8 A further two bound copies will be submitted to the Curator for incorporation into the HER.
- 5.2.9 Details of the Site will also be submitted online to the OASIS (**O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S**) database.
- 5.2.10 Wessex Archaeology Ltd shall retain full copyright of any reports under the *Copyright*, *Designs and Patents Act* 1988 with all rights reserved. Wessex Archaeology will provide an exclusive licence to the client for the use of the report by the client in all matters directly relating to the project.

Publication Report

- 5.2.11 As noted above, the PXA will set out proposals for analysis and publication of the results of investigations at Steart Point, and will include an outline task list, Programme of Works, nominated key personnel roles and responsibilities, and synopsis for the proposed publication. The publication proposal will be prepared in agreement with the LPA, as advised by Somerset County Council Heritage Service, and in consultation with English Heritage.
- 5.2.12 Notwithstanding conclusions drawn as a result of the PXA process, publication is likely to be through a suitable regional journal, such as the *Proceedings of Somerset Archaeology* and *Natural History Society* or *Archaeology in the Severn Estuary*. If results warrant it, alternative consideration will be given to production of a stand-alone monograph (as part of the Wessex Archaeology academic monograph series), and possibly in addition some

form of more popular publication. These proposals will be developed and set-out in the PXA.

5.3 Archive

- 5.3.1 The project archive will be prepared to the standards set out in *Management of Research Projects in the Historic Environment* (English Heritage 2006) and in accordance with procedures outlined in *Standards in the Museum Care of Archaeological Collections* (Museum and Galleries Commission, 1992) and the requirements of the recipient museum, who will be consulted by Wessex Archaeology prior to commencement of the investigation. The written archive will be on clean, stable materials, and will be suitable for photocopying. The materials used will be of the standard recommended in *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (Walker 1990).
- 5.3.2 The basic computerised data will form part of the site archive.
- 5.3.3 With the agreement of the landowner(s), the project archive, including written, drawn, photographic and material elements (together with a summary of the contents of the archive), including any objects declared Treasure under the *Treasure Act* (1996), will be deposited upon completion of the post-fieldwork programme.
- 5.3.4 Wessex Archaeology will finalise an agreement with the recipient museum (to be confirmed) regarding deposition of the archive before fieldwork commences. This agreement will also address retention and discard policy for the project.

6 NOMINATED PERSONNEL AND PROGRAMME

6.1 Minimum standards

- 6.1.1 The Contractor will provide personnel to the standard outlined below:
 - Project Manager MIFA or equivalent with at least 10 years relevant experience.
 - Team Leader MIFA or equivalent with at least 5 years experience in appropriate aspects of archaeological excavation and recording.
 - Project Supervisor AIFA or equivalent with at least 2 years experience in appropriate aspects of archaeological excavation and recording.
 - Project Assistant PIFA or equivalent with at least 6 months experience in appropriate aspects of excavation and recording

6.2 Key Personnel

- 6.2.1 The following key personnel are nominated:
 - Office-based Project Manager: Andy Crockett
 - Site-based Fieldwork Manager: Chris Ellis (07976 162132)
- 6.2.2 Wessex Archaeology reserves the right to replace nominated staff for operational or other reasons with staff of equivalent or greater experience, subject to the approval of the Client. Notwithstanding, as one of the largest professional archaeological organisations in the country, Wessex Archaeology has sufficient flexibility and resources to ensure all client requirements can be met without compromise. The Senior Management Team consider all tender invitations to ensure the organisation can meet such demands without

- compromising existing projects, prior to giving any agreement to tender. CVs for all key WA personnel deployed to the project can be provided on request.
- 6.2.3 Notwithstanding, as one of the largest professional archaeological organisations in the country, Wessex Archaeology has sufficient flexibility and resources to ensure all client requirements can be met without compromise. Wessex Archaeology Operation and Resource Directors consider all project requirements to ensure we can meet such demands without compromising existing projects.

6.3 Watching Brief team

- 6.3.1 The archaeological watching brief team will generally comprise three monitors; the Fieldwork Manager (or his nominated representative) and two Project Supervisor-grade employees. To improve communication between archaeologists and groundworkers, each archaeological monitor will be semi-permanently assigned to a specific groundwork crew.
- 6.3.2 Each archaeological monitor will be equipped as follows:
 - 4x4 vehicle;
 - GPS survey equipment;
 - Digital camera;
 - Hand-held two-way radio;
 - Binoculars;
 - Background documentation, including Risk Assessment;
 - Archaeological excavation tools;
 - Pro forma recording forms; and
 - Mobile phone.
- 6.3.3 As noted above, archaeological monitoring within the proposed creek system footprint will be constant when groundwork crews are within areas of enhanced archaeological potential, and intermittent elsewhere (**Figure 1**).

6.4 Specialist support network

- 6.4.1 During the course of the project, the advice of the following internal and external specialists may be sought as necessary:
 - Prof. Clive Gamble (Southampton University): Palaeolithic archaeology
 - John S C Lewis (Antiquarian Society): Mesolithic archaeology
 - Lorraine Mepham (Wessex Archaeology): Prehistoric, medieval and post-medieval pottery; all other finds types
 - Rachael Seager Smith (Wessex Archaeology): Roman pottery; all other finds types
 - Andrew Crockett (Wessex Archaeology): Topographic modelling and distribution analysis
 - Chris Stevens (Wessex Archaeology): Charred plant remains
 - Lorrain Higbee (Wessex Archaeology): Animal bone

7 HEALTH & SAFETY

7.1 General

- 7.1.1 The archaeological work will be carried out by Wessex Archaeology in full accordance with its Company Policy for Health & Safety, and all Health & Safety Regulations and accompanying HSE Approved Codes of Practice. The work will also be undertaken in line with the guidelines provided in the document Health & Safety in Field Archaeology (Standing Conference of Archaeological Unit Managers 1997, updated September 1999). Copies of Wessex Archaeology's written Company Policy for Health, Safety and Welfare can be provided on request.
- 7.1.2 A Health & Safety Risk Assessment covering Health & Safety issues with regard to the archaeological watching brief will be provided as part of the project pre-fieldwork documentation.

7.2 Fieldwork

- 7.2.1 The Fieldwork Director (Chris Ellis) is SMSTS-trained, and will operate as the Health & Safety Officer for the project. Prior to the commencement of fieldwork the Health & Safety Officer will provide a Wessex Archaeology tool-box talk to the field team, relevant to the fieldwork and with reference to the project Risk Assessment.
- 7.2.2 The nominated Health & Safety Officer will have overall responsibility for Health & Safety on Site. Health & Safety issues have priority over all other considerations and therefore the usual Wessex Archaeology line management system can be bypassed on such issues. This means that the Health & Safety Officer can over-rule decisions made by the Project Manager if he feels that Health & Safety could be compromised in any way.

7.3 Communication

- 7.3.1 The Wessex Archaeology Project Manager will be the central point of contact throughout the course of the fieldwork and the report writing stages. Instruction and advice shall be provided by the Client. The Wessex Archaeology Project Manager may also seek relevant advice and input from the Wessex Archaeology in-house Specialist Team.
- 7.3.2 The Wessex Archaeology Fieldwork Director will take instruction from the Wessex Archaeology Project Manager and in some circumstances from the Wessex Archaeology Regional Director. The Wessex Archaeology Fieldwork Director will instruct the field team (Wessex Archaeology Project Supervisors and Project Assistants).
- 7.3.3 During the report writing stages, the Wessex Archaeology Project Manager will coordinate the input of all staff and will be responsible for maintaining the budget and the agreed timetable.

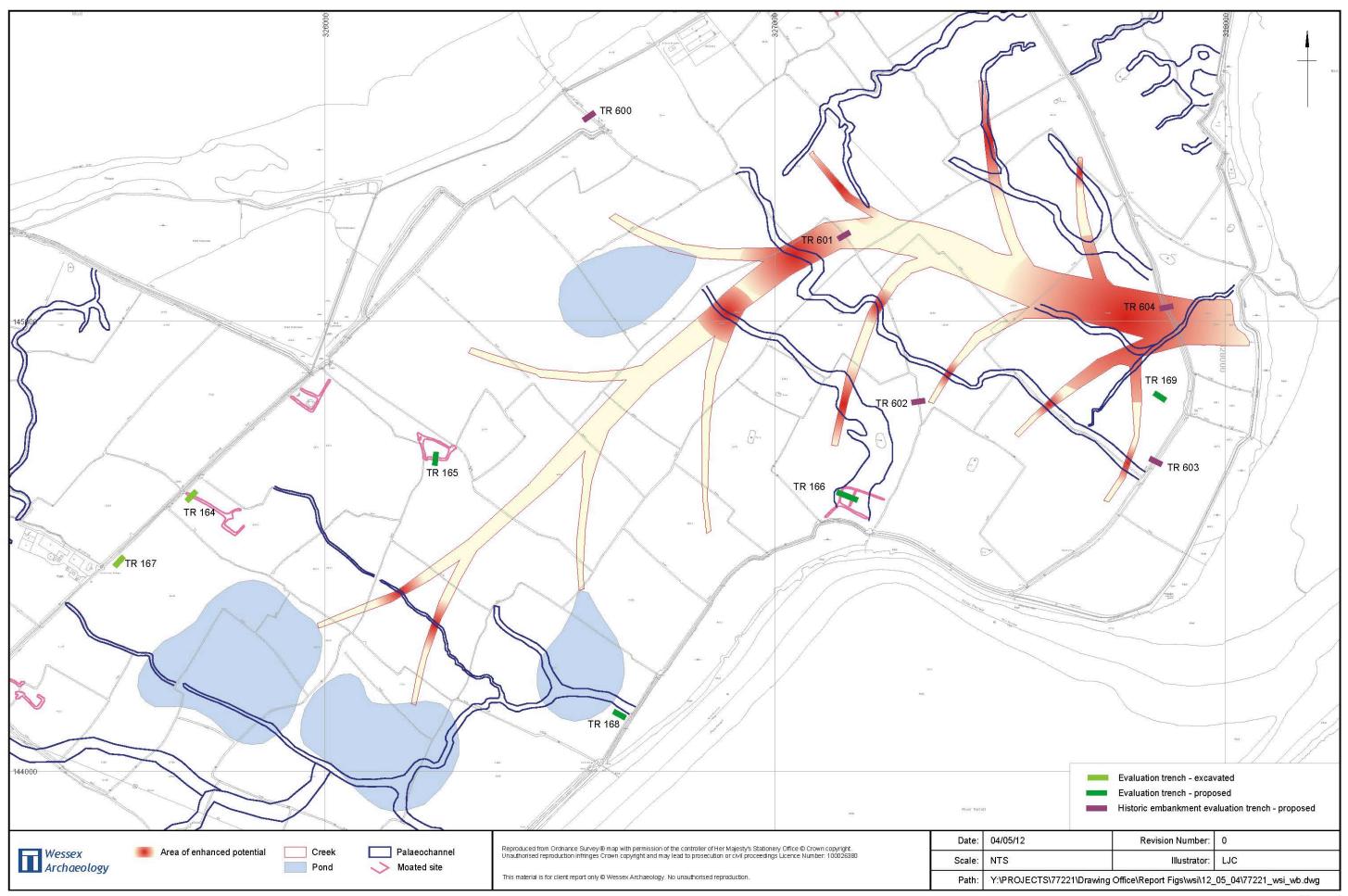
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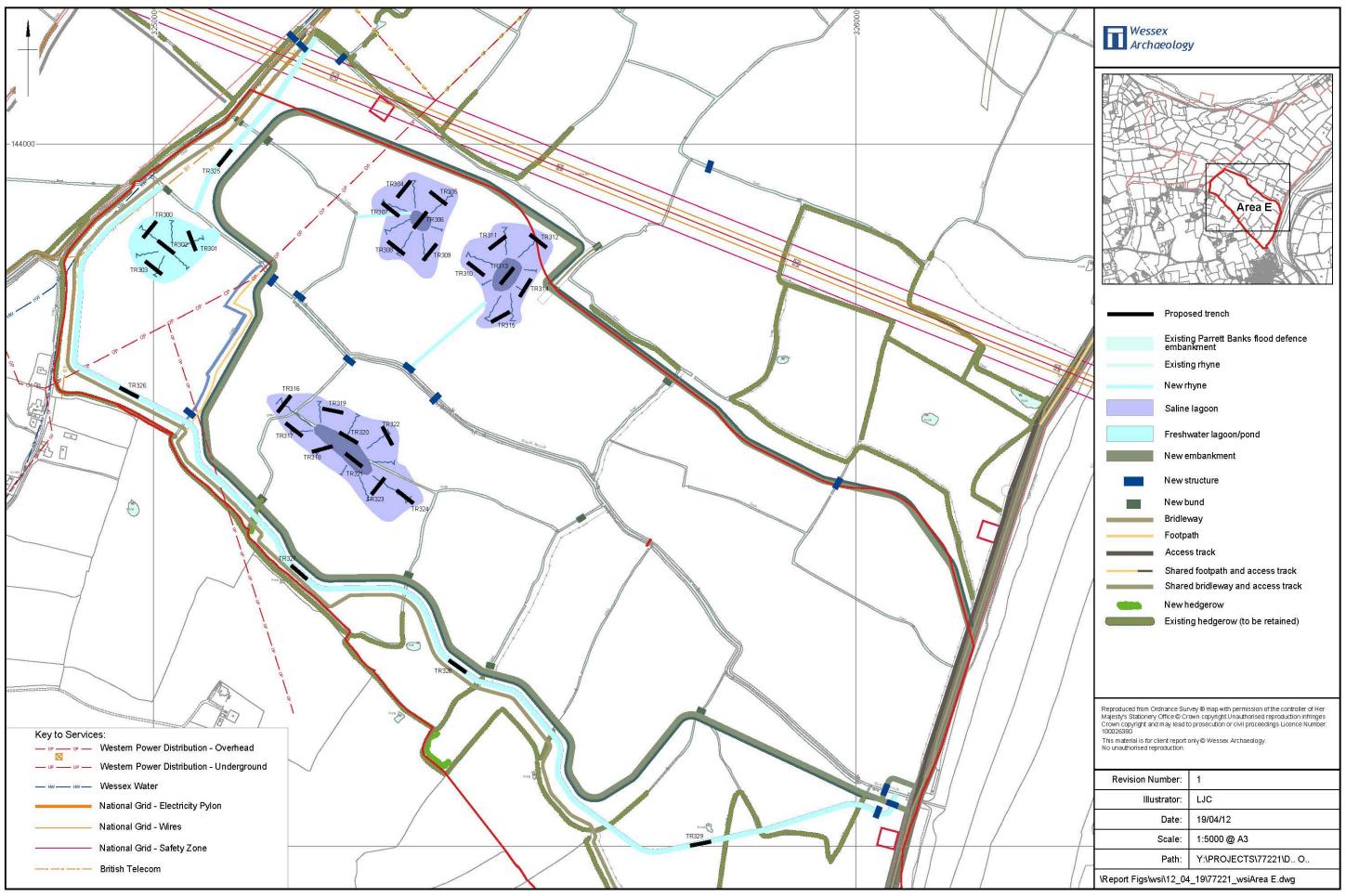
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Area E proposed trench location plan