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Rev. 3



Clappits Works

Site-Specific Written Scheme of Investigation

DCO Requirement 20 (1)

(Appliable to Work Numbers 21 to 24)

Prepared by:	Checked by:	Approved by:
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Revision Summary				
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1	23/07/2021	Alastair Becket and Elliot Grater	Phil Rew- Williamson	Catherine Sibley
2	11/01/22	Alastair Becket and Elliot Grater	Phil Rew- Williamson	Gareth Mills
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1	All	All	New Document
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FIGURES

Figure 1 Site Location

Figure 2 Overview Plan

Figure 3 Archaeological Sites within Works Area

Figure 4 Archaeological Mitigation Areas

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1. INTRODUCTION AND SCOPE

1.1. Project Overview

East Anglia Three Limited (EATL) was awarded a Development Consent Order (DCO) by the Secretary of State, Department of Business, Energy & Industrial Strategy (DBEIS) on 7 August 2017 for the East Anglia THREE Offshore Windfarm (EA THREE). The DCO granted consent for the development of a 1,200MW offshore windfarm and associated infrastructure and is live until 28 August 2022.

- 2. The DCO has now been subject to three non-material variations:
 - In March 2019 EATL submitted a non-material change application to DBEIS to amend the consent to increase the maximum generating capacity from 1,200MW to 1,400MW and to limit the maximum number of gravity base foundations to 100. In June 2019 DBEIS authorised the proposed change application and issued an Amendments Order.
 - In July 2020 EATL submitted a second non-material change application to DBEIS to amend the parameters of its offshore substations (reducing the number of these to one) and wind turbines (a decrease in the number of turbines and an increase in their hub height and rotor radius). On 15 April 2021 DBEIS authorised this proposed change application and issued an Amendments Order.
 - In August 2021 EATL submitted a third non-material change application to DBEIS to amend the consent to remove the maximum generating capacity of 1,400MW and to amend the parameters of its wind turbines (a decrease in the number of turbines and an increase in their hub height and rotor radius). The application is currently in the consultation phase.
- The onshore construction works associated with EA THREE will have a capacity of 1,400MW and transmission connection of 1,320MW. The construction works will be spread across a 37km corridor between the Suffolk coast at Bawdsey and the converter station at Bramford, passing the northern side of Ipswich. As a result of the strategic approach taken, the cables will be pulled through pre-installed ducts laid during the onshore works for East Anglia ONE Offshore Windfarm (EA ONE), thereby substantially reducing the impacts of connecting to the National Grid (NG) at the same location. The infrastructure to be installed for EA THREE, therefore, comprises:
 - The landfall site with one associated transition bay location with two transition bays containing the connection between the offshore and onshore cables;
 - Two onshore electrical cables (single core);
 - Up to 62 jointing bay locations each with up to two jointing bays;
 - One onshore converter station, adjacent to the EA ONE Substation;
 - Three cables to link the converter station to the National Grid Bramford Substation;
 - Up to three onshore fibre optic cables; and
 - Landscaping and tree planting around the onshore converter station location.
- 4. Since the granting of the DCO, the decision has been made that the electrical connection for EA THREE will comprise a high voltage direct current (HVDC) cable rather than a high voltage alternating current cable and, therefore, the type of substation that will be required is a HVDC converter station. The substation will be referred to here as a 'converter station' and this amended terminology has been agreed with the relevant authorities on 15 October 2020. It has also been determined that only one converter station will be constructed rather than two and that the converter station will be installed in a single construction phase.

1.2. Purpose and Scope

5. This Site-Specific Written Scheme of Investigation (WSI) sets out the standards and procedures for undertaking the archaeological investigations required for the Clappits Works stage of the EA THREE construction works (Figure 1 Site Location and Figure 2 Site Context Plan) (hereafter "the Works Site"). This document has been produced to discharge DCO Requirement 20 (1) which states:

Archaeology

20.

- (1) No stage of the connection works may commence until for that stage a written scheme of archaeological investigation (which accords with the outline written scheme of investigation (onshore)) has, after consultation with Historic England and Suffolk County Council, been submitted to and approved by the relevant planning authority.
- (2) In the event that site investigation is required, the scheme must include details of the following
 - (a) an assessment of significance and research questions; and
 - (b) the programme and methodology of site investigation and recording;

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- (c) the programme for post investigation assessment;
- (d) provision to be made for analysis of the site investigation and recording;
- (e) provision to be made for publication and dissemination of the analysis and records of the site investigation;
- (f) provision to be made for archive deposition of the analysis and records of the site investigation; and
- (g) nomination of a competent person or persons/organisation to undertake the works set out within the written scheme of investigation.
- (3) Any archaeological works or watching brief must be carried out in accordance with the approved scheme.
- (4) In the event that site investigation is required, the site investigation and post investigation assessment must be completed for that stage in accordance with the programme set out in the written scheme of archaeological investigation and provision made for analysis, publication and dissemination of results and archive deposition secured for that stage.
- The scope of this Site-Specific WSI relates to the Clappits Works Stage, as part of the onshore cable route that runs from the landfall location at Bawdsey to the Converter Station located near Bramford, Suffolk. The works in this stage comprise Work No.s 21 to-24 (Figure 2). WSIs have been produced for each stage of the onshore connection works and are provided under separate cover.
- The Clappits Works will be some of the first works to be undertaken along the cable route. These works have been designated as a stage in their own right to allow the works to commence at this location prior to works commencing along the cable route as a whole (i.e. the main cable works construction phase). The CCS and the access to it will be constructed in Summer 2022 and the jointing bay installation, duct proving, cable installation and reinstatement will be undertaken as part of the main cable works construction phase.
- As per DCO condition 20 (1), the scope of works presented within this document draws upon that presented within the Outline Written Scheme of Investigation (Onshore) (OWSI) produced as part of the original Environmental Statement (Document 8.4; RoyalHaskoningDHV 2016). It has also been informed by the 'East Anglia THREE: Desk Based Archaeological Risk Assessment and Mitigation Strategy' (RSK 2020, Appendix 1).

1.3. Legislation and Planning Policy

- East Anglia THREE is a Nationally Significant Infrastructure Project (NSIP), and as such the primary legislation relating to the consent regime for the project is provided by the Planning Act 2008. The Act designates a series of National Planning Statements (NPSs) setting out national policy in relation to NSIPs.
- Those NPS of specific relevance to the project comprise the EN-1 Overarching Energy NPS and EN-3 Renewable Energy Infrastructure both designated in July 2011. Also of relevance is NPPF Section 12: Conserving and enhancing the historic environment; this sets out the principal national guidance on the importance, management and safeguarding of heritage assets within the planning process.
- 11. This national guidance provides a framework which:
 - recognises that heritage assets are an irreplaceable resource;
 - requires applicants to provide proportionate information on the significance of heritage assets affected by the proposed project and an impact assessment on that significance;
 - takes into account the desirability of sustaining and enhancing the significance of heritage assets and their setting;
 - places weight on the conservation of designated heritage assets; and
 - requires developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and impact, and to make this evidence (and any archive generated) publicly accessible.

1.4. Guidance and Best Practice

- Detailed standard and guidance documents for archaeological fieldwork are produced by the Chartered Institute for Archaeologists (CIfA), those relevant to the current works include:
 - Standard and guidance for archaeological excavation (CIfA 2020a)
 - Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (CIfA 2020b)
 - Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (CIfA 2020c)

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Suffolk County Council also has a series of documents that provide the County's expected standards for undertaking archaeological fieldwork. Pertinent to this scope of work is:

- Requirements for Archaeological Excavation (updated January 2021);
- Additional Requirements for a Palaeoenvironmental Assessment (updated 2018); and
- Archaeological Archives in Suffolk. Guidelines for Preparation and Deposition (Updated 2019).
- Guidance set out in 'Standards for Field Archaeology in the East of England' (Gurney 2003) should also be followed, alongside the Good Practice Advice notes by Historic England and the Association of Local Government Archaeological Officers (ALGAO).
- The archaeological works set out within this WSI, and all associated post-excavation work and reporting, will be undertaken in accordance with this WSI by a competent, professional archaeological contractor (the Archaeological Contractor).

2. ABBREVIATIONS

ADS	Archaeology Data Service
ALGAO	Association of Local Government Archaeological Officers
CCS	Construction Consolidation Site
DBARAMS	Desk-Based Archaeological Risk Assessment and Mitigation Strategy
DBEIS	Department of Business, Energy and Industrial Strategy
DCO	Development Consent Order
CIFA	Chartered Institute for Archaeologists
cscs	Construction Skills Certification Scheme
DGPS	Differential Global Positioning System
EA ONE	East Anglia ONE Offshore Windfarm
EA THREE	East Anglia THREE Offshore Windfarm
EATL	East Anglia THREE Limited
HER	Historic Environment Record
HVDC	High Voltage Direct Current
MORPHE	Management of Research Projects in the Historic Environment
MW	Megawatt
NG	National Grid
OASIS	Online Access to the Index of Archaeological Investigations
OWSI	East Anglia Three Outline Written Scheme of Investigation (onshore)
PPE	Personal Protective Equipment
RO	Registered Organisation (CIfA)
RSA	Regional Science Advisor
SCCAS	Suffolk County Council Archaeology Service
sccs	Secondary Construction Consolidation Site
SFB	Sunken Feature Building
SME	Strip, map and excavate
SMS	Strip, map and sample
SPE	Set piece excavations

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SuDS Sustainable Drainage System	
UKIC	United Kingdom Institute for Conservation of Historic & Artistic Works
WSI	Written Scheme of Investigation

3. CONSTRUCTION DETAILS

3.1. Cable Works - Overview

- The construction works will be spread across a 37km corridor between the Suffolk coast at Bawdsey and the Converter Station at Bramford, passing the northern side of Ipswich. The cables will be pulled through pre-installed ducts laid during the onshore works for East Anglia ONE. The construction activity within each section along the onshore cable route will be as follows:
 - Any minor temporary modifications to the public road network;
 - Establish the Construction Consolidation Sites (CCSs);
 - Establish accesses to, and temporary haul road to, the jointing bay locations;
 - · Establish temporary jointing bay compounds;
 - Excavate jointing bay pit to locate the existing ducts at each of the compounds;
 - Construct jointing bay;
 - · Transport of cables to site, pull cables through ducts and undertake jointing;
 - · Topsoil replacement and seeding;
 - Remove temporary compounds (jointing bays and CCS); and
 - Reinstate all disturbed land and permanent fences and hedges.
- Some temporary modification of the existing road networks may be required such as localised widening, temporary widening or socketing of street signs and temporary moving of street furniture in order to allow larger vehicles than normal to access the jointing bays. This will be completed prior to the start of the main construction works within relevant sections of the cable corridor route.
- 18. EATL will require up to seven temporary construction compounds to aid in the construction of the proposed East Anglia THREE project. These have been designated as 'Primary Construction Consolidation Site' (PCCS) and 'Secondary Construction Consolidation Site' (SCCS) depending on their uses. Two PCCS and up to five SCCS will be installed, which will all be temporary and will be removed once construction is complete.

Table 3-1 – Construction Consolidation Site Locations

CCS Type	ID	ID Address	
Secondary	Α	Bullen Lane, Bramford, Ipswich, Suffolk IP8	
Primary	В	Paper Mill Lane, Claydon, Ipswich, Suffolk IP6 0AP	
Secondary	C	Witnesham Road, Ipswich, Suffolk IP6	
Secondary	D	Playford Corner, Playford Mount, Ipswich, Suffolk IP6 9DS	
Primary	E	Top Street, Martlesham, Suffolk IP12	
Secondary	F	Clappits, Woodbridge Road, Newbourne, Woodbridge, Suffolk IP12 4PA	
Secondary	G	Park Lane, Ipswich, Suffolk IP10	

19. The PCCSs will:

- Form the main point of access onto the linear construction site;
- Provide areas for the storage of materials and equipment;
- House site administration and welfare facilities for the labour resources;
- Form an interchange hub for deliveries of material, equipment and resources; and
- Allow HGVs to park prior to entering the local road network during peak hours.
- The SCCSs will act as hubs for the delivery of materials, equipment and resources along the route and will enable access to the cable route for construction. They will be of sufficient size to accommodate limited storage of materials, equipment and labour welfare facilities.

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It is anticipated that 29 jointing bays will be required along the 37km cable route, in addition to a transition bay at the landfall. Each jointing bay will comprise a concrete box 10m long by 3m wide by 1.5m high buried so that the base is 2.5m below ground level. A jointing bay construction compound will be required adjacent to each jointing bay and will have hardstanding areas of up to 900m² within the compound which would typically measure 24m x 115m i.e. 2,760m².(in accordance with Requirement 12(11) which stipulates that the footprint must not exceed 3,740m²). The compounds will have hardstanding and accommodate containers, drum trailer movement, parking, and welfare. A typical layout is shown in Figure 2 of the Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000061).

- Existing accesses and farm tracks will be upgraded and used where possible to access the jointing bay locations. Once these accesses reach the cable corridor, the routes to connect to the jointing bays are referred to as 'haul road'. The length of haul road for the cable route is limited by Requirement 12(12) of the DCO to 18.05km.
- In addition, the ducts to be used for EA THREE, which were installed during the EA ONE project construction works, will require to be 'proved' to ensure that they are intact and free of debris. This will be undertaken by the use of foam pigs which will be driven under pressure from jointing bay to jointing bay. Each stretch of duct that was installed using Horizontal Direct Drilling (HDD) will, however, require duct-proving excavations at each end of the HDD, to allow the use of different size foam pigs, due to a difference in the diameter of these compared to the ducting installed using open trench techniques.

3.2. Clappits Works

- ^{24.} Clappits Works comprise a stage of the onshore connection works and cover Work No.s 21 to 24. The infrastructure within these Work No.s comprises:
 - The Clappits SCCS (CCS F) in Work No. 22;
 - Three Jointing Bays (20 to 22) in Work No. 21;
 - Two improved accesses with the public roads as follows:
 - Access AP-H (Work No. 23) eastwards from Woodbridge Road, to access the Clappits SCCS and Jointing Bays 21 and 22 in Work No. 21; and
 - Access AP-I (Work No. 24) eastwards from Newbourne Road, to access Jointing Bay 20 in Work No. 21; and
 - A crossing of The Street (CR01 and CR02); and
 - The access tracks/haul roads required to access Clappits SCCS and jointing bays 20 to 22.
- These are shown on Figure 2.

3.2.1. Accesses AP-H and AP-I, the Crossing Point, Access Tracks and Haul Roads

- ^{26.} Clappits SCCS will be accessed from Woodbridge Road using Access AP-H. This junction was used for the EA ONE project (Access AX-14) but was fully reinstated following the EA ONE works and will need to be constructed under the EA THREE DCO. The vehicular access track from the access to the Clappits SCCS that was installed as part of the EA ONE construction works remains in situ as it was agreed with ESC that restoration would be environmentally more damaging than leaving the improved track in place. A new temporary vehicular access track of 160m length and 5.5m width will be used to link this existing track and the Clappits SCCS to reach the edge of the cable corridor (Work No. 21), where 610m of 5.5m wide haul road will link to road crossing CRO2, and a further 1,520m from road crossing CRO1 to Jointing Bays 20 and 21. The amount of temporary haul road required to access these jointing bays will be 2.13km.
- 27. Access AP-I will be constructed from Newbourne Road, along with 400m of 5.5m wide access track to link to the edge of the cable corridor which will access directly onto the compound of Jointing Bay 20. This access was not used as part of the EA ONE construction works.
- 28. A crossing of The Street (CR01 and CR02) will be required. This will be in the same location as that used for EA ONE.
- 29. No watercourse crossings will be required for the Clappits Works.
- 30. The construction methodologies associated with the accesses, access track and haul roads are typically as follows:
 - Set out the access and track/haul road with the use of Global Positioning Systems (GPS) Real Time Kinematic (RTK) equipment;
 - Locate, divert and cap any existing field drains;

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Set out and install drainage features the length of track to be constructed;

- Remove vegetation, then remove and locally store topsoil material over the working width; seeding topsoil if it is to be stored for longer than 6 months;
- Excavate to formation level and store any excess material;
- Under-track drainage will be installed where necessary and in accordance with drainage requirements;
- Place a geotextile onto existing subsoil to improve the bearing capacity of the sub-soil, depending on ground conditions, programme and landowner requirements; and
- Place imported stone in accordance with the design to form the track structure.

3.2.2. Secondary Construction Consolidation Site (Work No. 22)

- The Clappits SCCS will be a hub for the delivery of materials, equipment and resources. The dimensions of the Clappits SCCS will be 60m long by 20m wide covering a surface area of 1,200m², this is in accordance with Requirement 12(9)(a) of the DCO which limits the size of each SCCS to 1,200m². The Clappits SCCS will also be within the area previously used for the EA ONE SCCS in this location.
- The construction of the SCCSs involves stripping of topsoil, importing and laying stone for the compound base and installing cabins and welfare facilities. Construction of the Clappits SCCS will take approximately 3 weeks and the methodology will be as follows:
 - The extent of SCCS will be marked out with the use of GPS RTK equipment;
 - Any existing field drains will be located, diverted and capped;
 - Drainage features will be set out and installed as required;
 - Security fencing will be erected around the perimeter of the SCCS;
 - Once vegetation has been removed, topsoil material over the SCCS area will be removed and locally stored and seeded if it is to be stored for longer than 6 months;
 - Any excess material will be excavated to formation level and stored; and
 - Imported stone will be placed in accordance with the design of the SCCS base structure.
- The SCCS will be constructed first, with the duct proving, jointing bays and cable pull through occurring at a later date (anticipated in 2024). It is intended that the SCCS will provide an early onsite presence for the onshore cable construction works and will be used as a base for mitigation and survey works being undertaken as well as for the construction team to visit site during the later stages of the planning and design process. It may also be used for stakeholder and other site meetings.
- 34. The Clappits SCCS will remain in situ for the duration of the onshore cable works, prior to being restored as described in Section 3.2.5.

3.2.3. Jointing Bays 20 to 21 (Work No. 21)

- 35. The three jointing bays in Work No. 21 will be located as follows:
 - Jointing Bay 20 340m to the east of Newbourne Road and to the southwest of Waldringfield (Grid Ref 627520 244187);
 - Jointing Bay 21 45m to the west of Mill Road, to the east of Newbourne (Grid Ref 627881 243040); and
 - Jointing Bay 22 240m to the north of Kirton Creek and 190m to the southeast of White Horse Wood, to the southeast of Newbourne (Grid Ref 628065 241862).
- Once the location of each jointing bay compound has been established (using GPS RTK equipment), creation of the compound will commence with erection of temporary security fencing, removal of topsoil layer and installation of hardstanding areas.
- The jointing bay will then be excavated to a depth of up to 2.5m with adequate slope batter or shoring on all sides of the excavation to prevent the soil from collapse. The existing ducts will be uncovered and concrete slabs constructed to provide a level working area. Two sump pits will be included to facilitate drainage and dewatering and water will be treated, where necessary, before being discharged. Installation and jointing of the cables will then take place, along with installation of earthing link boxes and fibre optic cable chambers, before the area is back filled with subsoil.
- 38. The creation of each jointing bay compound and excavation of each jointing bay will take a week each.

3.2.4. Cable Installation

39. The electrical transmission cables will be delivered to the Clappits SCCS where they will be transferred to the jointing bay compounds when needed. The cable drums will comprise abnormal loads and their delivery will be managed as set out in the Traffic Management

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Plan (EA3-LDC-CNS-REP-IBR-000053). Two cable lengths of approximately 1,260m will be required to pull through between each pair of jointing bays. The cable ducts will be proved before the cable is pulled through. Once the cables are received at the jointing bay compound, they will be temporarily stored on the hardstanding area prior to installation in the pre-installed ducts.

- Installation of the cables into the ducts between the jointing bays will begin with a cable pulling system being installed into the bay. A steel bond and winching system with free spinning rollers will be installed along the bottom of the bay. Hydraulic jacks will raise the cable drum off the ground and a winch will be used to pull in cable using a pulling rope. A dynamometer will ensure the maximum pulling tension is not exceeded. Tension on the cable will be reduced using a biodegradable water-based lubricant. This process will be repeated for the second cable being installed in the duct. The cables will then be jointed once 2 cable sections (4 cables) have been installed.
- It is expected that pulling and jointing operations at each location would take approximately 2.5 weeks typically spread over a three to four week period, with approximately five workers for each jointing bay. These works will then be repeated to install the cables between all the jointing bays.

3.2.5. Reinstatement

- Following installation and jointing of the cables, the jointing bays, compound, accesses and haul roads will be reinstated with the stored topsoil and subsoil following trenching. If necessary, the subsoil will be 'ripped' prior to placement if compaction had occurred. Topsoil will be spread in such a way as to ensure that it does not become compacted. The topsoil will then be cultivated and reseeded (if required) and suitable hedgerow species replanted during the first appropriate planting season, in accordance with the Landscape Management Pan (EA3-LDC-CNS-REP-IBR-000056). Temporary fencing around any new planting would be removed once reinstatement was established.
- 43. The Clappits SCCS will remain in situ for the duration of the cable works and will then be removed and reinstated.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1. Archaeological and Historic Context

- The earliest evidence of archaeological activity around the Works Site and wider area, dates to the Pleistocene (about 500,000 years BC), and settlement sites are recorded from the Palaeolithic, Mesolithic, and through to the Neolithic. Most activity is recorded along areas of lighter soils such as The Breakland and The Sandlings, as well as major rivers, but activity is found throughout the area. Neolithic (4000-2200BCE) trade routes are evident between northwest Suffolk and the Lake District, and southwest Suffolk and Cornwall, and while causewayed enclosures and cursus monuments are known, long barrows and henges are largely absent. A total of 825 Bronze Age (2200-700BCE) barrows are recorded in Suffolk, of which 114 are still visible as earthworks, along with 'flat' cremation cemeteries, but little Bronze Age settlement activity has otherwise been recorded. Settlement and growth continued through the Iron Age (700BCE-43AD) uninterrupted, with most settlements remaining undefended, though some fortified settlements were established during the Later Iron Age.
- 45. Romano-British (43-410AD) activity in East Anglia was centred around Caistor St Edmunds in Norfolk & Colchester in Essex, and a steady population growth corresponds with land clearance and management and the creation of several major towns and road systems. Early medieval (410-1066AD) colonisation is first recorded at the head of the Deben Estuary, and the 8th-9th centuries marked a dramatic increase in population. The area was under Danish rule from AD 870-902, with Danish influence and acculturation still evident in regional placenames today. Following the Norman Conquest of AD 1066, castles and other fortifications were rapidly established, a practice that continued later into the medieval period (1066-1499AD), with 850 moated sites known throughout Suffolk, the earliest being of early-12th century origin.
- There are many post-medieval (1500-1799AD) and 19th Century features recorded in Suffolk, including listed buildings and registered parks and gardens, along with many undesignated features such as bridges, dovecotes and tramways etc.
- 47. Significant remains from the modern period (1900AD-Present Day) in East Anglia, are largely associated with World War 1 and World War 2, mostly comprising coastal defences, including pillboxes, trenches, artillery emplacements, and other concrete constructions. In addition, the remains of a Cold War radar station and the Bloodhound Missile Site are located at RAF Bawdsey.
- The historic environment records (Figure 5) surrounding the Works Site are mainly prehistoric in date. The majority of these features have been identified through aerial photography and crop marks.

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Prehistoric features within the area include possible ring ditches (WLD 008, WLD 018, WLD 019, NBN 008, NBN 011, NBN 007, NBN 018,), two specifically dated as Bronze Age (HMY 046, HMY 047), potential barrows (WLB 031, NBN 009, NBN 032), three specifically dated as Bronze Age (NBN 010, HMY 029, NBN 021), and one as Neolithic (HMY 045), ditched trackways (WLD 058, NBN 020) and potential prehistoric or early Roman field systems (WLD 017, HMY 006). Two prehistoric artefact scatters, one dated to the Neolithic (WLD 052, NBN 015), were uncovered to the west of the Works Site.

- Iron Age/Roman activity was recorded in the vicinity of the site. To the north is a possible Iron Age/Roman settlement with associated field boundaries (MRM 025), and to the immediate south of the Works Site is a further possible Iron Age/Roman enclosure (HMY 001), within which is a possible prehistoric or Roman hut circle (HMY 002). A trackway (NBN 019) dating to the late prehistoric/possible Roman period is located immediately east of the Works Site. A single Roman coin was found to the west of the Works Site (NBN 012), and further Roman finds were discovered alongside finds dating from the prehistoric to medieval periods (WLD 013, WLD 015), to the north of the Works Site.
- Saxon activity has been confined to a single bronze artefact recovered to the north of the Works Site (WLD 015), and a single sherd of Late Saxon/early medieval pottery to the east (HMY 048). Medieval activity in the area includes a medieval heath/common land (NAC 150), a medieval pottery scatter to the south (WLD 049), and a medieval or post-medieval field system (NBN 033).
- Post-medieval activity includes a post-medieval track (WLD 059), several 19th century farmsteads (WLD 104, WLD 105, NBN 055, HMY 067), a 19th century barn (WLD 106), a bridge (HMY 007), and a single human skull fragment (WLD 024).
- 53. Two assets, a possible boundary bank (HMY 031) and two linear ditched features (HMY 024) are undated.

4.2. Archaeological Investigations at the Clappits Works Site for EA ONE

- The Works Site has been subject to significant archaeological investigation during the development of the EA ONE project. This investigation has included geophysical survey (Oxford Archaeology 2015) subsequent trial-trenching evaluations (Wessex Archaeology 2016), and a metal detecting survey (Wardell Armstrong 2017). Further mitigation in 2018 included targeted set piece excavations (SPE), strip, map and excavate (SME), and watching briefs (Wardell Armstrong 2018).
- Due to the overlapping development areas, archaeological sites identified during the EA ONE investigations sit within or near the Works Site (Figure 3). Site 33 sits within the Clappits SCCS area (Work no. 22). Outside of this archaeological site, the Work Areas were also subject to geophysical survey and trial trenching. To the north of the jointing bays (Work no. 21) were located Sites 29, 30, 31, and 32, and to the south of the Clappits SCCAS area (Work no. 22), was located Sites 34-37, which all contained archaeology that could inform the potential of the EA THREE mitigation. Detailed drawings depicting Sites 29-37 extracted from the EA1 Updated Project Design¹ are located in Appendix 1.

4.2.1. Site 33

- All the trial trenches at the Clappits SCCS area (Work no. 22) were located within the excavated site 33. The three proposed jointing bays, all within Work no. 21, had archaeology within their vicinities. Trial trenches at the most northerly jointing bay revealed two prehistoric ditches, which conformed to anomalies in the geophysics, and while the middle bay is located in an area with little to no known archaeology, the most southerly jointing bay is located near a concentration of ditches and features, including a Roman-British enclosure (trenches 531-536), and undated and post medieval ditches (trenches 539-541), all of which correspond to a busy area of activity on the geophysics.
- Site 33 covers approximately half of the proposed SCCS area (Work no. 22) at Clappits and extends into the cable corridor (Work No. 21). The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SPE. Geophysical survey took place on all but the southern part of the site, and identified a small rectangular and possibly subdivided enclosure, while the metal detecting survey recovered 39 artefacts, mostly post-medieval, though there were two Roman coins and some other Roman artefacts, along with some medieval finds. There was no distribution pattern noted to the finds. Evaluation trench 491 recorded two ditches on the location of the geophysics, while trenches 498, 501, 502, and 504 contained evidence of burning and other ditches. Excavation of the whole site revealed a series of large and complex field and enclosure systems dating to the Bronze, Iron, and Roman periods. Two small Bronze Age domestic structures, and a Roman kiln were also present on site.

¹ Wardell Armstrong (on behalf of Scottish Power) (2019) East Anglia One Offshore Windfarm Archaeological Mitigation Works Updated Project Design

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The proposed EA THREE Access AP-I and the access track to Jointing Bay 20 (Work no. 21) is located just to the west of the northern end of Site 33. Though archaeology was sparser compared to the southern end of the field, a series of linear features, possibly forming an enclosure, are noted, and there is potential that features related to these are located in the footprint of the proposed development and should be expected to be uncovered as part of the proposed mitigation.

4.2.2. Site 32

Site 32 was located 250m north of Access AP- I and the access track to Jointing Bay 20 (Work no. 21). The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SPE. Geophysical survey revealed a long north-south boundary and a series of other boundaries and enclosures, split into at least two phases. Metal detecting revealed a small number of Roman and medieval finds with no discernible pattern, with most medieval finds likely linked to the nearby settlement of Waldringfield. Evaluation trench 482 revealed two ditches, one with Late Bronze Age/Early Iron Age pottery, with a similar ditch located in trench 483, alongside post holes. SPE revealed a complex network and sequence of field systems that spanned from the Late Iron Age to the medieval, with some scattered Early Iron Age pits and a ring gully, likely from a roundhouse. Medieval field boundaries were overlain. Activity in Site 32 was concentrated to the north, away from the EA THREE SMS area, though the field systems (some running east-west, some northwest-southeast) continue throughout, so there is a possibility that features relating to this network continue towards the proposed Access I.

4.2.3. Site 31

Site 31 was located 700m north of Access AP_I and the access track to Jointing Bay 20 (Work no. 21), and the archaeological works carried out here included geophysical survey, and metal detecting survey followed by trial trenching and SPE. Geophysical survey results were uninterpretable due to modern disturbance, and the metal detecting revealed primarily medieval finds, likely related to the nearby settlement of Waldringfield. Evaluation trenches revealed eight ditches and two pits, with a substantial assemblage of Late Bronze Age pottery within one feature. SPE revealed a north-south ditch, likely double ditched, running across the site, likely Early Iron Age in date. Though Site 31 is located 700m away from the Works Site, it revealed features of similar age and form to Site 32, suggesting that the extent of prehistoric archaeology in the area is potentially extensive.

4.2.4. Site 30

Site 30 was 800m north of Access AP_I and the access track to Jointing Bay 20 (Work no. 21), and archaeological works here consisted of geophysical and metal detecting surveys, as well as trial trenching and SME. Geophysical survey results were uninterpretable due to modern disturbance, the metal detecting survey revealed primarily post-medieval finds, and the single trench excavated as part of the evaluation was negative. SME revealed a cluster of pits and post holes of Late Bronze Age/Early Iron Age date, potentially including a roundhouse structure and rubbish pits. Though Site 30 is located 800m north of proposed EA THREE EA THREE SMS area areas, it revealed features of similar age and form to Sites 32 and 31, further emphasising the potential for prehistoric archaeology in the area.

4.2.5. Site 29

Site 29 was approximately 900m north of of Access AP-I and the access track to Jointing Bay 20 (Work no. 21), and was split into three areas: A, B, and C. Site 29c is the closest to the EA THREE development and contained the most substantial archaeology. The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SPE. In Site 29c, geophysics revealed a trackway and field boundaries. Metal detecting finds were extensive, with 110 artefacts recovered, mostly medieval, with no significant patterns identified beyond likely modern disturbance. The evaluation revealed features primarily provisionally dated to the Bronze Age, with a high quantity of Bronze age pottery recovered, though two ditches in trench 461 containing Romano-British and medieval pottery respectively. SPE revealed activity from the Bronze Age through to the medieval period, including Bronze Age field systems and possible domestic enclosures, a small number of Bronze Age cremation burials, three Late Iron Age barrows, and two Roman cremations. Though Site 29c is 900m north of any planned EA THREE SMS area, the significance of the archaeology uncovered highlights the potential of the surrounding landscape.

4.2.6. Sites 34

Site 34 was located approximately 200m south of the Clappits SCCS area (Work no. 22), and the proposed haul road (Work no. 21) runs the length of the site. The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SPE. Geophysics revealed mostly post-medieval field boundaries, as well as a possible barrow, while metal detecting recovered only four post-medieval artefacts. One feature, an undated ditch, was revealed in trench 509 from the evaluation. SPE did not reveal the suspected barrow, and all features found were likely a continuation of field systems revealed in Site 33, suggesting a correlation of archaeology between the two areas.

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4.2.7. Site 35

Site 35 was located approximately 150m north of Jointing Bay 21 (Work no. 21), with the associated haul road running the length of the site. The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SME. Geophysical survey revealed some faint evidence of boundaries, and the metal detector survey only recovered post-medieval finds. A single feature was uncovered during trial trenching, a ditch with medieval material in trench 513. SME revealed a further continuation of the field systems uncovered in Site 33 and Site 34, suggesting possible further continuity of archaeology throughout this area.

4.2.8. Site 36

Jointing Bay 21 (Work no. 21) is located at the northern end of Site 36, with the associated proposed haul road running the length of the site to the south. The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SPE. Geophysical survey revealed vague indications of field systems. While most of the metal detecting finds were post-medieval, nine medieval artefacts were recovered, primarily in the centre and south of the site. The evaluation revealed a series of undated ditches, likely forming an enclosure system, as well as one pit in trench 522 that had fragments of Early Bronze Age Beaker pottery. SPE revealed a continuation of the field systems present in sites 33-35. There was a concentration in the northern end of the site where Jointing Bay 21 is to be located, with several E-W linears going beyond the borders of the site and a series of discretes scattered throughout the area. Any disturbance beyond the boundaries of the site will likely encounter a continuation of this archaeology.

4.2.9. Site 37

Site 37 was located at the southern end of the proposed EA THREE haul road, which runs the length of the site. The archaeological works carried out here included geophysical and metal detecting surveys, followed by trial trenching and SME. Geophysical survey revealed evidence of a rectilinear field system and a sub-rectangular enclosure that was noted in the HER as possible Iron Age or Romano-British. Metal Detecting revealed only two medieval finds, all others were post-medieval. Evaluation trenches 532-541 all contained archaeological features, mostly relating to an enclosure system, corroborating the geophysical anomalies, though only one ditch returned dating evidence from the Romano-British Period. SME revealed extensive multi-phase Iron Age and Romano British occupation associated with settlement activity and agriculture. This included a network of ditch systems, Late Iron Age industrial activity in the form of waste pits and a kiln, and a series of enclosures. Field boundaries were seen to have been periodically reestablished and re-organised in the 2nd century AD. Additional material was found including refuse pits, but it is interpreted that the focus of domestic activity is to the immediate east of the excavation area. This, and the high level of activity in Site 37, strongly suggest further activity beyond the boundary of the excavation.

5. OBJECTIVES AND ADMINISTRATION

5.1. General Objectives

- 67. The general objectives of the programme of archaeological works are to:
 - examine the archaeological resource within the Clappits Works Site, including clarifying the presence/absence and extent of any buried archaeological remains;
 - identify, within the constraints of the works, the date, character and condition of any surviving remains within the Clappits Works Site;
 - assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits;
 - analyse and interpret the results; and
 - produce reports which will present the results of the works in sufficient detail, including where necessary the information to allow an informed decision to be made concerning further mitigation strategies.

5.2. Specific Objectives

- The specific objectives of the programme of archaeological mitigation works are to:
 - contribute towards the discharge of DCO Requirement 20 (1);
 - record the depth, extent, character and date of any archaeological remains revealed;
 - recover and record a proportionate sample of any artefacts and palaeoenvironmental remains revealed;
 - undertake a proportionate programme of post-excavation analysis;

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compile a suitably detailed report presenting the results of the programme of archaeological mitigation works;

- compile a material and documentary archive, and deposit that archive with a suitable repository;
- if appropriate, publish the results of the programme of archaeological mitigation works in an appropriate peer-reviewed academic journal, or equivalent medium; and
- if appropriate, and as per the OWSI, contribute to local and regional research strategies as outlined in Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011), and the subsequent East of England Regional Research Framework (2021)
- 9. The areas and activities to be subject to archaeological mitigation are discussed in Section 6 and depicted on Figure 4.

5.3. Roles and Responsibilities

5.3.1. Archaeological Regulator

The Archaeological Regulator responsible for regulating the works undertaken, on behalf of the Local Planning Authority, Mid-Suffolk District Council, is:

Suffolk County Council Archaeology Service (SCCAS)

Bury Resource Centre

Hallow Road, Bury St Edmunds, Suffolk, IP32 7AY

0345 678 9000

5.3.1.1. Monitoring

- The Archaeological Contractor will inform the Archaeological Regulator of the commencement of fieldwork and the progress of the investigations on the Works Site. Reasonable access to the Works Site will be arranged for representatives of SCCAS and Historic England as appropriate for inspection and monitoring visits.
- variations to this WSI will be agreed in advance with EATL, the Archaeological Consultant to EATL, Historic England and the Archaeological Regulator.

5.3.2. Archaeological Consultant

73. The Archaeological Consultant responsible for project oversight and archaeological strategy is:

Alastair Becket

Associate Archaeologist

+440 131 335 6830 +44 141 353 5037

abecket@slrconsulting.com

SLR Consulting Limited

Floor 2, 4/5 Lochside View, Edinburgh Park, Edinburgh, EH12 9DH

5.3.3. Archaeological Contractor

- 74. The Archaeological Contractor will be appointed following confirmation of the construction programme and project phasing, consistent with the provisions set out in this WSI. The appointed Archaeological Contractor will provide:
 - a suitable risk assessment;
 - a team of suitably qualified archaeologists; and
 - progress reports (verbally or by email) to the Archaeological Regulator upon request;
 - a contractor's method statement confirming the implementation of the archaeological works in compliance with the methods set out in this WSI.

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5.3.4. Principal Contractor

The appointed Principal Contractor comprises NKT. The Principal Contractor will provide a detailed methodology for the construction groundworks in any areas of additional disturbance; this methodology will be supplied to the Archaeological Consultant and the Archaeological Contractor.

6. FIELDWORK METHODOLOGY

6.1. Scope of Archaeological Mitigation

- The Clappits Works have been designed to take place, wherever possible, in the footprint of areas previously disturbed or signed off during EA ONE and should require no further archaeological mitigation. The exception to this is the area of Access AP_I and the access track to Jointing Bay 20 (Figure 4), which sits outside the previously disturbed area. At this location archaeological mitigation will be required in the form of Strip, Map and Sample Excavation (Site EA3-3), a detailed methodology for which is outlined in Section 6.2.
- If areas of additional disturbance for the Clappits Works in Work No.s 21 to 24 are identified beyond those subject to significant disturbance during the construction of EA ONE and/or already investigated and cleared of archaeology via archaeological excavation (as detailed within Section 4, above), Strip, Map and Sample (SMS) Excavation is likely to provide the most suitable form of archaeological mitigation allowing any exposed remains to be recorded. Any such requirement would be agreed with SCCAS in advance of any mitigation or construction works. Though it is not anticipated that any such mitigation works are required, the broad methodology for SMS, as set out in the remainder of this document, serves as an indication of the likely approach required.

6.2. Strip, Map and Sample Excavation

- Access AP-I and the access track to Jointing Bay 20 (hereafter Site EA3-3) will require mitigation through Strip, Map and Sample Excavation before commencement of works. A programme of works will be agreed with SCCAS and the appointed contractor, and reasonable time will be allowed for the excavation of archaeological remains. Strip Map and Sample (SMS) Excavation is a technique often appropriate where archaeological remains are thought or even known to be present, but their specific type(s) and densities are unknown. The level of sample excavation required will be agreed following a site meeting and consultation with SCCAS/Historic England.
- Prior to the commencement of mitigation works, a Parish Code is required to be obtained from the Suffolk HER. This constitutes a Site code for the archaeological works. All finds and Site Archive will be marked with this number, and it will appear on the front cover of any Reports and used as the Site Code in the OASIS Record.
- Overburden will be removed using 360° tracked mechanical excavators fitted with toothless ditching buckets, working under the continuous direct supervision of a suitably experienced archaeologist. A methodology for mechanical excavation will be as follows:
 - overburden² will be removed in spits of no more than 200mm down to the level of the upper archaeological horizon or the natural geology whichever is reached first;
 - spoil will be stockpiled at designated locations. Topsoil and subsoil will be stockpiled separately. All spoil will be compacted and managed to avoid excessive saturation by water. Spoil will be stored at least 10m from any watercourse to avoid run-off of silt. If subsoil is to be stored on previously undisturbed land than geotextile membrane must be used as a barrier between the existing topsoil and the subsoil bund. Topsoil will not be stripped in such locations to facilitate subsoil storage;
 - each mechanical excavator will work backwards from a starting point to avoid tracking over cleared areas. No vehicles will track across stripped areas; and
 - for every plant team, there will be a ratio of one supervising archaeologist per machine.
- Upon completion of stripping, archaeological features and deposits will be identified and defined. These will be mapped using a survey quality GPS device and the resultant working plans (supplied by the appointed contractor in pdf and geo-referenced shapefile formats) will be supplied to and used in discussion with SCCAS to devise an adequate sample excavation strategy for exposed archaeological features. A 'sample' of the archaeological features will then be hand-excavated, enough to allow the clear identification of phases of human occupation on the site, where possible, and a full definition of archaeologically sensitive areas

² Overburden is defined as topsoil; including plough soil and subsoil including colluvium and alluvium where they occur only above archaeological deposits.

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within the area to be used to access the jointing bay. SMS areas will be fully backfilled by the appointed contractor following sign-off from SCCAS and EATL.

- After mechanical excavation, and subject to agreement with EATL and SCCAS, the appointed contractor should aim to start archaeological fieldwork within one week to prevent deterioration of archaeological material. Any delays will require possible mitigation, and SCCAS/Historic England retain the power to pause stripping of archaeological areas if the stripping is more than two weeks ahead of the excavation.
- Following the completion of archaeological mitigation in a site and following sign off from SCCAS, the excavation area will be backfilled under the supervision of the appointed contractor and to the satisfaction of EATL. All equipment will be removed, spoil will be backfilled in the reverse order it was removed, and then compacted. A photographic record will be maintained of the excavation areas prior to, and following, backfilling to document the condition of the land.

6.3. Preservation of Undisturbed Areas

Where construction activity related to EA THREE has been planned to take place within the previously disturbed footprint, it is critical that activity does not stray beyond the planned activity and into areas with archaeological potential that have not been disturbed. EATL will be responsible for the clear demarcation of these areas on the ground, as well as informing all teams undertaking construction activity as to the necessity of these boundaries.

6.4. Fieldwork Techniques

6.4.1. Sample Hand Excavation

- Any archaeological remains revealed will be cleaned and excavated by hand. This will be undertaken in accordance with the CIfA Standard and Guidance for Archaeological Excavation (2020a), as well as with all due industry and professional standards.
- 86. The following samples will be excavated:
 - 100% excavation of each sampled stake hole;
 - 100% excavation of each sampled post hole;
 - 100% excavation of all features relating to structural remains, cremations, and ritual deposits;
 - 50% excavation of each pit (if >0.4m diameter) up to 1.5m diameter;
 - a minimum 25% excavation of each sampled pit above 1.5m diameter, to include one complete cross section to obtain the feature's profile;
 - a minimum of 20% excavation of sampled linear features up to 5m in length; and
 - the sampling of longer features will be agreed with the SCCAS once their full extent within the excavation area has been established.
- Percentages referred to are based upon the surface areas of those parts of any archaeological features that lie within the archaeological monitoring and recording area, and not upon the entire known extent of any such features. In any specific instance, should the above percentage excavation(s) not yield sufficient information to enable the form and function of archaeological remains to be determined to an extent proportionate to their significance, further excavation of such remains may be required.

6.4.2. Metal Detecting

- All areas requiring archaeological mitigation will be subject to a metal detecting survey ahead of topsoil/subsoil stripping in line with SCCAS guidance (SCC 2021). The Contractor will be responsible for supplying metal detectors and suitably qualified personnel.
- Only finds from the surface/topsoil will be recovered. All significant artefacts will be recovered, and their locations mapped using a survey quality GPS, and will be supplied by the Contractor in pdf and geo-referenced shapefile formats.
- 90. Cut features will be detected before excavations, and spoil heaps shall be scanned regularly. If necessary, stratified layer deposits (e.g., dark earth) will be subject to metal detecting whilst hand excavation takes place.

6.4.3. Significant Remains

91. Where significant remains are revealed, additional detailed recording, specialist environmental sampling, and / or scientific dating may be required. The scope of and methodology for any such detailed recording would be agreed in advance between EATL, EATL's

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Archaeological Consultant and the Archaeological Regulator. A sample strategy for significant remains, informed by English Heritage (Historic England) (2011) could consist of:

- large samples (20lts) from waterlogged/anoxic deposits for the purpose of recovering plant and invertebrate remains, as well as small vertebrates and marine molluscs;
- monolith/Kubiena samples for the analysis of pollen, spores, diatoms and foraminifera;
- · core samples to be taken where monolith and section samples are not possible, for the recovery of microfossils; and
- small samples taken from individual contexts, 10-50g for ostracod and geoarchaeological analysis, and 10-20mm² for pollen and spore analysis.

6.4.4. Non-archaeological Remains

Where features are found to derive from naturally occurring events e.g. tree throws, plant holes, animal burrows, solution holes etc., a sample sufficient only to confirm that interpretation will be hand-excavated.

6.4.5. Variations to Strategy

93. Any variations to the above sampling strategy would be approved in advance by the Archaeological Regulator, following on-site discussion.

6.5. Archaeological Recording

- 4. Archaeological site recording will include the following:
 - a pro-forma context record for each stratigraphic unit revealed³;
 - a record of any areas identified as being devoid of archaeological remains and of any features investigated and confirmed to be
 of natural origin;
 - a 'Harris Matrix' diagram to elucidate any complex stratigraphic sequences;
 - site plans, either DGPS-recorded, or hand-drawn at a scale of 1:100, and depicting:
 - the extent of the mitigation area, tied into the Ordnance Survey National Grid and located on a 1:2,500 scale plan;
 - the extent of all stratigraphic units revealed;
 - appropriate detail identified within stratigraphic units;
 - plans of stratigraphic units at a minimum scale of 1:20, unless specific circumstances dictate an optimal scale;
 - sections of stratigraphic units at an appropriate scale. Unless specific circumstances dictate an optimal scale, then this should be a minimum of 1:20. For areas of detailed, significant or complex stratigraphy the scale used should be a minimum of 1:10⁴;
 - A photographic record comprising recognised industry-quality digital SLR photographs⁵; numerical indices of all context records, drawings, photographs, samples and small finds, checked and cross-referenced as necessary; and
 - a diary record of the progress of the archaeological work, including details of liaison and monitoring meetings, site visits, and a record of staff on site.
- 95. All of the above records will form part of the eventual project archive, to be deposited with the SCCAS Conservation Team.
- All archaeological recording will be undertaken in accordance with industry best practice, including standards and guidance set out by CIFA (2020a) and SCCAS (SCC 2021).

6.6. Artefact Recovery

Archaeological artefacts will be collected, stored and processed in accordance with accepted national and regional methodologies, guidelines and standards.

³ Typically, this would relate to any individual 'context' identified within a single archaeological intervention. However, there may be occasions where a context evidently recurs within multiple interventions, most commonly in relation to linear features. In such instances, it may optimise the intelligibility of the information derived, and aid in its interpretation, for a single context record to be compiled.

⁴ All scale drawings will include spot heights relative to the Ordnance Datum in metres, correct to two decimal places.

⁵ Alongside individual archaeological contexts / stratigraphic units, general site shots will also be taken to give an overview of the site and progress of the archaeological works programme.

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98. 'Bulk finds' will be collected and recorded by context. 'Small finds' will be recorded three-dimensionally using DGPS or equivalent survey equipment. Each artefact within any identified artefact scatters will also be recorded three-dimensionally.

99. All artefacts (apart from modern finds) will be collected and retained, unless otherwise agreed in advance with the Archaeological Regulator.

Where required, artefacts will be stabilised, conserved and stored in accordance with the guidance of the United Kingdom Institute of Conservators (UKIC). If necessary, a conservator will visit the Works Site to undertake 'first aid' conservation treatment of finds prior to their removal from site.

6.7. Environmental Sampling

The sampling strategy will be agreed with SCCAS and the Historic England Regional Science Advisor, as required. Particular attention will be paid to the recovery of samples from any waterlogged deposits present. Where appropriate, samples will be taken for floatation for the purpose of recovering material including charred plant remains, charcoal, and small mammal and fish bones. Samples for floatation will consist of 40-60 litres, or 100% of smaller features. Recovery and sampling of environmental remains will be in accordance with guidelines prepared by English Heritage (now Historic England) (2011) and SCCAS (SCC 2018):

- samples will be recovered from cleaned surfaces, using clean tools and placed in clean containers;
- samples will be appropriately recorded and labelled, and a register of all samples recovered will be maintained; and
- the samples will be stored safely in a sufficiently secure location prior to their delivery to the appropriate specialist.

The sample strategy adopted will consider information obtained during the EA ONE archaeological works that might inform as to the preservation/condition of any environmental remains and their potential to address specific archaeological questions. For the area of Site EA3-3, of greatest relevance will be Site 33 due to its proximity. From 136 samples 38 have been highlighted as requiring further analysis, all to recovered charcoal. In particular, sample <21> was singled out for its radiocarbon potential. More widely, across Sites 33, 32, 31, 30, 29, 34, 35, 36, 37, sampling consistently highlighted recovered charcoal as worthy of further investigation, with the exceptions of Site 29c, which had quantities of charred plant remains and shell worthy of further analysis, Site 35, which had a quantity of charred grain, and Site 37, which had a significant quantity of mollusc shells from one pit. Recommendations for further charcoal analysis were consistent across all sites. Post-excavation analysis of the EA ONE material is ongoing.

Secure contexts will be sampled for dating purposes as appropriate (whether on site or as sub-samples of processed bulk samples). This will include C14 dating, archaeomagnetic dating and dendrochronological dating. Any concentrations of charcoal or other carbonised material recovered on site will usually be retained. Samples for archaeomagnetic dates will be taken on site by the relevant specialist (English Heritage, now Historic England, 2006). Samples for dendrochronological dates would be taken either on site or from recovered timbers by the relevant specialist in accordance with published guidelines (English Heritage, now Historic England, 1998). Samples would be processed after initial post-excavation assessment.

Should any palaeoenvironmental deposits of particular interest be revealed, the Historic England Regional Science Advisor (RSA) will be contacted, and their advice sought in respect of an appropriate further sampling strategy. The RSA for East Anglia is:

Zoe Outram

Historic England (Cambridge Office)

Tel: 01223 582 707

Email: zoe.outram@HistoricEngland.org.uk

Any sampling would be undertaken in accordance with Historic England's 'Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record' (2015a). Geoarchaeological survey strategies will be agreed with SCCAS and the Historic England Regional Science Advisor and could consist of sampling of layers of geoarchaeological significance such as colluviums and alluviums through the employment of specialist techniques such as hand-augering or borehole survey.

6.8. Human Remains

Should human remains be encountered, they will initially be left in situ, suitably covered and secured, in compliance with industry best practice. The Archaeological Contractor will notify the Archaeological Consultant, who will then inform both EATL and the Archaeological Regulator.

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Following this initial consultation, the removal of human remains will only take place in accordance with a Ministry of Justice exhumation license, the appropriate Environmental Health regulations and the Burial Act 1857.

- The Archaeological Contractor will be responsible for applying for an exhumation license from the Ministry of Justice, and, once in receipt, for ensuring that the provisions of that license are complied with.
- If exhumation is to occur it will be undertaken in compliance with Historic England's 'The Role of the Human Osteologist in an Archaeological Fieldwork Project' (2018). The document states:

"Recovery strategies should ensure adequate retrieval of small bones, calcified fragments (for example, arterial plaques, bladder stones etc) and small artifacts. This will normally require wet-sieving and sorting of soil retrieved from the base of the grave after lifting the skeleton. Detailed strategy will depend upon the specific nature of the soil and buried remains at the site in question, but recovering basal grave soil in three sub-samples, corresponding to the head, torso and leg /foot area, helps preserve information as to the approximate location in the grave of recovered material. Infant remains may be block lifted." (p11)

6.9. Treasure Act

- Should any treasure be discovered, it will be removed, if possible, to a secure location. Where removal is not practical on the same working day as the discovery, suitable security measures will be put in place to protect the find from damage, loss and theft.
- upon discovery of any treasure, the Archaeological Contractor will immediately inform the Archaeological Consultant, the local coroner, and the Portable Antiquities Finds Liaison Officer for Suffolk.
- 112. In accordance with the provisions of the Treasure Act 1996 Code of Practice (2nd Rev.), the local coroner for Suffolk is:

Mr Nigel Parsley
Senior Coroner
The Coroners Court and offices
Beacon House, Whitehouse Road
Ipswich, IP1 5PB
Tel: 0345 607 2040
Email: admin.coroners@suffolk.gov.uk

13. The Portable Antiquities Finds Liaison Officers for Suffolk are:

Anna Booth Finds Liaison Officer for Suffolk Anna.Booth@Suffolk.gov.uk

Phil Hughes Finds Liaison Officer for Suffolk Phil.hughes@suffolk.gov.uk

Portable Antiquities Scheme (SUFFOLK), Suffolk County Council Archaeological Service, Bury Resource Centre, Hollow Road, Bury St Edmunds, IP32 7AY

114. The Archaeological Contractor will ensure that the Treasure Act regulations are complied with and that all relevant parties are kept informed. A list of finds which have been collected and which fall under the Treasure Act will be included within the fieldwork report.

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7. POST-EXCAVATION AND REPORTING

7.1. General

The post-excavation and reporting programme will be agreed with the Archaeological Regulator and undertaken in accordance with the procedures set out in Historic England's Management of Research Projects in the Historic Environment (MORPHE 2015b) guidelines. The following sequence of post-excavation tasks will be undertaken:

- preparation of the site archive;
- preparation of a post-excavation assessment;
- post-excavation analysis consistent with the assessment;
- preparation of a grey-literature report;
- preparation of a publication; and
- deposition of finds and archive in an appropriate museum.

7.2. Timescales

- 116. The following timescales will apply, unless otherwise agreed to in writing by the Archaeological Regulator:
 - · delivery of an interim report to the County Historic Environment Record (HER) within one month;
 - delivery of a post-excavation assessment, covering all phases of the archaeological mitigation works, to the Archaeological Regulator within six months; and
 - post-excavation analysis to be complete and a draft publication report compiled within one year, as required.

7.3. Finds Processing and Material Archive

- All finds will be processed promptly following completion of the fieldwork. Retained finds will be washed (where appropriate, see below), marked, bagged and recorded within a database (e.g. MS Access or GIS DBASE), and will include the location from which they were recovered in National Grid and Ordnance Datum, accurate to two decimal places. Finds that have the potential for preserved residues should not be washed, as recommended in Historic England's 'Organic Residue Analysis and Archaeology: Guidance for Good Practice' (2017).
- The finds assemblage will be treated, labelled and stored in accordance with the appropriate Historic England guidance documentation, all relevant local authority guidelines and the United Kingdom Institute for Conservation of Historic & Artistic Works (UKIC) guidelines.
- 119. In accordance with English Heritage (Historic England) (2011, pg. 7), environmental samples will be:

"Processed as part of the data collection and recovery stage of a project, so that the specialist can clearly see the full range of material and judge its potential to meet project aims and objectives."

- Samples will be stored in a cool dark environment, and processed as soon as possible after being taken, in order to limit the risk of decay to organic remains.
- 121. The Archaeological Contractor will ensure that the processing of all assemblages recovered is also undertaken in accordance with the requirements of the agreed repository.
- Where appropriate, each category of find, or each material type, will be examined by a suitably qualified archaeologist or specialist, with the results of that analysis incorporated into the fieldwork report.

7.4. Paper Archive

Upon completion of the archaeological fieldwork, the archive of written, drawn and photographic records generated on site will be reviewed by a suitably experienced archaeologist. The archive will be ordered and checked to ensure that it is complete, and that the information recovered is of the required standard and is suitably intelligible ahead of its analysis.

7.5. Reporting

The full (grey literature) technical report will include the following:

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- a non-technical summary;
- a site location plan;
- archaeological and historical background;
- aims and objectives;
- methodology;
- results (including full description, assessment of condition, quality and significance of all archaeological features, as relevant);
- interpretation of the results within a wider context;
- conclusions on the significance of the remains identified and a statement of their potential provided;
- publication proposals, if warranted;
- summary of archive, storage and curation;
- general and detailed plans illustrating the location(s) of the investigations, accurately plotted onto an OS base map to an appropriate scale;
- detailed scaled plans and sections of features/deposits as appropriate, including OD heights;
- a complete matrix (either site-wide, or for each area of activity identified);
- summary data tables;
- a cross-referenced index of the project archive; and
- specialist assessment and/or analysis reports.

7.6. Report dissemination

- 125. A draft of the report will be submitted to the Archaeological Consultant and EATL for review ahead of finalisation.
- One bound and one digital version of the report (complete with illustrations) will be produced by the Archaeological Contractor within one week of the receipt of any comments issued on the draft. Digital text will be in Microsoft Word format, and illustrations will be in PDF format.
- On finalisation of the report, a digital copy in PDF/A format will be provided to the Archaeological Regulator and SCCAS (HER). EATL and the SCCAS HER will also be provided with any relevant geo-referencing data, including final excavation plans, showing the location of features and sections, in .shp format (for SCCAS), and according to agreed data standards (for EATL). Digital data and reports will be managed in accordance with guidance set out in the Dig Digital project (DigVentures 2019).
- 128. The Archaeological Contractor will complete an Online Access to the Index of Archaeological Investigations (OASIS) form in relation to the report, to include a digital version of the report itself. The full report will include the OASIS ID number.

7.7. Publication

If the results of the programme of archaeological mitigation are considered sufficiently significant as to warrant wider public dissemination, then a suitable format and forum will be identified in liaison with the Archaeological Regulator. As a minimum, this might include a short article in a local peer-reviewed journal.

8. ARCHIVING

8.1. Composition

- 130. The compilation of an integrated and ordered project archive will be undertaken by the Archaeological Contractor in accordance with the provisions of the following:
 - · Historic England's MoRPHE guidance;
 - SCCAS Archaeological Archive Standards (SCC 2019);
 - the requirements of the local repository; and
 - this WSI.
- The archive will include:
 - all recovered artefacts and significant samples (material archive);
 - all written, drawn, photographic and other records generated during the fieldwork (site archive); and

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all digital data, including that which is digital in origin⁶, and any digital copies made of the primary site records⁷, including images.

Once prepared, the Archaeological Contractor will store the archive in a suitable and secure location prior to its deposition.

8.2. **Discard Policy**

The guidelines set out in Selection, Retention and Dispersal (Society of Museum Archaeologists 1993) will be followed, which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive. The Discard Policy will be agreed in writing with the SCCAS Archive in advance of action being taken.

The discard of environmental remains and samples will follow nationally recommended guidelines (SMA 1993; 1995; English Heritage 2011).

8.3. **Security Copy**

In line with current best practice (e.g. 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.

Deposition

The hardcopy archive will be deposited for long-term curation with the SCCAS Archive. In depositing the archive, the Archaeological Contractor will:

- contact the SCCAS Archive at an early stage, in order to obtain their acceptance, in principle, of the archive for long-term storage and curation;
- be responsible for identifying and adhering to any specific policies or requirements provided by the repository in respect of archive preparation and submission;
- obtain a written agreement from the landowner to transfer title to all items in the material archive to the SCCAS Archive (on their behalf) 8; and
- grant license to copyright for documentary material (both physical and digital) to EATL, for transfer to the relevant repository.
- The Accession Numbers for the project will be the Parish Codes which will be obtained by the Suffolk HER prior to the commencement 137. of any fieldwork.
- In the event that the fieldwork does not reveal deposits of archaeological interest and produces little or no artefactual material, there would be no requirement for an archive to be deposited. In these circumstances, the Archaeological Contractor will obtain written agreement from the Archaeological Regulator that this is the case.

8.5. **Deposition of Digital Archive**

- Currently, the only suitable repository for digital archives is the Archaeology Data Service (ADS). The digital archive must therefore be compiled in accordance ADS standards and requirements.
- Should the archive repository confirm that they do not require the hardcopy archive, then once the digital archive has been transferred to the ADS, the Archaeological Contractor may retain, disperse or dispose of the primary hardcopy items. This may entail physical destruction of the primary record.

 $^{^{6}}$ Including email correspondence, images, survey data and other site data collected through digital/electronic means.

⁷ Including relevant drawn and written data created during fieldwork (context sheets, sample sheets, finds records, drawings/plans/sections/sketches, all indices, earthworks surveys, and any notes that contribute to the interpretation and understanding of the site and its recording) and relevant $records/data\ produced\ as\ part\ of\ the\ post-excavation\ assessment\ or\ analysis\ etc.$

⁸ If ownership of any or all of the artefactual material is to be retained by the landowner, then provision must be made for its time-limited retention by the Archaeological Contractor to facilitate its full analysis and specialist recording.

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8.6. Notification

The Archaeological Contractor shall promptly notify the Archaeological Regulator when the archive of records and finds has been deposited with the appropriate repository.

8.7. Copyright

- The Archaeological Contractor will assign copyright in all reports, documentation and images generated during the project to EATL.

 The Archaeological Contractor will retain the right to be identified as the author/originator of the material. It is the responsibility of the Archaeological Contractor to obtain such rights from any sub-contracted specialists.
- The Archaeological Contractor may apply in writing to use or disseminate any part of the project archive, documentation or images, and such permission will not be unreasonably withheld.
- 144. EATL will own all Intellectual Property Rights to photographs and documentation prepared for this project by or on behalf of the Archaeological Contractor.

9. GENERAL DETAIL

145. The Archaeological Contractor will undertake the works in accordance with this WSI and any subsequent written variations agreed with the Archaeological Regulator. No variation from, or changes to, this WSI will be undertaken except by prior agreement with the Archaeological Consultant or EATL, in consultation with the Archaeological Regulator where appropriate.

9.1. Personnel

- All archaeological personnel involved in this project will be suitably qualified and experienced professionals. Prior to commencement of the programme of archaeological mitigation, the Archaeological Contractor will provide the Archaeological Consultant, on behalf of EATL, with the following staff details:
 - Project Manager CV;
 - Project Officer and / or Site Supervisor CVs; and
 - a list of other archaeological personnel proposed for deployment on the project, including summary detail of professional field experience and any relevant specialisms.
- The composition of the archaeological team will be notified in writing to SCCAS, including the names of Project Officers/Site Supervisors, alongside insurance details.
- The Archaeological Contractor's Project Manager will be a Member of the CIfA or will be able to demonstrate an equivalent level of experience and competency in managing archaeological field projects of a comparable nature and scale.
- Specialist staff, including those engaged specifically for post-excavation assessment, analysis, and report-writing, will be suitably qualified and, where appropriate, will be supervised by personnel with additional relevant expertise.
- 150. Specialist staff will be available at 48 hours' notice, for the duration of the fieldwork, in order to provide specialist advice.

9.2. Access Arrangements and Welfare

- Site access is to be restricted at all times, with only authorised personnel admitted.
- 152. The Archaeological Contractor will liaise with EATL and Principal Contractor in order to agree:
 - · site access and egress;
 - the location(s) of compound facilities, and any relevant operational detail relating to those facilities; and
 - a spoil management strategy.
- The Archaeological Contractor will be responsible for ensuring that all personnel are made aware of, and adhere to, any site arrangements and regulations defined by EATL and Principal Contractor.

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54. The Principal Contractor will be responsible for providing site welfare facilities of a suitable size and standard, and for the maintenance of those facilities.

9.3. Health and Safety

155. Prior to commencement of the programme of archaeological mitigation, the Archaeological Contractor will:

- provide the Archaeological Consultant and EATL with details of their public liability and professional indemnity insurance;
- submit a copy of their Health and Safety policy, compiled in accordance with national guidelines and all relevant Health and Safety legislation, to the Archaeological Consultant and EATL; and
- complete a Risk Assessment detailing any project-specific Health and Safety, ecological and environmental considerations, measures and requirements, and submit a copy to the Archaeological Consultant, EATL and, where necessary, the Principal Contractor.
- Prior to preparation of the site-specific Risk Assessment by the Archaeological Contractor, either EATL or the Principal Contractor will provide the Archaeological Contractor with any and all information obtained in relation to existing services within the Works Site. This will include the most accurate information available on the nature and locations of those known services.
- Health and safety measures implemented will be proportionate to the work and risks involved. For example, areas of archaeology may require to be fenced off to allow for safe demarcation of the working area. Individual features, however, would not typically be fenced off unless a specific health and safety issue is identified.
- During the course of the programme of archaeological mitigation, the Archaeological Contractor will ensure:
 - the adherence of all on-site archaeological personnel engaged on the project to the Principal Contractor's Safety Standards and CDM Health and Safety rules;
 - the implementation and management of the Archaeological Contractor's own Health and Safety Policies;
 - dissemination of the site-specific Risk Assessment to all on-site archaeological personnel engaged on the project, ensuring that it is reviewed and the content acknowledged, prior to the admission of any archaeological personnel to any working areas and prior to their undertaking any other work-related tasks;
 - that the identity of any on-site First Aiders is made known to all archaeological personnel engaged on the project;
 - that the location(s) of First Aid boxes and fire extinguishers is made known to all archaeological personnel engaged on the project; and
 - that all archaeological personnel engaged on the project are in possession of, and wear at all times (as required), the necessary Personal Protective Equipment (PPE), which, as a minimum, should include a hard hat, a hi-vis vest, safety gloves and site-appropriate footwear⁹.
- 159. All archaeological personnel engaged on the project will be in possession of a valid Construction Skills Certification Scheme (CSCS)
- 160. Where required, all archaeological personnel engaged on the project will attend a Health and Safety Induction coordinated by the Principal Contractor.
- The Archaeological Contractor will leave the site in a tidy and professional condition and will remove all materials that it has introduced onto the site, unless specifically agreed otherwise with the Principal Contractor.

9.4. Confidentiality and Publicity

- 62. All communications regarding the archaeological works will be directed to the Archaeological Consultant and EATL.
- The Archaeological Contractor will not comment upon any aspect(s) of the project to members of the public or any other parties, unless specifically authorised to do so by the Archaeological Consultant or EATL.

⁹ Any additional PPE, such as safety glasses/goggles, ear defenders, dust-masks etc., should be issued and worn, as required.

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The Archaeological Contractor will not disseminate images or information associated with the project, either for information or publicity purposes, without the prior written consent of Archaeological Consultant or EATL.

9.4.1. Community Liaison

- EATL will manage public relations with local residents and businesses that may be affected by the proposed construction works, and will maintain public relations in accordance with the Clappits Works Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000061).
- A designated EA THREE Community Liaison Officer will field and respond to any public concerns, queries or complaints. A local liaison group will also be established to deal with specific issues, e.g. avoiding disruption to the harvest.
- A timetable of works, a schedule of working hours, the extent of the works, and relevant contact details will be provided to local Parish Councils and the local liaison group, in advance.

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10. REFERENCES

Archaeological Archives Forum (AAF) (2011) *Archaeological Archives: A guide to the best practice in creation, compilation, transfer and curation*. Available at: https://archaeologydataservice.ac.uk/archives/view/aaf_papers/downloads.cfm

Association of Local Government Archaeological Officers (ALGAO) (2021) East of England Research Framework. Available at: https://researchframeworks.org/eoe/

CIfA (2020a) Standard and guidance for archaeological excavation. Available at: https://www.archaeologists.net/codes/cifa

CIFA (2020b) Standard and guidance for the collection, documentation, conservation and research of archaeological materials. Available at: https://www.archaeologists.net/codes/cifa

CIFA (2020c) Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives. Available at: https://www.archaeologists.net/codes/cifa

DigVentures (2019) Work Digital/Think Archives: A guide to managing digital data generated from archaeological investigations. Available at: https://digventures-thepixelparlour.netdna-ssl.com/wp-content/uploads/2019/12/WDTA-Guide-FINAL.pdf

English Heritage (now Historic England) (1998) Guidelines on producing and interpreting dendrochronological dates.

English Heritage (now Historic England) (2006) Archaeomagnetic Dating: Guidelines on Producing and Interpreting Archaeomagnetic Dates.

English Heritage (now Historic England) (2011) *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*. 2nd Edition. London: English Heritage.

Gurney, D. (2003) 'Standards for Field Archaeology in the East of England', East Anglian Archaeology Occasional Papers, 14.

Historic England (2015a) Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record. Swindon: Historic England.

Historic England (2015b) Management of Research Projects in the Historic Environment (MORPHE). Swindon: Historic England.

Historic England (2017) Organic Residue Analysis and Archaeology: Guidance for Good Practice. Swindon: Historic England.

Historic England (2018) The Role of the Human Osteologist in Archaeological Fieldwork Projects. Swindon: Historic England.

Medlycott, M. (2011) 'Research and Archaeology Revisited: a revised framework for the East of England', East Anglian Archaeology Occasional Papers, 24.

RoyalHaskoningDHV (2016) Outline Written Scheme of Investigation, Document 8.4.

RSK (2020) Desk Based Archaeological Risk Assessment and Mitigation Strategy, P20-060.

Society of Museum Archaeologists (SMA) (1993) *Selection, Retention and Dispersal of Archaeological Collections*. Available at: http://socmusarch.org.uk/socmusarch/gailmark/wordpress/wp-content/uploads/2017/06/Selection-retention-and-dispersal-of-collections.pdf

Society of Museum Archaeologists (SMA) 1995 *Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums:* Guidelines for Use in England, Northern Ireland, Scotland and Wales.

Suffolk County Council (SCC) (2018) Additional Requirements for a Paleoenvironmental Assessment. Available at: https://www.suffolk.gov.uk/culture-heritage-and-leisure/suffolk-archaeological-service/archaeological-planning-and-countryside-advice/

Suffolk County Council (SCC) (2019) *Archaeological Archives in Suffolk. Guidelines for Preparation and Deposition*. Available at: https://www.suffolk.gov.uk/assets/culture-heritage-and-leisure/suffolk-archaeological-service/SCCAS-Archaeological-Archives-Guidelines.pdf

Suffolk County Council (SCC) (2021) Requirements for Archaeological Evaluation. Available at: https://www.suffolk.gov.uk/culture-heritage-and-leisure/suffolk-archaeological-service/archaeological-planning-and-countryside-advice/

Wardell Armstrong (2018) East Anglia One Onshore Works Suffolk: Archaeological Sites Data Summary Report. Unpublished Report.

Wardell Armstrong (2019) East Anglia One Offshore Windfarm, Archaeological Post-Excavation Updated Project Design

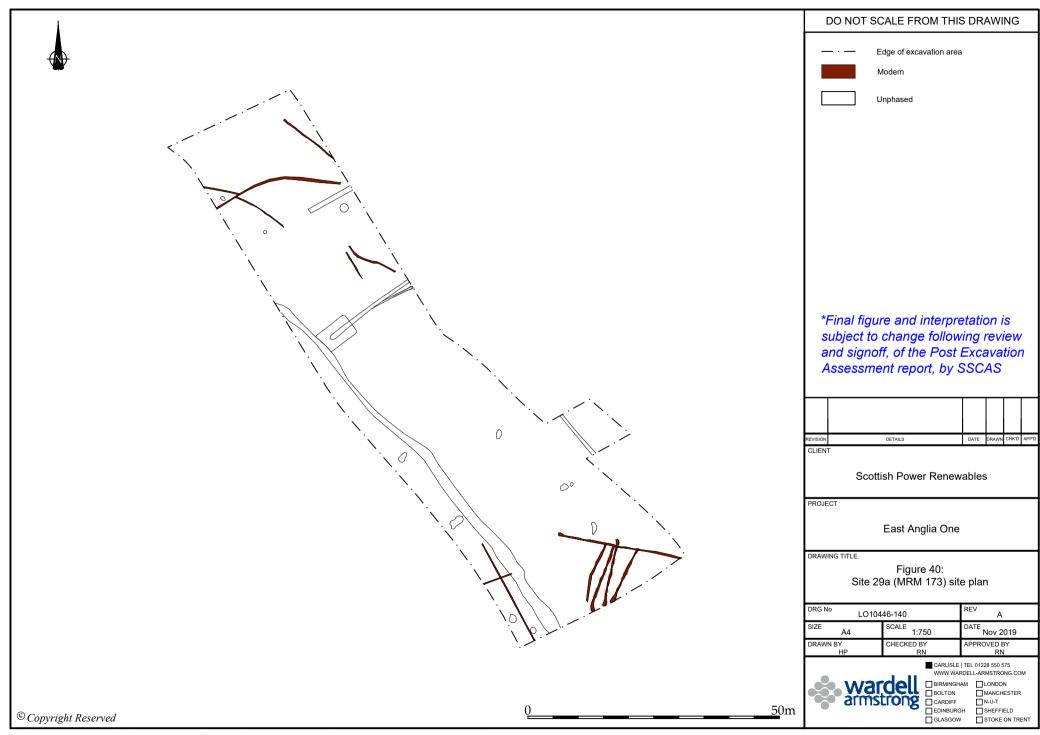
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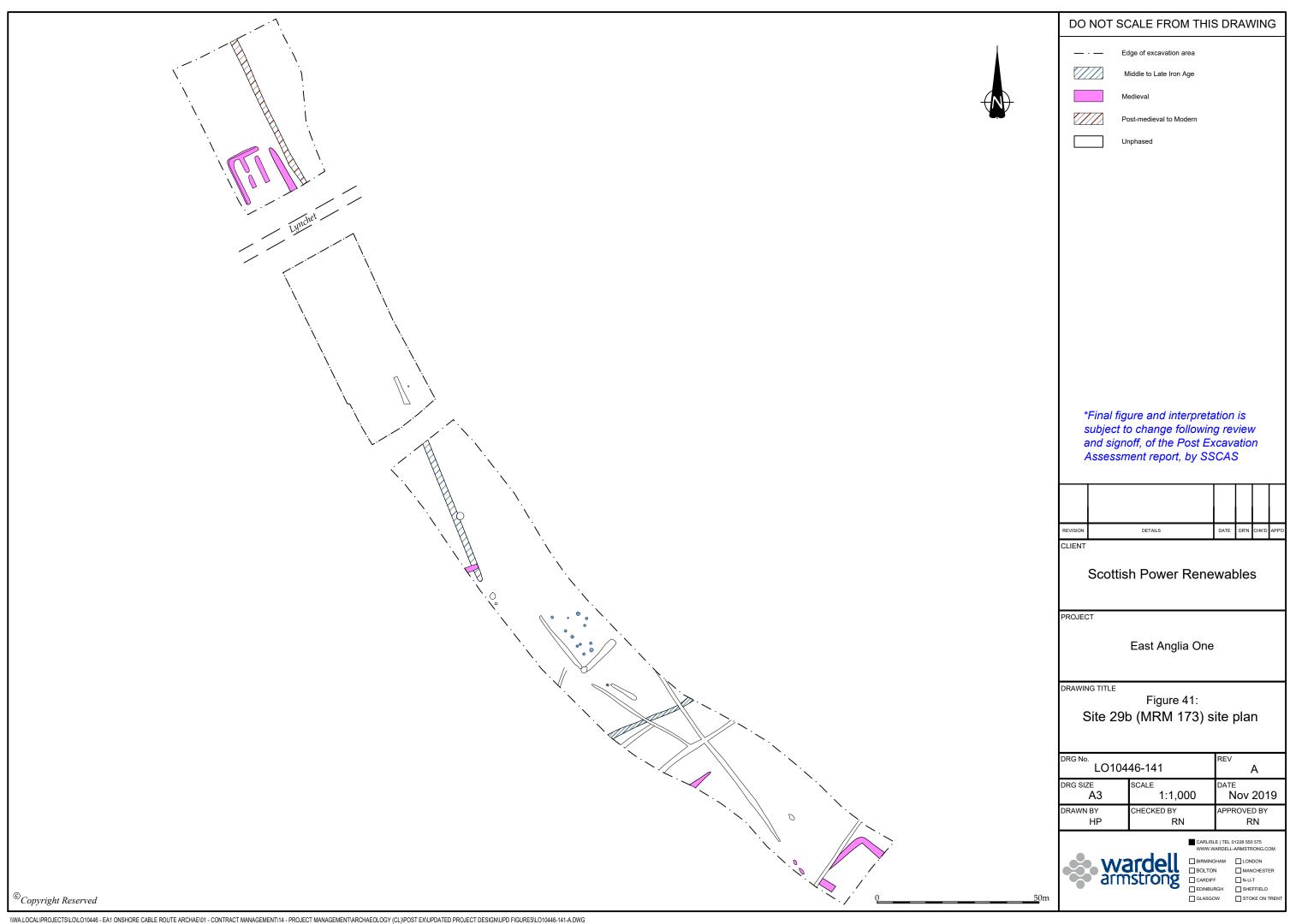
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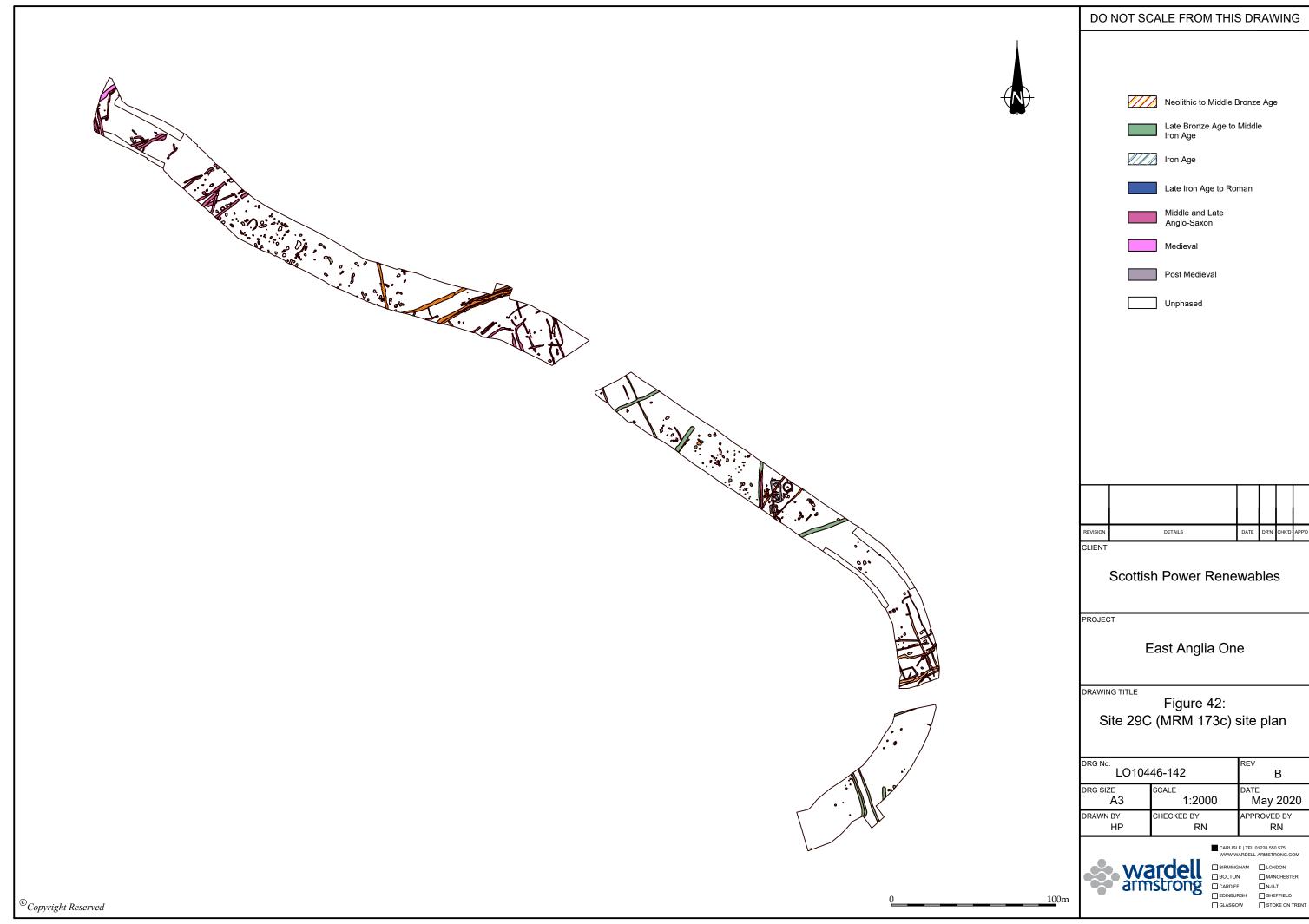


APPENDIX 1 - EXTRACTS FROM EAST ANGLIA ONE OFFSHORE WINDFARM ARCHAEOLOGICAL MITIGATION WORKS UPDATED PROJECT DESIGN



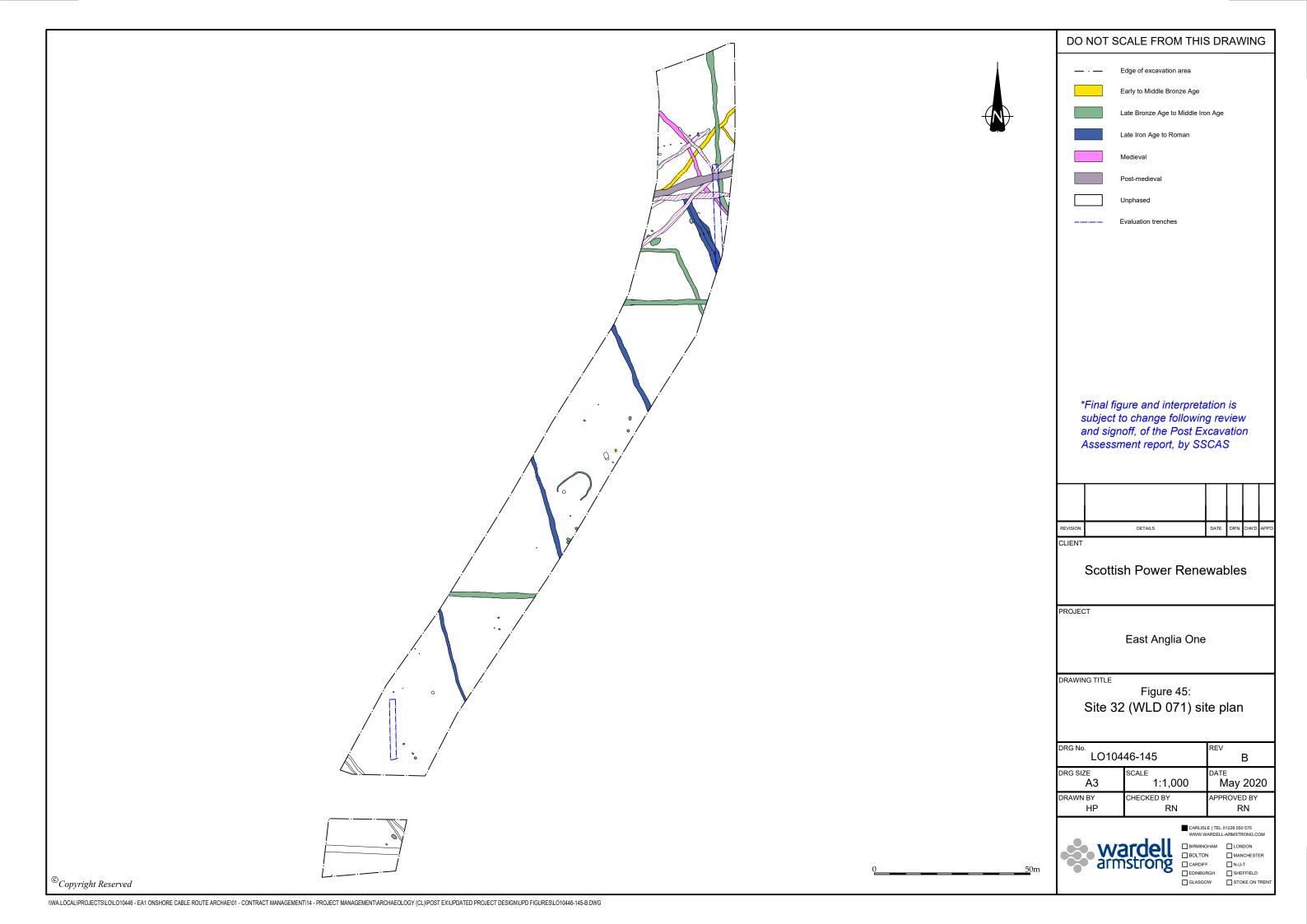






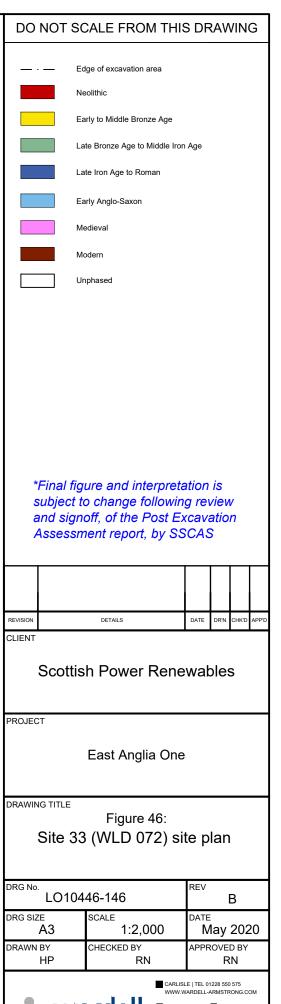




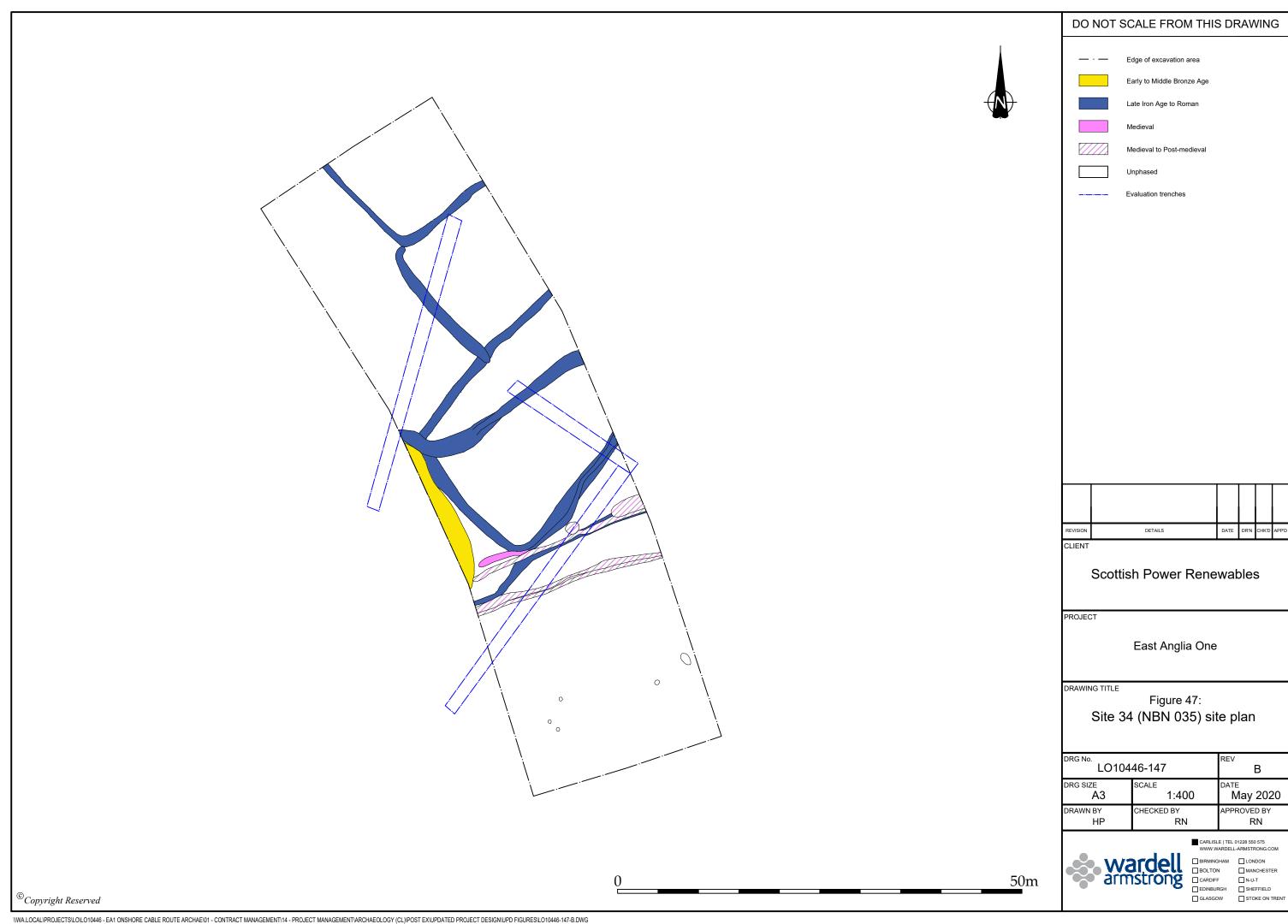


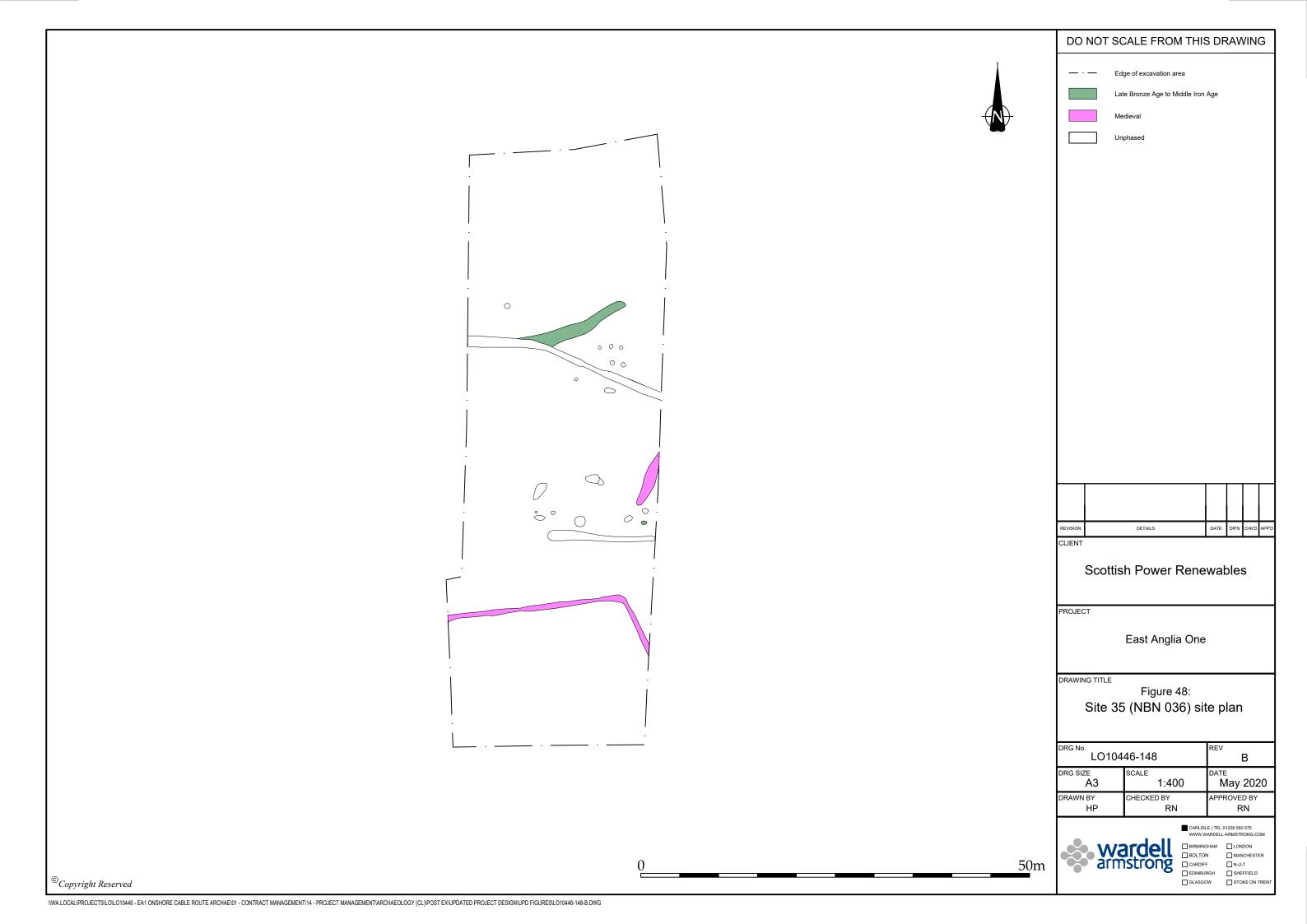


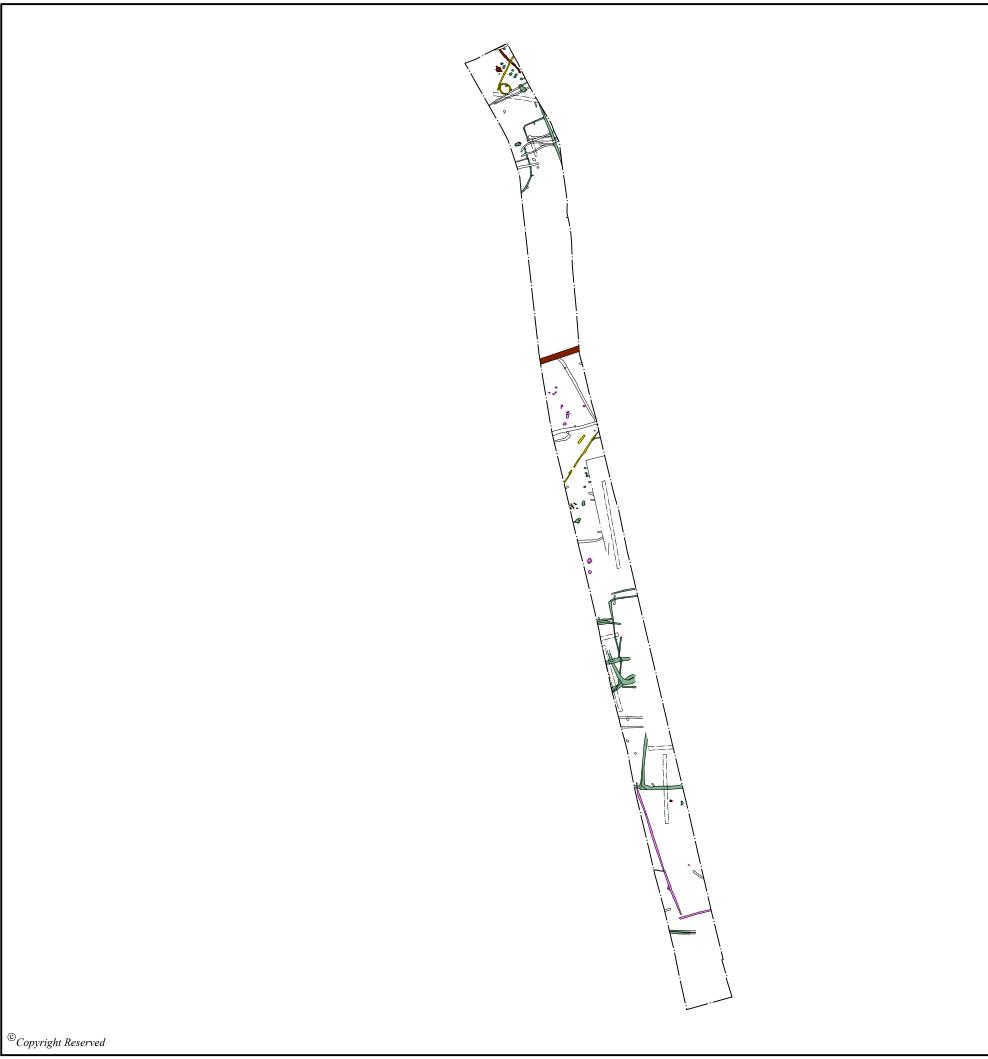




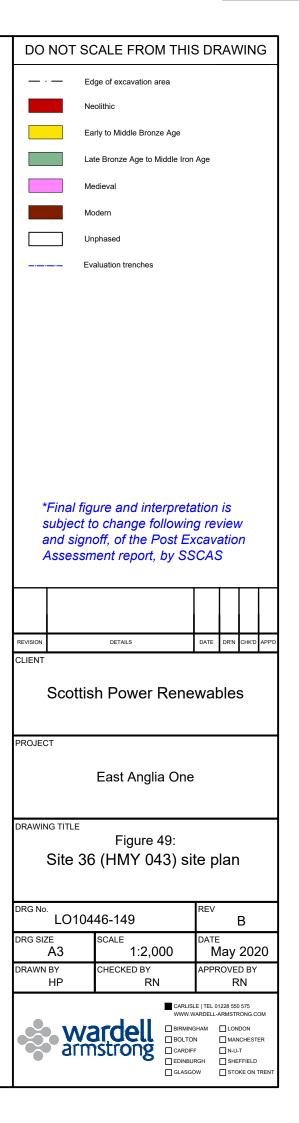
MANCHESTER CARDIFF N-U-T
EDINBURGH SHEFFIELD
GLASGOW STOKE ON TREN

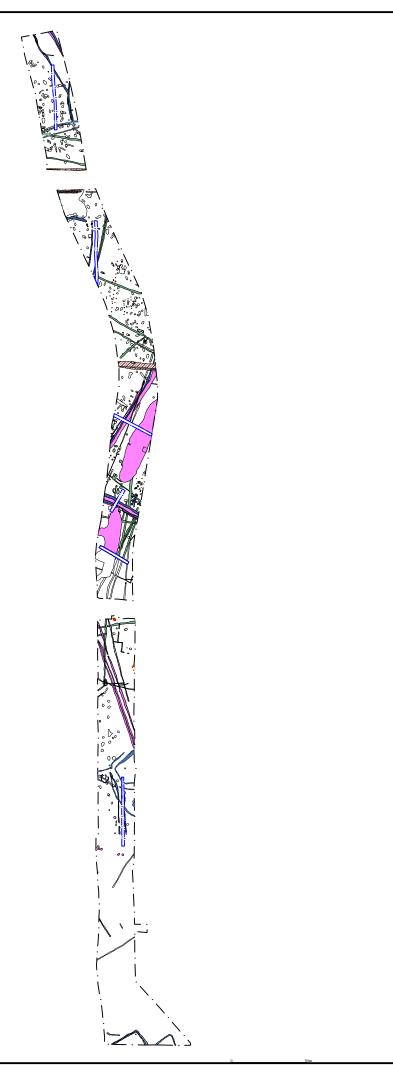




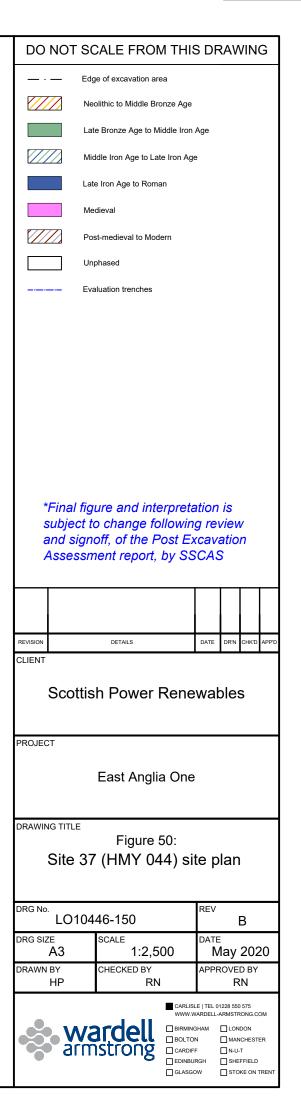












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FIGURES



