East Anglia ONE North and East Anglia TWO Offshore Windfarms

Archaeological Watching Brief Report of Investigation for Soil Resource Survey works

HER site codes: FRS 075 & KND 029.

Prepared by:	Checked by:	Approved by:
 *SLR Consulting Ltd.* *08/09/21*	*Electronic Signature with name and date (delete text before signing)*	*Electronic Signature with name and date (delete text before signing)*

Revision Summary				
Rev	**Date**	**Prepared by**	**Checked by**	**Approved by**
01	08/09/2021	Elliot Grater		
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Description of Revisions			
Rev	**Page**	**Section**	**Description**
01	All	All	New Document
02	4,9, 22	1, 7	Insertion of HER parish references, and insertion of oasis number, and summary sheet as Appendix 5
03	1		Formating of HER parish references and insertion of updated OASIS summary sheet

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1. INTRODUCTION AND NON-TECHNICAL SUMMARY

1.1. Introduction

1. This report presents the results of archaeological monitoring and recording undertaken by SLR Consulting Ltd (SLR) on behalf of ScottishPower Renewables (SPR) undertaken in association with the East Anglia ONE North (EA ONE North) and East Anglia TWO (EA TWO) Offshore Wind Farm projects. The report covers archaeological monitoring of a soil resource survey (SRS), conducted by Tim O'Hare Associates LLP (TOHA) on behalf of Optimised Environments Ltd, at the EA ONE North and EA TWO Onshore Substations site, East Anglia (approximately NGR: TM 4138 6115) (Figure 1). Monitoring work was undertaken in accordance with the Written Scheme of Investigation (WSI, Appendix 4) as agreed with Suffolk County Council Archaeology Service (SCCAS). The monitoring work took place between July 13th-15th 2021.

1.2. Non-technical Summary

2. Archaeological works involved the monitoring of two soil scientists from TOHA while they excavated a series of 53 trial holes, either spade excavated to remove topsoil and hand-augered to a depth of 1.0m, or hand-augered to a depth of 1.0m. Several locations of trial holes were micro sited on the day to avoid disturbing crops, disturbed ground, spoil heaps, or the location of possible geophysical anomalies. No archaeological features or deposits were observed or disturbed by the works and no further mitigation is suggested in relation to these specific trial holes.

1.3. Site Location

3. The onshore development area for EA ONE North and EA TWO (Figure 1) has been identified by a detailed site selection process as outlined in Chapter 4 Site Selection and Consideration of Alternatives of the East Anglia TWO and East Anglia ONE North Environment Statements (submitted with the Development Consent Order (DCO) application). It includes land between Sizewell and Thorpeness at the landfall (approximately NGR: TM 4747 6071) and extends inland approximately 9km terminating at the onshore substation location just to the north of Friston (approximately NGR: TM 4138 6115), encompassing the parishes of Aldringham-cum-Thorpe, Leiston, Knodishall and Friston. This area is in multiple landownerships and the land use is a mixture of arable and market garden agriculture with areas of heath, scrub, woodland, and sand dunes to the far east along the coastal edge.

4. Since archaeological fieldwork (e.g. geophysical survey) for the projects commenced, the limits of the proposed onshore development area have undergone substantial revision and refinement. The proposed onshore development area has now been superseded by the onshore development area (ODA), as presented for the DCO application purposes. This latter boundary, for the area of the proposed SRS, is shown on the drawings in Appendix 1.

5. The underlying bedrock geology within the area of the survey comprises Crag Group Sand. This is overlain across most of the Site with superficial deposits of Lowestoft Formation Diamicton, Sand and Gravel and Clay and Silt (British Geological Survey 2021). The soils are classified in the Soilscape 10 and Soilscape 7 associations which are characterised as freely draining slightly acid sandy soils and freely draining slightly acid but base rich soils respectively, as well as in the Soilscape 18 association, characterised as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (Cranfield University 2019).

2. ABBREVIATIONS

ADBA	**Archaeological Desk-Based Assessment**
DCO	**Development Consent Order**
EA ONE North	**East Anglia One North Offshore Wind Farm**
EA TWO	**East Anglia Two Offshore Wind Farm**
NSIP	**Nationally Significant Infrastructure Projects**
OASIS	**Online Access to the Index of Archaeological Investigations**
ODA	**Onshore Development Area**
SCCAS	**Suffolk County Council Archaeology Service**
SLR	**SLR Consulting Ltd**
SPR	**ScottishPower Renewables**

SRS	**Soil Resource Survey**
TOHA	**Tim O'Hare Associates LLP**
WSI	**Written Scheme of Investigation**

3. PROJECT BACKGROUND AND SITE DESCRIPTION

3.1. Project Background

6. The proposed EA ONE North and EA TWO projects are Nationally Significant Infrastructure Projects (NSIP) that are being developed respectively by East Anglia ONE North Limited and East Anglia TWO Limited (the Applicants) both of whom are wholly owned subsidiaries of SPR. Both projects have the potential to make a substantial contribution to UK 2030 energy targets by meeting nearly 10% (5% for each project) of the UK offshore wind cumulative deployment target for 2030. The East Anglia ONE North offshore windfarm site is located in the southern North Sea, approximately 36km from its nearest point to the port of Lowestoft and 42km from Southwold whilst the East Anglia TWO offshore windfarm site is approximately 31km from its nearest point to Lowestoft and 32km from Southwold, also being located in the southern North Sea. The proposed East Anglia ONE North project will have an operational capacity of up to 800MW, which is enough to power approximately 659,000 UK households whilst the proposed East Anglia TWO project will have an operational capacity of up to 900MW, which is enough to power approximately 742,413 UK households. Both projects would principally comprise offshore wind turbines, offshore electrical and construction, operation and maintenance platforms, offshore export cables, onshore cables, an onshore substation, a National Grid substation and National Grid overhead line realignment works.

7. Both projects are in the application determination stage and their application programmes run in parallel having been submitted as separate DCO applications. The ODA, which includes landfall location, onshore cable route, onshore substation location and National Grid infrastructure, has been developed to allow for the construction of both the proposed projects. At this stage it is not known whether both projects would be constructed simultaneously or sequentially.

3.2. Archaeological Background

3.2.1. Archaeological Desk-Based Assessment

8. An Archaeological Desk-Based Assessment (ADBA) conducted as part of the environmental impact assessment has highlighted the potential for currently unrecorded heritage assets with archaeological interest, including possible remains of prehistoric, Roman, and medieval date.

9. The ADBA stated that: 'the LiDAR assessment is considered likely to have identified all substantial upstanding heritage assets within the ADBA study areas, although smaller discrete features may have been missed due to the limited coverage at resolutions greater than 2m'. In relation to the below ground archaeological remains 'the map regression will have identified any features still present in the 19th century, but will not have identified earlier features, which may not have survived above ground to this date', and 'the aerial photography analysis is likely to have detected a majority of cropmark features.' The report concluded that: 'there remains the potential that further below ground archaeological remains are present, either as smaller features not readily detected in aerial photography or due to the ground conditions at the time the photos were taken not being conducive to cropmark formation'.

10. It was therefore concluded that 'on the basis of the known archaeological and historical background of the ADBA study areas… there is considered to be a moderate to high likelihood that further prehistoric remains survive within the ADBA study areas.' These may include possible assemblages of flint artefacts, especially along the gravel terraces of the Hundred River.

11. It was also considered that there is 'a moderate likelihood of further Iron Age and Romano-British remains in the form of possible settlements and associated field systems.' However, it was recognised that Iron Age and Roman sites (likely to comprise traces of ditches and earthworks) are more conducive to identification through geophysical survey.

12. Additionally, it was considered that there was 'a medium to high potential for evidence of Anglo-Saxon and medieval agricultural land use within the ADBA Study Area'. The area around the possible church of Buxlow (KND 009 and HA6), located within the ODS to the south of the proposed substation site, was considered to have considerable potential for burials.

3.2.2. Geophysical Survey

13. The geophysical survey undertaken to date has clearly demonstrated that the prevailing geological and pedological conditions within the ODA are favourable for the detection of sub-surface archaeological remains and consequently it has been assessed that the results provide a reliable indication of the extent of the majority of the significant areas of sub-surface archaeological remains within the ODA, subject to the limitations of the technique. It is recognised that other types of archaeological activity, including unenclosed settlement or funerary activity, may be difficult to detect (by the surveys carried out to date), but could also be of importance.

14. Anomalies indicative of probable or possible archaeological features and activity have been identified throughout the ODA (see Appendix 1), the majority of which were previously unknown, thus adding significantly to the archaeological understanding of the landscape where the proposed development will be situated. Although the suspected archaeological remains extend throughout the ODA there are still large areas where no anomalies of archaeological potential have been identified from the geophysical survey. However, the low magnitude exhibited by some of the anomalies and the partial and discontinuous nature of others suggests that, in certain instances, the archaeological remains may be more extensive than revealed by the survey to date, either due to partial truncation by modern agricultural techniques and/or a lack of magnetic contrast on a variable geological substrate.

15. Nevertheless, areas comprising both concentrations of anomalies or single clearly defined features are identified as areas of archaeological potential. Most of the linear anomalies are interpreted as locating soil filled ditches forming an extensive and complex network of field systems and enclosures, most likely for containing animals, which extends across pockets of the onshore development area. These field systems and potential stock enclosures are of uncertain date but probably date to the later prehistoric, early Roman periods or post-medieval periods. Smaller, sub-divided, enclosures with numerous discrete anomalies are interpreted as more likely to have been the sites of human occupation. Several of these settlement sites are identified, particularly in the western half of the onshore development area, again varying dates are likely up to the medieval period.

16. On the basis of the geophysical survey carried out to date, the archaeological potential of the ODA is considered to be potentially higher than asserted in the concluding assessments of potential given in the ADBA. The survey has clearly identified numerous anomalies indicative of multi-period activity, including prehistoric funerary activity (ring ditches) and medieval settlement (road frontage occupation).

3.2.3. Preliminary Trial Trenching

17. A total of 67 trenches were excavated in three discrete areas in 2019; Area 1 (Substation), Area 3 (Aldringham Road) and Area 4 (Hundred River Crossing). The trenching in Area 1, within the area of the proposed SRS, confirmed the results of the geophysical survey with only a single undated pit feature being present in the 39 trenches excavated over the footprint of the proposed substation.

3.2.4. Archaeological Trial-Trenching

18. Archaeological trial-trenching has recently been completed (August 2021) in the substation area. Though at the time of this report the results of the trenching campaign have yet to be disseminated, archaeological features and deposits have been identified in several locations. The SRS locations (Appendix 1) were designed to avoid areas identified via desk-based and geophysical survey as being of archaeological potential.

4. GENERAL ARRANGEMENTS

4.1. Aims and Objectives

4.1.1. Aims

- To archaeologically monitor excavation of topsoil/overburden removed during SRS works in archaeologically sensitive locations.
- To avoid areas of archaeological potential, wherever possible.
- If archaeological features were disturbed; identify, investigate, understand, record, and report the extent, nature, and significance of surviving archaeological remains within the invasive SRS works areas.

4.1.2. Objectives

- Ensure that the working area was monitored during TOHA's groundworks in archaeologically sensitive areas to ensure any archaeological remains are avoided where possible, recorded and (if necessary) recovered with minimal damage;

- Identify and record all archaeological features / deposits present;
- If necessary, excavate and record a sufficient sample of any features present to place on record and understand the nature, sequence, date and significance of the archaeological remains present within the excavated area; and
- Undertake assessment, analysis, archiving and reporting as appropriate to the significance of the results, to be disseminated in an appropriate format.

4.1.3. Monitoring Locations.

19. SRS trial holes (Table 1) near archaeologically sensitive locations, in part determined by the results of the trial trenching, and those trenches which are currently known to be archaeologically sensitive, or where sensitivity cannot be determined, were highlighted in the WSI. It was originally proposed that only these holes would require monitoring, and a toolbox talk would be provided by the monitoring archaeologist to provide the TOHA team with information about the archaeological potential of the area.

20. However, it proved more practical for the archaeologist to monitor all trial holes on site due to the preferential order for TOHA to complete their works and the size of the site making it easier for the archaeologist to stay with the TOHA team for the duration.

Table 1: SRS locations in proximity to archaeologically sensitive locations

SRS Location Number	Nearest Archaeological Trial-Trench Number(s)
1	TR253
2	TR303
4	TR346, TR350
5	TR192
6	TR378
7	TR304
9	TR134
12	TR188
16	TR103
19	TR389
20	TR10
24	TR355
25	TR106
27	TR32
28	TR19, TR20
30	TR12
31	TR88
36	TR338
37	TR08
39	TR78
40	TR249, TR286
42	TR158
43	TR443
44	TR181
45	TR214
46	TR449
47	TR242
48	TR94
49	TR177
51	TR255
53	TR425

4.2. Personnel

21. The archaeological regulator is the:

Suffolk County Council Archaeology Service (SCCAS)
Bury Resource Centre,
Hallow Road,
Bury St Edmunds, Suffolk, IP32 7AY
0345 678 9000

22. The archaeological consultant is:

Alastair Becket
Associate Archaeologist
abecket@slrconsulting.com
SLR Consulting Limited
Floor 2, 4/5 Lochside View, Edinburgh Park, Edinburgh, EH12 9DH
0131 335 6830

23. The monitoring archaeologist was:

Elliot Grater
Project Consultant
abecket@slrconsulting.com
SLR Consulting Limited
Floor 2, 4/5 Lochside View, Edinburgh Park, Edinburgh, EH12 9DH
0131 335 6830

4.3. Standards

24. SLR Consulting Ltd. are a Registered Organisation with the Chartered Institute for Archaeologists. Their work is accordingly undertaken to the highest professional standards. All archaeological fieldwork and reporting will be carried out in accordance with the relevant SCCAS, Historic England and Chartered Institute for Archaeologist's guidance and the Standards for Field Archaeology in the East of England.

5. FIELDWORK METHODOLOGY

5.1. Field Investigation

5.1.1. Monitoring of Excavations

25. The archaeological monitoring works were conducted in July 2021, in accordance with the methodology described within the WSI (Appendix 4), with the amendment that all trial holes, not just those in archaeologically significant areas, were monitored. Trial hole locations (Figure 2) were determined by TOHA staff, checked by the monitoring archaeologist, and then either spade excavated to remove topsoil and overburden and thereafter soil-augered to a maximum depth of 1.0m (ground conditions permitting) or hand-augered to a maximum depth of 1.0m. The archaeologist was consulted on the position of trial holes before excavation, was allowed to pause works to investigate potential archaeological features and was able to record the excavations as they occurred. When works were halted by the archaeologist to investigate potential archaeology, the trial hole was cleaned and re-examined. In no situation was the archaeologist required to excavate or expose further any potential archaeological features. Where trenches from the ongoing trial trench excavation were still open by proposed trial hole locations, any potential archaeology within the trenches was taken into account when determining the location of a trial hole.

26. All excavation and on-site recording were carried out according to the WSI and standard SLR procedures, with recording principally by photography and by completing standard record forms. The positions of the trial holes were recorded by TOHA using a hand-held GPS capable of +/-3m accuracy.

6. RESULTS

6.1. Summary

27. In total 53 trial holes were excavated by TOHA personnel under archaeological monitoring, 22 were spaded and augered, and 31 were directly augered. No archaeological material was recovered, and no features identified. Where topsoil was spaded away the archaeologist was able to examine the sub-soil before augering for signs of disturbance. Where holes were directly augered, the augered material was deposited by the hole and any disturbances or changes in the soil would be been noticeable.

28. Four trial holes had their locations moved to avoid potential geophysical anomalies. Though the original location of the trial holes had been planned to avoid geophysical anomalies SRS7, SRS8, SRS12, SRS31, and SRS16 were micro sited to ensure anomalies were avoided. SRS14 was micro-sited to avoid ecology. SRS18, SRS23, SRS33, SRS0, SRS49, SRS31, SRS29, SRS22, SRS40, and SRS47 were micro sited by the request of TOHA with the consent of the monitoring archaeologist, mostly to avoid spoil heaps, potential hazards, or disturbed ground. Appendix 2 details all reasons for micro-siting. The location of the trial holes as recorded by TOHA, in comparison to the planned locations is presented in Figure 2.

29. A total of four trial holes had signs of some disturbance within them. SRS7, and SRS26 had very small fragments of post-medieval/modern brick/tile in the topsoil, though no features were identified in the hole. SRS22 had some flecks of charcoal within the topsoil, though no feature was identified, and augering was micro sited in the hole to avoid this disturbance. Likewise, SRS45 had some colour disturbance in the subsoil on the West site of the trial hole, so augering took place in the East side, but this is likely due to ploughing or machine tracking rather than evidence of an archaeological feature.

30. A full list of trial holes and any comments are listed in Appendix 2.

6.2. Interpretation and specialist reports

31. As no archaeological features were identified or artefacts recovered, there is no interpretation or specialist reports to submit as part of this report.

7. DISCUSSION AND CONCLUSION

32. No archaeological features were identified in the undertaking of this intrusive groundworks. The location of the trial holes had been designed specifically to avoid known areas of archaeological interest, and the nature of the works; small, spaded holes in the topsoil and hand augering were unlikely to cause significant disturbance. No further archaeological mitigation or excavation is recommended in relation to these specific trial holes.

33. An Online Access to the Index of archaeological investigations (OASIS) record has been created (slrconsu1-502371), and the summary sheet has been attached to this document as Appendix 5.

8. REFERENCES

British Geological Survey 2021 ‘Geology of Britain viewer’

Cranfield University 2019 ‘Soilscapes Viewer’

Federation of Archaeological Managers and Employers 2010 ‘Manual of Health and Safety in Field Archaeology’

APPENDIX 1: Drawings

Figure 1. Site Location

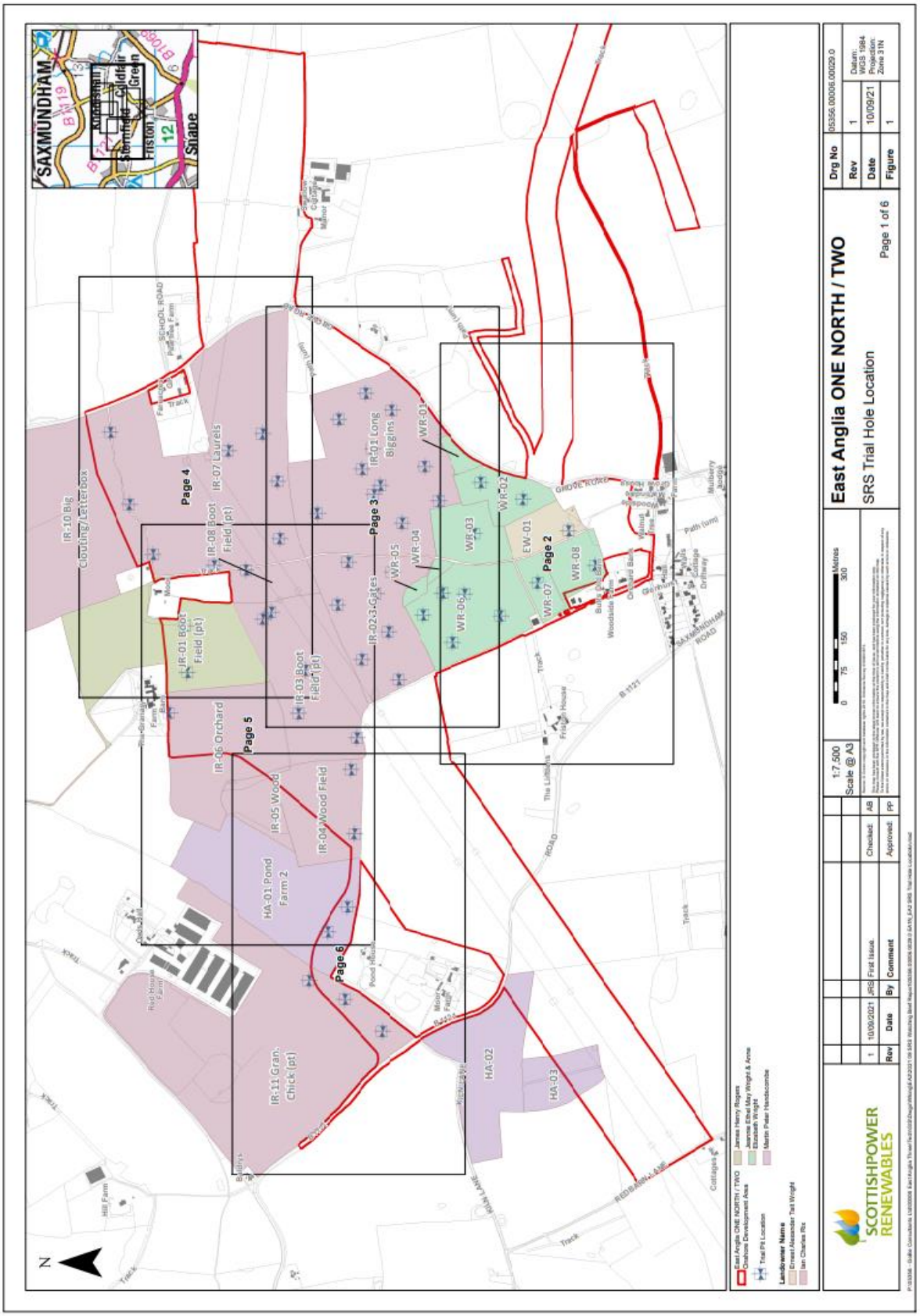
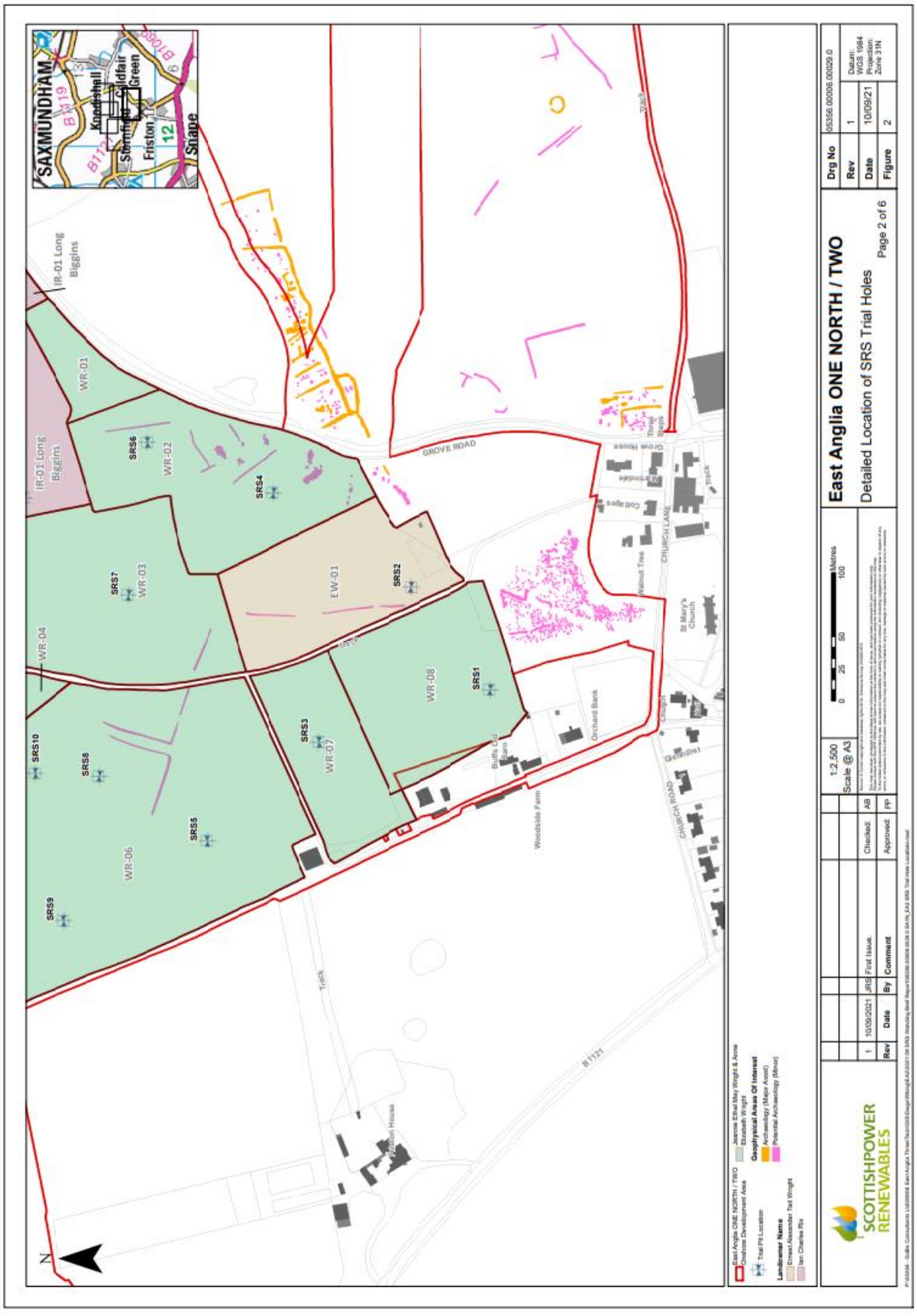
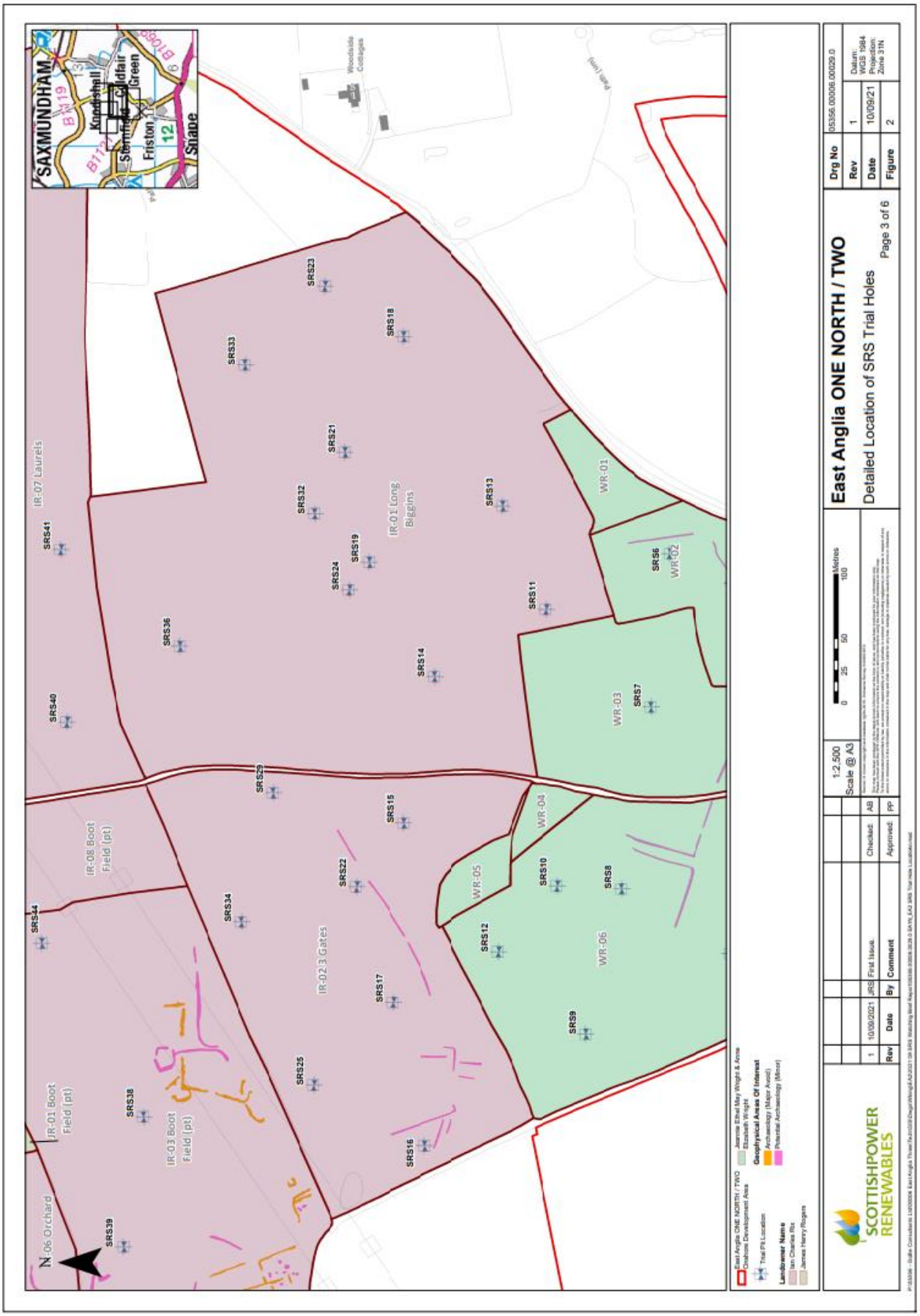
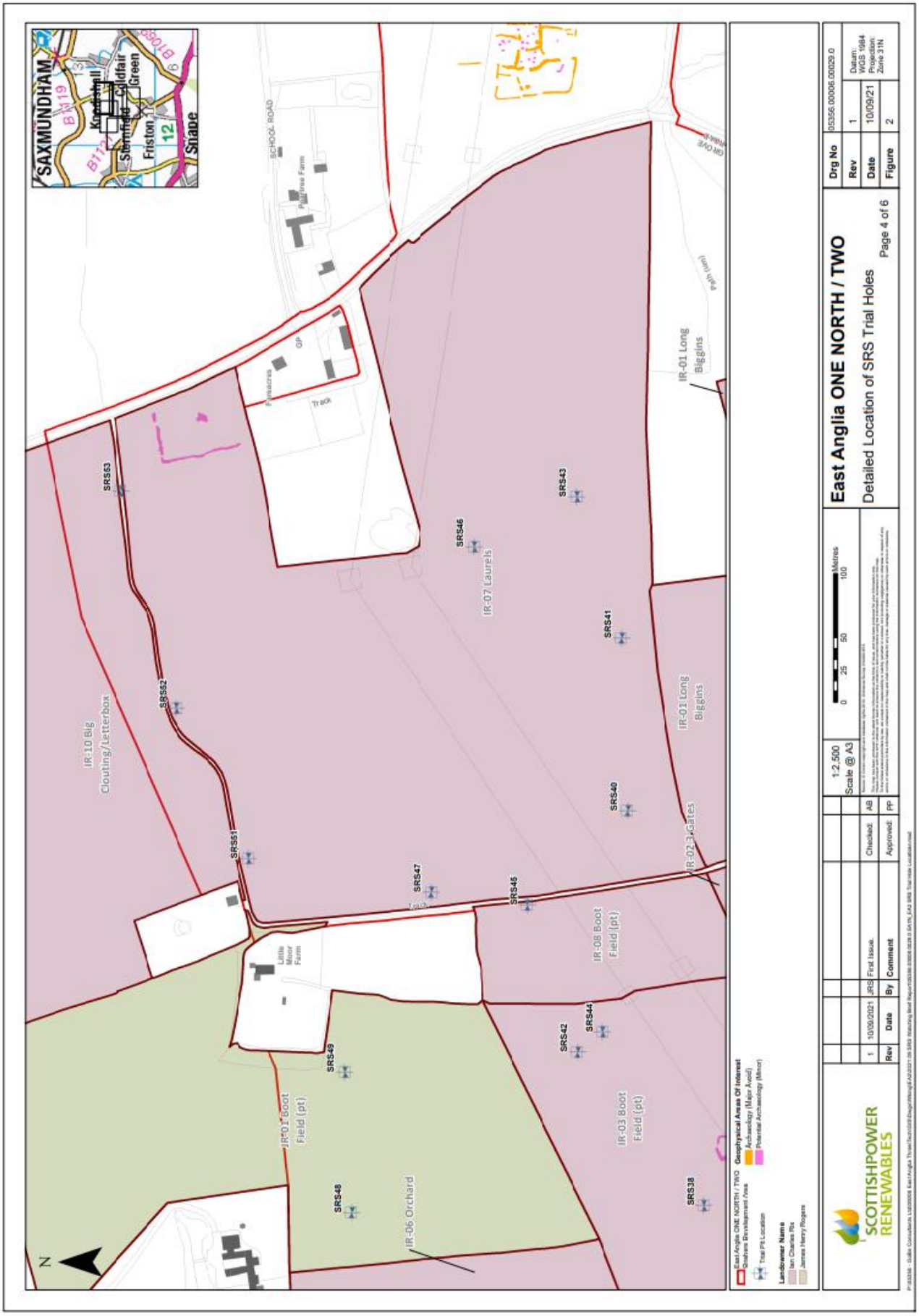
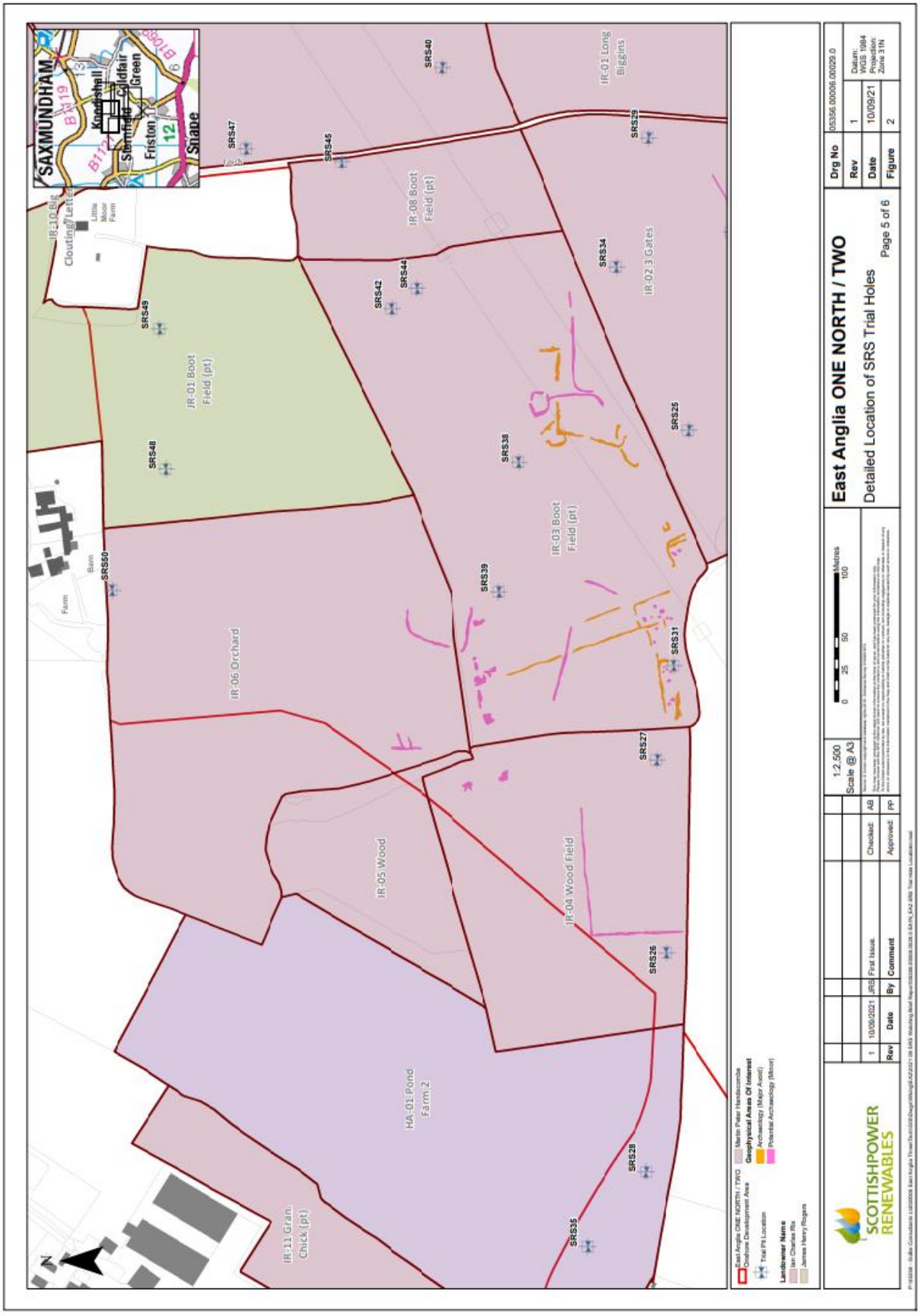


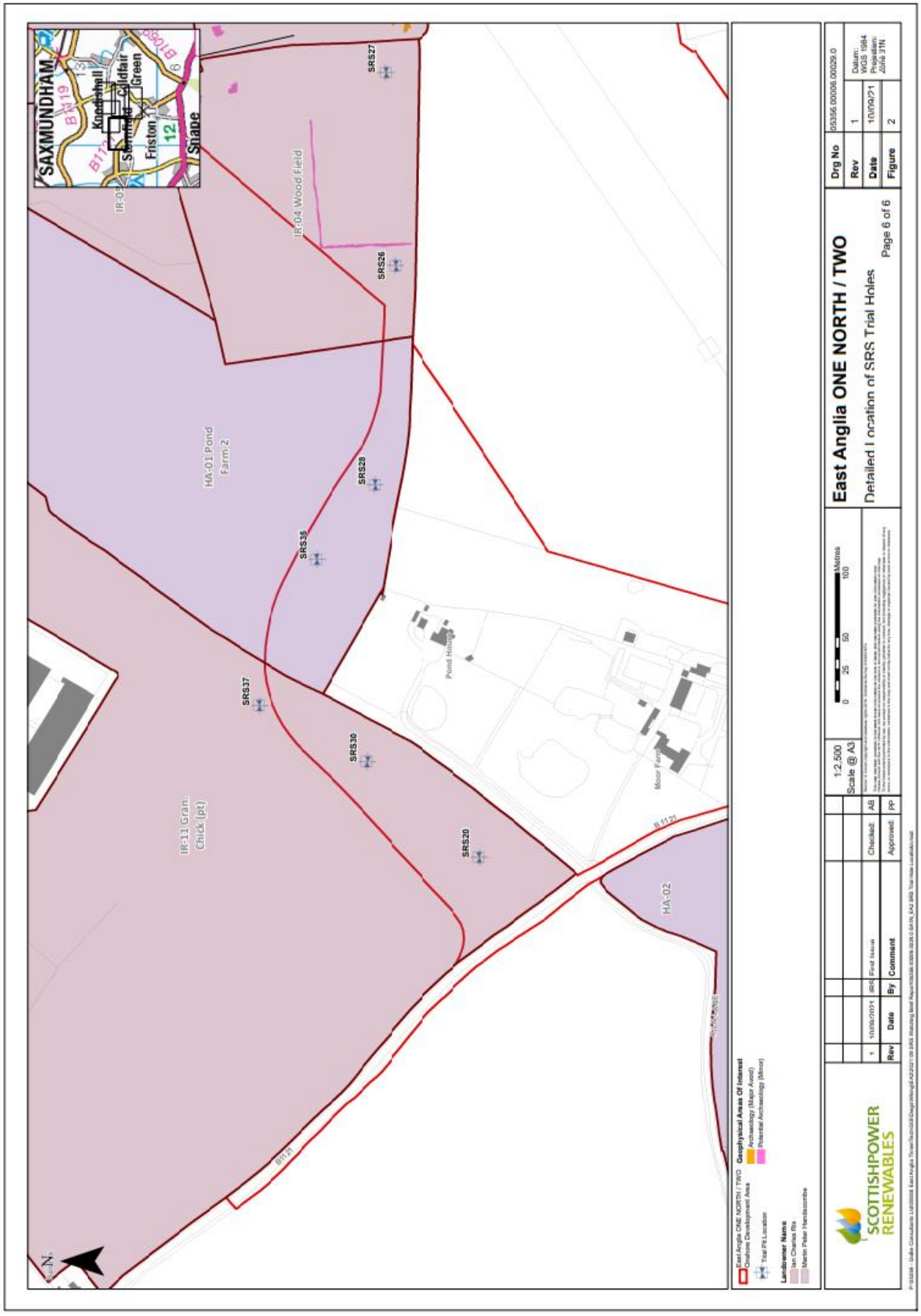
Figure 2. Detailed Location of SRS Trial Holes











APPENDIX 2: Digitised Trial Hole records

SRS Number	Spade & Auger/Auger	Archaeology Present	Notes
1	Spade & Auger	None	
2	Auger	None	
3	Spade & Auger	None	
4	Spade & Auger	None	
5	Spade & Auger	None	
6	Auger	None	No photo
7	Spade & Auger	Flecs of modern cbm in top soil (unrecovered)	Moved SE slightly to avoid geophys. Flecs of CBM investigated but no features present in trial pit, other modern brick visible across local area
9	Spade & Auger	None	
8	Auger	None	Moved to the N side of TR163 to avoid geophys
10	Auger	None	
11	Auger	None	
12	Auger	None	Moved SW approx 10m to avoid Geophys
13	Auger	None	Possible field drain to not dug to depth
14	Spade & Auger	None	Moved SW to avoid ecology
15	Auger	None	
16	Auger	None	Microsited 2m South due to Geophys
17	Auger	None	
18	Auger	None	Moved slightly E due to vegetation
19	Spade & Auger	None	
20	Spade & Auger	None	
21	Auger	None	
22	Spade & Auger	Possible flecs of charcoal in topsoil	Microsited south 5m to avoid disturbance Though charcoal did not appear to be part of a feature, and was just in topsoil, auger was positioned in the N side of pit to avoid it
23	Spade & Auger	None	Moved S due to spoil heap

24	Spade & Auger	None	
25	Spade & Auger	None	
26	Spade & Auger	Small flecs of possible CBM (or sandstone) , present in top-soil, unrecovered	Auger positioned to avoid side with CBM present
27	Auger	None	
28	Auger	None	
29	Spade & Auger	None	Microsited slightly south to avoid disturbance
30	Auger	None	Moved 5m SW to avoid disturbed ground
31	Spade & Auger	None	Microsited slightly south to avoid geophysics
32	Auger	None	No photo
33	Auger	None	Moved 20m E to avoid land-drain
34	Auger	None	
35	Auger	None	
36	Auger	None	
37	Auger	None	Location might be off as nearby trench is unexcavated
38	Auger	None	no photo
39	Auger	None	
40	Auger	None	Moved to opposite side of TR286 to avoid walking under powerlines
41	Auger	None	
42	Auger	None	
43	Auger	None	
44	Auger	None	
45	Spade & Auger	None	Some colour disturbance in subsoil in W side of trench so auger positioned on E side. Did not appear to be a feature, but possibly ploughing or disturbance from machine tracking
46	Spade & Auger	Fragments of modern CBM and possible modern industrial waste in topsoil (unrecovered)	No features seen, materials only found in topsoil
47	Auger	None	Microsited approx 5m West to avoid spoil heap/water filled trench

48	Auger	None	Though position of trial hole has not been moved nearby archaeological ditches and landdrains were noted to make sure pit avoided them
49	Spade & Auger	None	Moved W of TR 174 to avoid disturbance
50	Spade & Auger	None	Nearby to trial pit location there is some post-med /modern CBM on the surface, but none in the trial pit itself
51	Auger	None	
52	Spade & Auger	None	
53	Spade & Auger	Fragments of modern CBM in topsoil (unrecovered)	Fragments likely from trackway N of pit location

APPENDIX 3: Selected Photos

Plate 1. General Working Shot, SRS1

Plate 2. General Working Shot, SRS44

Plate 3: General Working Shot, SRS26

Plate 4: General Working Shot, SRS2

Plate 5: SRS2, mid-ex shot showing spade hole before augering

Plate 6: SRS25, fully dug and augered

Plate 7: SRS26, after augering

Plate 8: SRS49, fully excavated and augered, with auger sample on spade

APPENDIX 4: WRITTEN SCHEME OF INVESTIGATION

East Anglia ONE North and East Anglia TWO Offshore Windfarms

Appendix Four: Archaeological Written Scheme of Investigation for Soil Research Survey works

Prepared by:	Checked by:	Approved by:
 *SLR Consulting Ltd.* *03/06/21*	*Electronic Signature with name and date (delete text before signing)*	*Electronic Signature with name and date (delete text before signing)*

Revision Summary				
Rev	**Date**	**Prepared by**	**Checked by**	**Approved by**
01	02/06/2021	Alastair Becket and Elliot Grater		
02	09/07/2021	Alastair Becket		

Description of Revisions			
Rev	**Page**	**Section**	**Description**
01	All	All	New Document
02	7	4.1.3 Table 1	Text and table updated with known archaeologically sensitive locations as of 09/07/21
02	8	4.5	Fieldwork dates updated
02	9	5.1.1	Paragraph 35 updated with minor refinement of soil-analysis methodology

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INTRODUCTION AND SCOPE

1.1. Scope

1. This document is a Written Scheme of Investigation (WSI) describing a programme of archaeological monitoring and recording work to be undertaken in association with the East Anglia ONE North (EA ONE North) and East Anglia TWO (EA TWO) Offshore Wind Farm projects. This WSI has been prepared by SLR Consulting Ltd. on behalf of ScottishPower Renewables (SPR).

2. This WSI covers archaeological monitoring of a soil research survey (SRS), conducted by Tim O'Hare Associates LLP (TOHA) on behalf of Optimised Environments Ltd, at the EA ONE North and EA TWO Onshore Substations site, East Anglia (Figure 1). Monitoring will aim to identify and record any archaeological remains or layers that are impacted by the works. Should archaeological remains be identified, further archaeological mitigation may also be required prior to the development. The SRS works consist of a series of 53 trial holes, spade excavated to remove topsoil and overburden and thereafter soil-augured to a maximum depth of 1.0m (ground conditions permitting). The locations of the trial holes are provided in Figure 2.

1.2. Site Location

3. The onshore development area for EA ONE North and EA TWO has been identified by a detailed site selection process as outlined in Chapter 4 Site Selection and Consideration of Alternatives of the East Anglia TWO and East Anglia ONE North Environment Statements (submitted with the Development Consent Order (DCO) application). It includes land between Sizewell and Thorpeness at the landfall (approximately NGR: TM 4747 6071) and extends inland approximately 9km terminating at the onshore substation location just to the north of Friston (approximately NGR: TM 4138 6115), encompassing the parishes of Aldringham-cum-Thorpe, Leiston, Knodishall and Friston. This area is in multiple landownerships and the land use is a mixture of arable and market garden agriculture with areas of heath, scrub, woodland, and sand dunes to the far east along the coastal edge.

4. Since archaeological fieldwork (e.g. geophysical survey) for the projects commenced, the limits of the proposed onshore development area have undergone substantial revision and refinement. The proposed onshore development area has now been superseded by the onshore development area (ODA), as presented for the DCO application purposes. This latter boundary, for the area of the proposed SRS, is shown on the drawings in Appendix 1.

5. The underlying bedrock geology within the area of the survey comprises Crag Group Sand. This is overlain across most of the Site with superficial deposits of Lowestoft Formation Diamicton, Sand and Gravel and Clay and Silt (British Geological Survey 2021). The soils are classified in the Soilscape 10 and Soilscape 7 associations which are characterised as freely draining slightly acid sandy soils and freely draining slightly acid but base rich soils respectively, as well as in the Soilscape 18 association, characterised as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (Cranfield University 2019).

2. ABBREVIATIONS

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CIfA	**Chartered Institute for Archaeologists**
DCO	**Development Consent Order**
EA ONE North	**East Anglia One North Offshore Wind Farm**
EA TWO	**East Anglia Two Offshore Wind Farm**
HER	**Historic Environment Record**
MoRPHE	**Management of Research Projects in the Historic Environment**
OASIS	**Online Access to the Index of Archaeological Investigations**
ODA	**Onshore Development Area**
SCCAS	**Suffolk County Council Archaeology Service**
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SRS	**Soil Research Survey**
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WSI	**Written Scheme of Investigation**

3. PROJECT BACKGROUND AND SITE DESCRIPTION

3.1. Project Background

6. The proposed EA ONE North and EA TWO projects are Nationally Significant Infrastructure Projects (NSIP) that are being developed respectively by East Anglia ONE North Limited and East Anglia TWO Limited (the Applicants) both of whom are wholly owned subsidiaries of SPR. Both projects have the potential to make a substantial contribution to UK 2030 energy targets by meeting nearly 10% (5% for each project) of the UK offshore wind cumulative deployment target for 2030. The East Anglia ONE North offshore windfarm site is located in the southern North Sea, approximately 36km from its nearest point to the port of Lowestoft and 42km from Southwold whilst the East Anglia TWO offshore windfarm site is approximately 31km from its nearest point to Lowestoft and 32km from Southwold, also being located in the southern North Sea. The proposed East Anglia ONE North project will have an operational capacity of up to 800MW, which is enough to power approximately 659,000 UK households whilst the proposed East Anglia TWO project will have an operational capacity of up to 900MW, which is enough to power approximately 742,413 UK households. Both projects would principally comprise offshore wind turbines, offshore electrical and construction, operation and maintenance platforms, offshore export cables, onshore cables, an onshore substation, a National Grid substation and National Grid overhead line realignment works.

7. Both projects are in the application determination stage and their application programmes run in parallel having been submitted as separate DCO applications. The ODA, which includes landfall location, onshore cable route, onshore substation location and National Grid infrastructure, has been developed to allow for the construction of both the proposed projects. At this stage it is not known whether both projects would be constructed simultaneously or sequentially.

3.2. Archaeological Background

3.2.1. Archaeological Desk-Based Assessment

8. An Archaeological Desk-Based Assessment (ADBA) conducted as part of the environmental impact assessment has highlighted the potential for currently unrecorded heritage assets with archaeological interest, including possible remains of prehistoric, Roman, and medieval date.

9. The ADBA stated that: 'the LiDAR assessment is considered likely to have identified all substantial upstanding heritage assets within the ADBA study areas, although smaller discrete features may have been missed due to the limited coverage at resolutions greater than 2m'. In relation to the below ground archaeological remains 'the map regression will have identified any features still present in the 19th century, but will not have identified earlier features, which may not have survived above ground to this date', and 'the aerial photography analysis is likely to have detected a majority of cropmark features.' The report concluded that: 'there remains the potential that further below ground archaeological remains are present, either as smaller features not readily detected in aerial photography or due to the ground conditions at the time the photos were taken not being conducive to cropmark formation'.

10. It was therefore concluded that 'on the basis of the known archaeological and historical background of the ADBA study areas… there is considered to be a moderate to high likelihood that further prehistoric remains survive within the ADBA study areas.' These may include possible assemblages of flint artefacts, especially along the gravel terraces of the Hundred River.

11. It was also considered that there is 'a moderate likelihood of further Iron Age and Romano-British remains in the form of possible settlements and associated field systems.' However, it was recognised that Iron Age and Roman sites (likely to comprise traces of ditches and earthworks) are more conducive to identification through geophysical survey.

12. Additionally, it was considered that there was 'a medium to high potential for evidence of Anglo-Saxon and medieval agricultural land use within the ADBA Study Area'. The area around the possible church of Buxlow (KND 009 and HA6), located within the ODS to the south of the proposed substation site, was considered to have considerable potential for burials.

3.2.2. Geophysical Survey

13. The geophysical survey undertaken to date has clearly demonstrated that the prevailing geological and pedological conditions within the ODA are favourable for the detection of sub-surface archaeological remains and consequently it has been assessed that the

results provide a reliable indication of the extent of the majority of the significant areas of sub-surface archaeological remains within the ODA, subject to the limitations of the technique. It is recognised that other types of archaeological activity, including unenclosed settlement or funerary activity, may be difficult to detect (by the surveys carried out to date), but could also be of importance.

14. Anomalies indicative of probable or possible archaeological features and activity have been identified throughout the ODA (see Appendix 1), the majority of which were previously unknown, thus adding significantly to the archaeological understanding of the landscape where the proposed development will be situated. Although the suspected archaeological remains extend throughout the ODA there are still large areas where no anomalies of archaeological potential have been identified from the geophysical survey. However, the low magnitude exhibited by some of the anomalies and the partial and discontinuous nature of others suggests that, in certain instances, the archaeological remains may be more extensive than revealed by the survey to date, either due to partial truncation by modern agricultural techniques and/or a lack of magnetic contrast on a variable geological substrate.

15. Nevertheless, areas comprising both concentrations of anomalies or single clearly defined features are identified as areas of archaeological potential. Most of the linear anomalies are interpreted as locating soil filled ditches forming an extensive and complex network of field systems and enclosures, most likely for containing animals, which extends across pockets of the onshore development area. These field systems and potential stock enclosures are of uncertain date but probably date to the later prehistoric, early Roman periods or post-medieval periods. Smaller, sub-divided, enclosures with numerous discrete anomalies are interpreted as more likely to have been the sites of human occupation. Several of these settlement sites are identified, particularly in the western half of the onshore development area, again varying dates are likely up to the medieval period.

16. On the basis of the geophysical survey carried out to date, the archaeological potential of the ODA is considered to be potentially higher than asserted in the concluding assessments of potential given in the ADBA. The survey has clearly identified numerous anomalies indicative of multi-period activity, including prehistoric funerary activity (ring ditches) and medieval settlement (road frontage occupation).

3.2.3. Preliminary Trial Trenching

17. A total of 67 trenches were excavated in three discrete areas in 2019; Area 1 (Substation), Area 3 (Aldringham Road) and Area 4 (Hundred River Crossing). The trenching in Area 1, within the area of the proposed SRS, confirmed the results of the geophysical survey with only a single undated pit feature being present in the 39 trenches excavated over the footprint of the proposed substation.

3.2.4. Archaeological Trial-Trenching

18. Archaeological trial-trenching is currently (June 2021) underway in the substation area. Whilst the results of the trenching campaign have yet to be disseminated, archaeological features and deposits have been identified in several locations. The proposed SRS locations (Appendix 1) have been designed to avoid areas identified via desk-based and geophysical survey as being of archaeological potential, and the ongoing results of the trial trenching will influence the need for archaeological monitoring.

4. GENERAL ARRANGEMENTS

4.1. Aims and Objectives

4.1.1. Aims

- Archaeological monitoring of excavation of topsoil/overburden removed during SRS works in archaeologically sensitive locations.
- Avoid areas of archaeological potential, wherever possible.
- If archaeological features are disturbed; identify, investigate, understand, record, and report the extent, nature, and significance of surviving archaeological remains within the invasive SRS works areas.

4.1.2. Objectives

- Ensure that the working area is monitored during TOHA's groundworks in archaeologically sensitive areas to ensure any archaeological remains are avoided where possible, recorded and (if necessary) recovered with minimal damage;
- Identify and record all archaeological features / deposits present;
- If necessary, excavate and record a sufficient sample of any features present to place on record and understand the nature, sequence, date and significance of the archaeological remains present within the excavated area; and

- Undertake assessment, analysis, archiving and reporting as appropriate to the significance of the results, to be disseminated in an appropriate format.

4.1.3. Monitoring Locations.

19. Archaeologically sensitive locations have been in part determined by the results of the trial trenching, and those trenches which are currently known to be archaeologically sensitive, or where sensitivity cannot be determined, such as where a trench has not been opened, and their associated SRS hole, are listed in Table 1. It is proposed that archaeological monitoring of the topsoil/overburden be conducted in these locations. The remainder of the SRS locations will not be subject to archaeological monitoring, however, a tool-box talk will be provided by the monitoring archaeologist to provide on-site team with information about the archaeological potential of the area.

Table 1: SRS locations in proximity to archaeologically sensitive locations

SRS Location Number	Nearest Archaeological Trial-Trench Number(s)
1	TR253
2	TR303
4	TR346, TR350
5	TR192
6	TR378
7	TR304
9	TR134
12	TR188
16	TR103
19	TR389
20	TR10
24	TR355
25	TR106
27	TR32
28	TR19, TR20
30	TR12
31	TR88
36	TR338
37	TR08
39	TR78
40	TR249, TR286
42	TR158
43	TR443
44	TR181
45	TR214
46	TR449
47	TR242
48	TR94
49	TR177
51	TR255
53	TR425

4.2. Personnel

20. The archaeological regulator is the:

    Suffolk County Council Archaeology Service (SCCAS)
    Bury Resource Centre,
    Hallow Road,
    Bury St Edmunds, Suffolk, IP32 7AY
    0345 678 9000

21. The archaeological consultant is:

    Alastair Becket
    Associate Archaeologist
    abecket@slrconsulting.com
    SLR Consulting Limited
    Floor 2, 4/5 Lochside View, Edinburgh Park, Edinburgh, EH12 9DH
    0131 335 6830

22. Fieldwork staff will be provided by SLR Consulting Ltd.

23. If required, processing, assessment and analysis will be carried out by appropriate specialists or by an external specialist. The results will be reviewed and incorporated into reporting.

24. If appropriate dependent on results, an Online Access to the Index of archaeological investigations (OASIS) record will be set up and completed along with the archive.

4.3. Standards

25. SLR Consulting Ltd. are a Registered Organisation with the Chartered Institute for Archaeologists. Their work is accordingly undertaken to the highest professional standards. All archaeological fieldwork and reporting will be carried out in accordance with the relevant SCCAS, Historic England and Chartered Institute for Archaeologist's guidance and the Standards for Field Archaeology in the East of England.

4.4. Monitoring by Archaeological Regulator

26. All archaeological work will be monitored by the archaeological regulator, directly on site and / or through summary reports and telephone / email with SPR and their representatives, as appropriate.

27. The archaeological regulator will be updated as the work proceeds and will be invited to visit the site by prior arrangement through SPR during the fieldwork in order to discuss any issues raised with SPR.

28. The archaeological regulator's monitoring will potentially include:

- (if results merit it) one or more site visits to confirm the fieldwork is being undertaken in accordance with the WSI and discuss the findings; and
- review and discussion of all reports and archives drafts before submission.

4.5. Programme

29. The programme start date for the SRS works is the 13 July 2021 and works are expected to continue for 3 days.

30. SLR Consulting Ltd. will inform SCCAS of the proposed commencement dates of fieldwork, and then provide regular updates on the progress of the surveys. Reasonable access to site will be arranged for representatives of SCCAS, if required, for inspection and monitoring visits. These will be accompanied by the SPR representatives and/or Archaeological Consultant.

4.6. Health and Safety

31. All work will be in accordance with all relevant health and safety procedures determined by SPR and TOHA, but including those set out in:

- the Health and Safety at Work Act 1974 and related legislation;
- the Federation of Archaeological Managers and Employers, Manual of Health and Safety in Field Archaeology 2010; and
- the Council for British Archaeology Handbook no. 6, Safety in Archaeological Fieldwork (1989).

32. All necessary protective clothing and equipment will be used. The archaeologists on site will wear hard hats, gloves, reflective jackets and protective footwear.

33. A First-Aid kit and Accident Book will be kept on site at all times.

5. FIELDWORK METHODOLOGY

5.1. Field Investigation

5.1.1. Monitoring of Excavations

34. The proposed SRS locations (Appendix 1) have been designed to avoid areas identified via desk-based and geophysical survey as being of archaeological potential. The on-site archaeologist will advise avoidance of these archaeologically sensitive areas in the event that SRS locations are altered in the field.

35. Selected trial holes excavated in the EA ONE North/ EA TWO areas will be monitored by a suitably qualified archaeologist in accordance with local and national standards and guidelines (CIfA 2014a, 2014b, Gurney 2003, SCCAS 2021). These will either be spade excavated to remove topsoil and overburden and thereafter soil-augured to a maximum depth of 1.0m (ground conditions permitting) or hand-augered to a maximum depth of 1.0m. In those locations identified as being archaeologically sensitive due to their proximity to known archaeology (Table 1) the removal of topsoil/overburden will be subject to archaeological monitoring and recording conditions. Auger locations within these trial-holes will be chosen to avoid any identified archaeological features.

36. Additional monitoring may be required should further archaeologically sensitive areas be identified during the ongoing trial-trenching. A check of the most up-to-date information will be conducted by SPR/their consultant one working day prior to works beginning. Any changes to the trial-pit monitoring list (Table 1) will be provided to the on-site archaeologist, TOHA and SCCAS in advance of works commencing.

37. Hand excavation of trial holes will proceed under archaeological observation but would not be controlled directly by the nominated on-site archaeologist(s). Reasonable time should be allowed for the monitoring archaeologist(s) to investigate test holes once the topsoil/overburden has been removed, and/or if potential archaeological deposits are identified.

38. If any archaeological features are found they will be defined by hand-cleaning as necessary and recorded in plan. Avoidance will be sufficient to satisfy the aims and objectives of the work if the feature(s) can be avoided through micro-siting of the auger location.

39. If potential archaeological features or deposits of archaeological origin have been disturbed during excavation of the trial holes a sample will be hand-excavated stratigraphically under archaeological conditions. The excavated parts of the features will be recorded in written records and detailed drawings indicating numbered context boundaries, sediment texture and colour.

40. The sample may address all features where appropriate or may exclude repetitive excavation of features of similar form and phase. Provisionally, the sampling policy may be as follows:

- 100% excavation of each sampled stake hole;
- 50% excavation of each sampled post hole or pit up to 1.5m diameter;
- 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;
- the sampling of longer features will be agreed with the SCCAS once their full extent within the excavation area has been established.

41. Percentages referred to are those of the surface area of the feature which lies within the archaeological monitoring and recording area.

42. Where avoidance is not possible and archaeological deposits are limited (for example, a single small pit or posthole), full excavation and recording of the feature will allow the trial hole to be continued.

5.1.2. Recording

43. All archaeological deposits will be recorded using a pro-forma single context recording system, and fully cross-referenced. Particular attention will be paid to recording the stratigraphy of deposits in areas of alluvium/colluvium.

44. The drawn record will comprise hand-drawn plans of the feature cuttings at a suitable scale, typically 1:20 or 1:50 and hand-drawn sections at 1:10 or 1:20. All these drawings will include locational information in the form of National Grid coordinates and levels above ordnance datum.

45. The general deposit-sequence within the archaeological monitoring and recording area will be recorded in written form and where appropriate in drawings of selected parts of sections.

46. A photographic record will be maintained comprising high-resolution digital images, with a supporting index, archived in accordance with the Chartered Institute for Archaeologists' (CIfA) guidelines for long term storage of digital media (CIfA 2014c: Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives).

5.2. Palaeoenvironmental Sampling

47. If required, palaeoenvironmental samples will be taken from appropriate representative deposits (such as occupation and midden deposits or ditch and pit fills) and submitted for assessment. Particular attention will be paid to the recovery of samples from any waterlogged deposits present. Recovery and sampling of environmental remains will be in accordance with guidelines prepared by English Heritage (now Historic England) (2011) and the sampling strategy provided by the specialist and agreed with SCCAS and the Historic England Regional Science Advisor, as required.

48. 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 subsequent to initial post-excavation assessment.

5.3. Artefacts

49. All artefacts will be labelled, packed and stored in appropriate materials and conditions to ensure that no deterioration occurs. All artefact processing/storage will be carried out in accordance with UKIC (United Kingdom Institute for Conservation) (1996) guidelines.

5.4. Treasure

50. Finds of treasure are governed by the Treasure Act 1996 (and as amended by the Treasure Designation Order 2002 No 2666). This Act replaced the common law of treasure trove in England, Wales and Northern Ireland, which was previously the only legal protection afforded to antiquities. Under the law of treasure trove, finds of gold or silver had to be reported to the coroner and could be declared treasure trove and the property of the Crown if they had been deliberately hidden with the intention of recovery and their owner, or heirs were unknown. The 1996 Act removed the need to establish that objects were hidden with the intention of being recovered, except in a very few cases; it sets out the precious metal content required for a find to qualify as treasure; and it extends the definition of treasure to include other objects found in archaeological association with finds of treasure. Six categories of object are now classed as treasure:

- any object other than a coin which is at least 10% silver or gold by weight and more than 300 years old;
- any coins that are at least 10% silver or gold by weight and come from a single find, provided the find contains at least two coins with a gold or silver content of at least 10%. The coins must be at least 300 years old at the time of discovery. Where finds consist of coins that are less than 10% gold or silver by weight, there must be at least 10 coins in the find and they must be at least 300 years old at the time of discovery for the find to be considered treasure;
- any object, of whatever, composition, that is found in the same place as, or that had previously been together with, another object that is treasure;
- any object (other than a coin), any part of which is base metal, which, when found is one of at least two base metal objects in the same find which are of prehistoric date;
- any object, (other than a coin) which is of prehistoric date, and any part of which is gold or silver; and
- any object that would previously have been treasure trove but does not fall within the specific categories given above.

51. The Act also introduces a Code of Practice for the voluntary recording of archaeological finds.

52. If any objects are recovered that are deemed to potentially qualify as treasure, SLR Consulting Ltd. will inform SPR and consult with SCCAS to determine the object's status. Objects that qualify as treasure will be notified to the local coroner and Finds Liaison Officer within fourteen days of discovery, in accordance with The Treasure Act 1996 Code of Practice and its amendment. The Treasure will initially be deposited with the Finds Liaison Officer.

5.5. Human Remains

53. Human remains will be left in situ unless damage or desecration may be anticipated, and except where removal or analysis would aid a satisfactory evaluation of the site. Any reburial of human skeletal remains will be done utilising a protective geotextile mesh. All relevant legislation and guidance shall be observed (SCCAS 2019, Section 1.10).

6. ASSESSMENT, REPORT AND ARCHIVE

6.1. Processing and Assessment

54. Upon completion of the trial holes and auguring, an evaluation report will be produced recording any archaeological deposits or finds encountered and will provide sufficient detail for SCCAS to make informed decisions in discussion with SPR (and their representatives) on the scope of further archaeological (evaluation and mitigation) works to be undertaken in the post-consent stages of the project. The evaluation report will be submitted within an agreed period following completion on site. An interim report may initially be prepared for discussion, which may include spot dates to aid in the dating of key features. Full analysis of all finds and environmental samples recovered during the excavation of the trial holes would then be undertaken at the earliest possible time thereafter.

55. The interim report(s), if required, will comprise a brief description of the results, a draft or sketch plan of each trial hole, a quantification of the primary archive including contexts, finds and samples and will be prepared and submitted to SCCAS (and Historic England, as appropriate) within an agreed period.

6.2. Report

56. The full draft report will include:

- a cover page, title page, or introduction containing the site name, the site code, the dates that fieldwork was undertaken, museum accession number, an Ordnance Survey grid reference, the name of the originating body and the report date;
- a list of contents, figures and tables;
- a non-technical summary;
- an introduction;
- a description of the site and its location;
- topography and geology;
- the planning background;
- the archaeological and historical background;
- the methodology;
- a summary of the project's results;
- interpretation of the archaeological features and their wider setting;
- artefact and ecofact reports by suitable specialists;
- a statement of the significance of the results in their local, regional and national context cross referenced to the regional research frameworks and agendas, as appropriate;
- a conclusion / discussion;
- references;
- a site plan showing trial hole locations;
- plans and sections of all archaeological features at a recognised scale;
- general photographs of the evaluation in progress and selected photographs of archaeological features investigated;
- a catalogue of finds;
- a catalogue/index and location of the site archive and project archive;
- appendices to include the approved survey-specific WSI; and
- an OASIS reference and accession number.

57. In addition, the following requirements and guidance will be adhered to:

- The archaeological contractor will consult the Suffolk Historic Environment Record (HER) officer to obtain a parish code for the work before commencement. These numbers will be unique for each project or site and will be clearly marked on all documentation relating to the work.

6.3. Archive

58. An archive of all records and finds will be prepared, consistent with the principles of Management of Research Projects in the Historic Environment (MoRPHE) (Historic England 2015) and compliant with SCCAS archaeological archive guidelines (2019). It will be adequate to perform the function of a final archive for deposition in the Archaeological Service's Store or in a suitable museum in Suffolk (see Brown 2011).

Note – it is not anticipated that the archive (paper or finds) will be deposited before the end of any subsequent evaluation and mitigation works undertaken post-consent (subject to consent being granted).

59. SPR and the SLR Consulting Ltd. will ensure every effort is made to obtain the agreement of the landowners for the deposition of the full site archive, and transfer of title, with SCCAS or designated Suffolk museum. If this is not achievable for all or parts of the finds archive then provision will be made for additional recording (e.g. photography, illustration, scientific analysis), as appropriate.

60. SLR Consulting Ltd. will consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation, and regarding any specific cost implications of deposition. It is intended that the depository will be prepared to accept the entire archive resulting from the project (both finds and written archive) in order to create a complete record of the project.

61. For deposition with the County Archaeological Store, the archive will comply with SCCAS Archive Guidelines. If the Archaeological Service's Store is not the intended depository, the archaeological consultant will ensure that a duplicate copy of the written archive is deposited with the Suffolk Historic Environment Record (HER).

62. It is proposed that the digital archive relating to this project will be lodged with the Archaeology Data Service (ADS 2013), or similar digital archive repository.

63. The report on the fieldwork and archive, consistent with the principles of MoRPHE, will be provided. Its conclusions will include a clear statement of the archaeological value of the results, and their significance in the context of the Regional Research Framework (East Anglian Archaeology, Occasional Papers 3, 8 and 24, 1997, 2000 and 2011).

64. The results will be related to the relevant known archaeological information held in the Suffolk HER. It will include examination of all readily available cartographic sources (e.g. those in the County Records Office) to record evidence for historic or archaeological sites and history of previous land uses. Where permitted, photographs, photocopies or traced copies will be presented in the report. It will also incorporate an assessment of the potential for documentary research that would contribute to the archaeological investigation of the site.

65. A copy of the survey specific WSI will be included as an appendix to the report.

66. An unbound hardcopy of the full report, clearly marked DRAFT, will be presented to SCCAS for approval within six months of the completion of fieldwork, unless other arrangements are negotiated. Following acceptance, a single copy of the report will be presented to the Suffolk HER as well as a digital copy of the approved report.

67. Where appropriate, a digital vector trail hole will be included with the report, which must be compatible with MapInfo GIS software, for integration in the Suffolk HER.

68. SCCAS support the OASIS project, to provide an online index to archaeological reports. At the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/ will be initiated by the archaeological contractor and key fields completed on Details, Location and Creators forms. When the archaeological project is completed, all parts of the OASIS online form will be completed (again by the archaeological contractor) and a copy included in the final report and also with the site archive. A .pdf version of the entire report will ultimately be uploaded to the OASIS website by the archaeological contractor.

7. REFERENCES

Archaeology Data Service and Digital Antiquity 2013 'Caring for Digital Data in Archaeology –A Guide to Good Practice'

Brown, D. H. 2011 'Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation' 2nd Edition

British Geological Survey 2021 'Geology of Britain viewer'

CIfA 2014a 'Standard and guidance for an archaeological watching brief'

CIfA 2014b 'Standard and guidance for the collection, documentation, conservation and research of archaeological materials'

CIfA 2014c 'Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives'

Council for British Archaeology 1989 'Handbook no. 6, Safety in Archaeological Fieldwork'

Cranfield University 2019 'Soilscapes Viewer'

Department for Culture, Media and Sport 1996 'Treasure Act 1996'

Department for Culture, Media and Sport 2002 (updated 2007, published 2008, 2ndEdition) 'Treasure Act 1996 Code of Practice (Revised) England and Wales'

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

English Heritage (now Historic England) 1998 Dendrochronology – Guidelines on Producing and Interpreting Dendrochronological 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 (second edition)'

East Anglian Archaeology 1997, 2000 and 2011: 'Occasional Papers 3, 8 and 24'

Federation of Archaeological Managers and Employers 2010 'Manual of Health and Safety in Field Archaeology'

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

Health and Safety Executive 1974 'Health and Safety at Work etc Act'

Historic England (2015) 'Management of Research Projects in the Historic Environment (MoRPHE)'

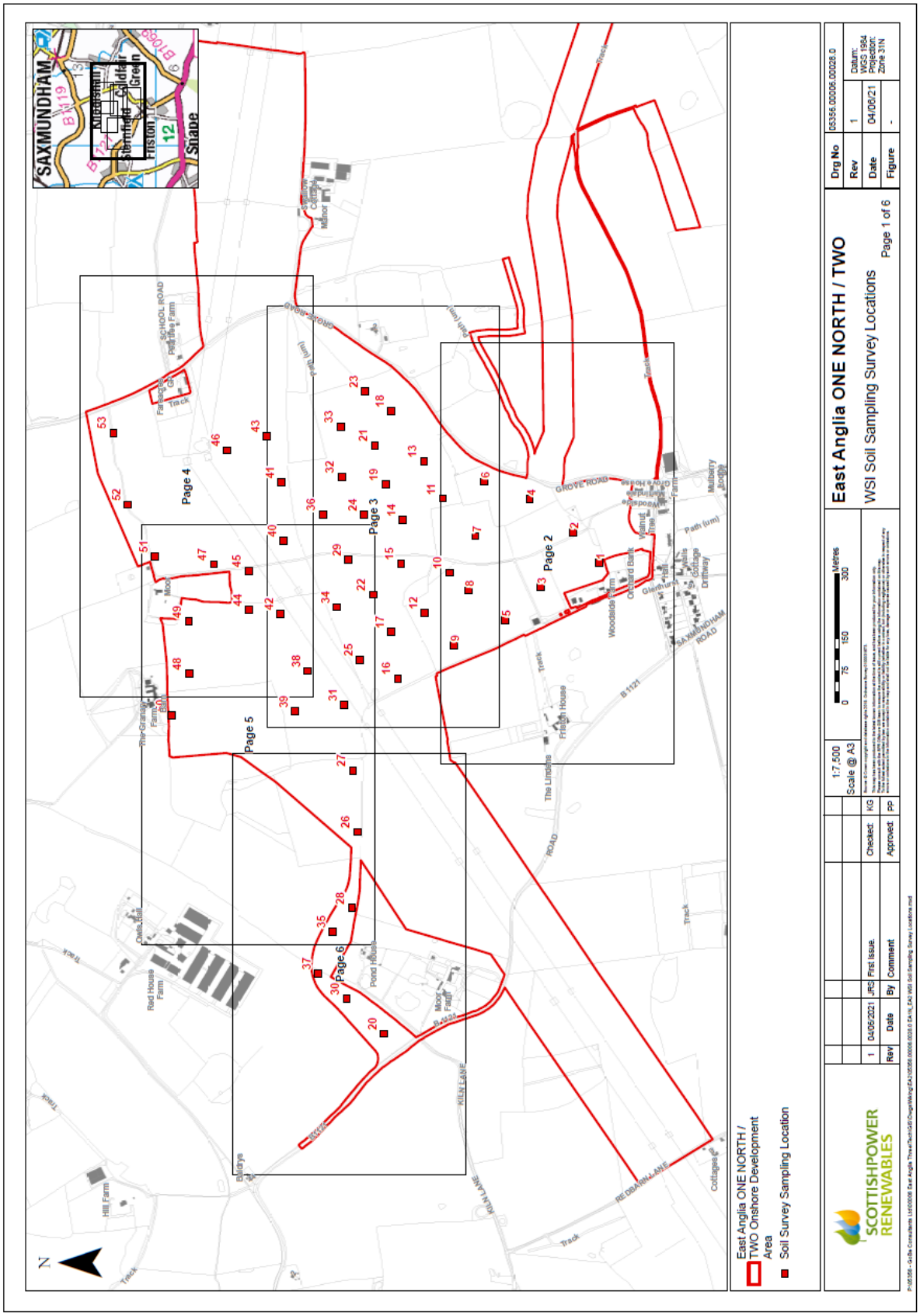
Suffolk County Council Archaeology Service (SCCAS) 2017, last updated May 2019 'Archaeological Archives in Suffolk, Guidelines for Preparation and Deposition'

Suffolk County Council Archaeology Service 2021 'Requirements for Archaeological Excavation'

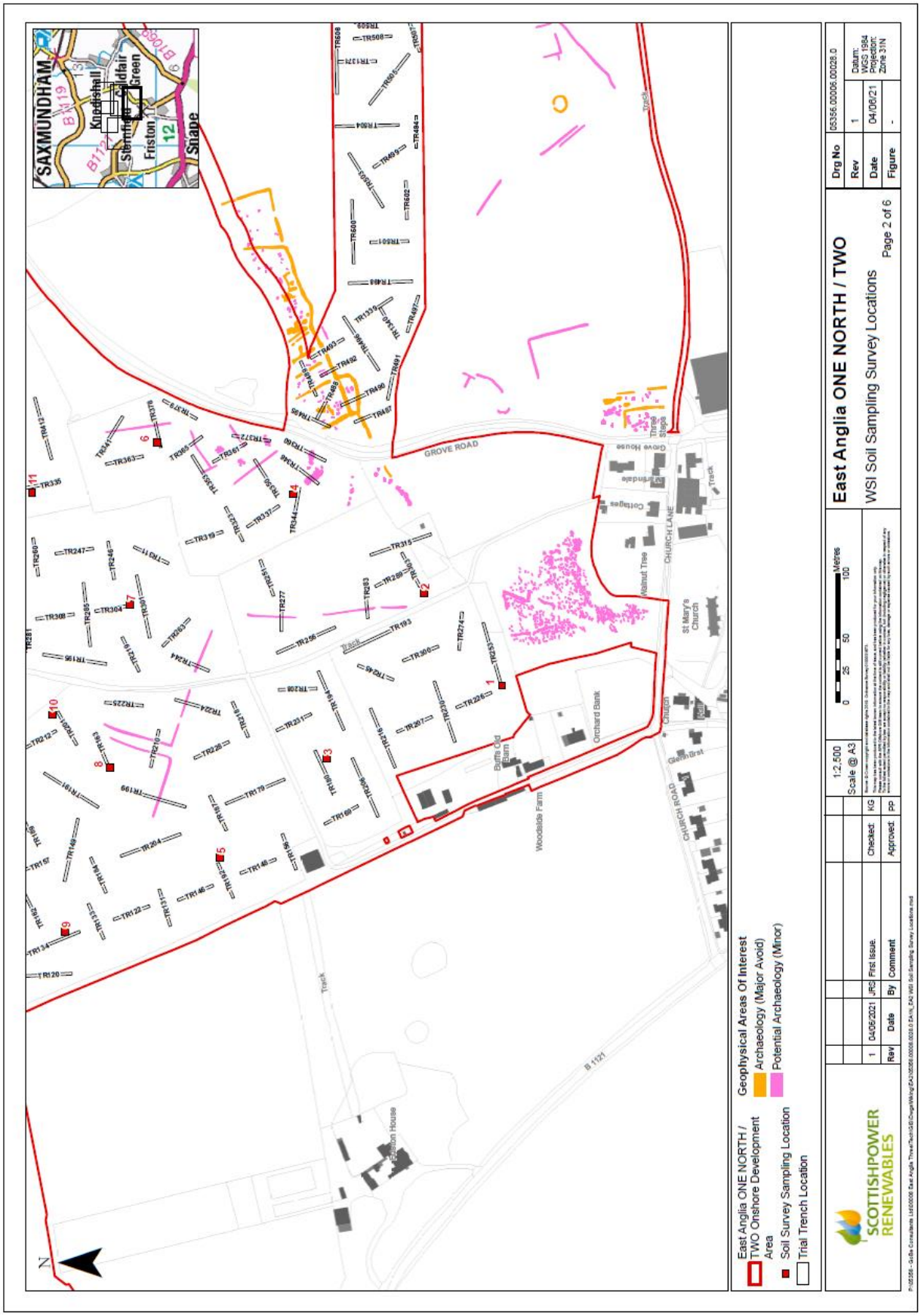
United Kingdom Institute for Conservation of Historic and Artistic Works 1996 'UKIC code of ethics and rules of practice'

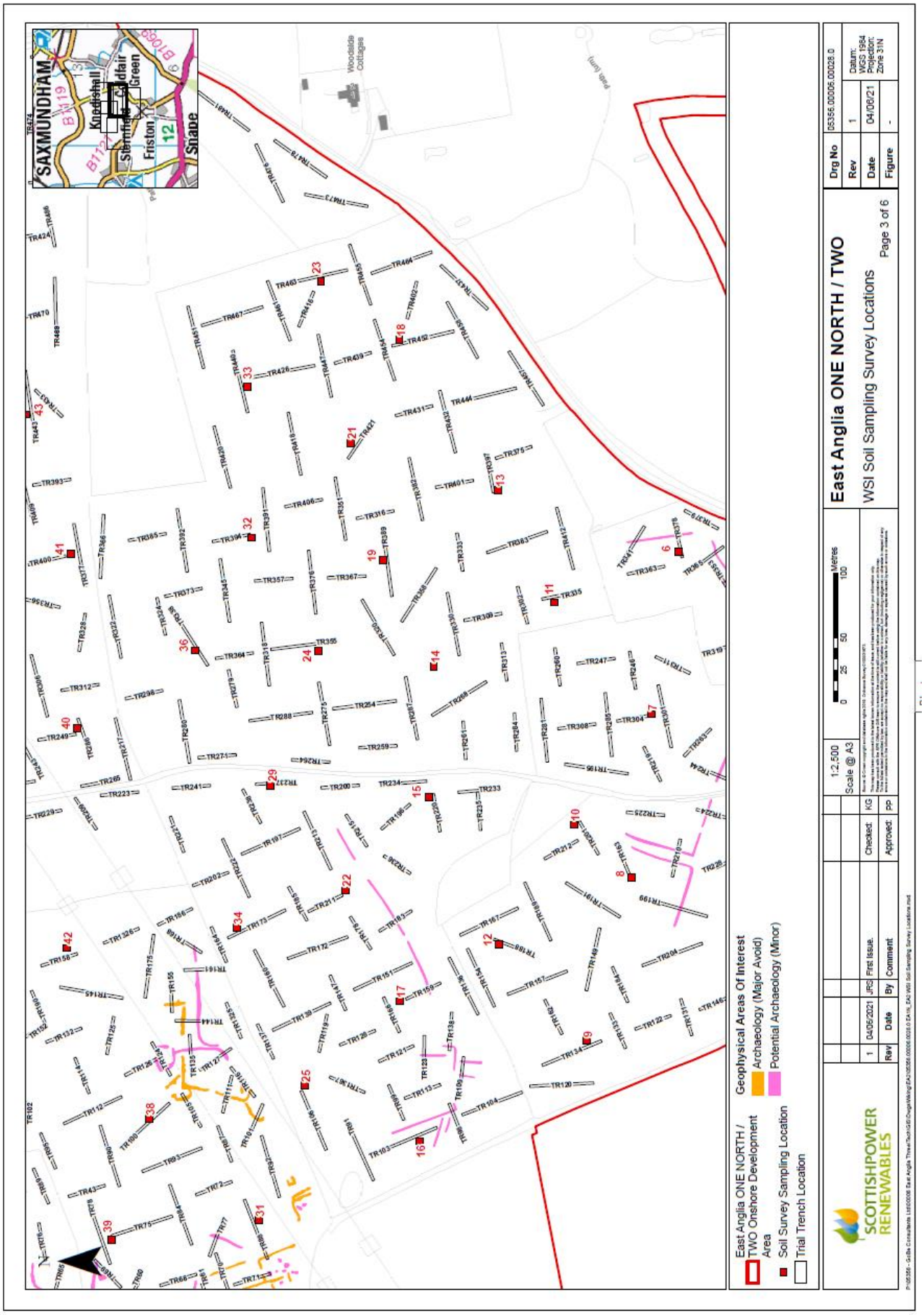
APPENDIX 1 Drawings

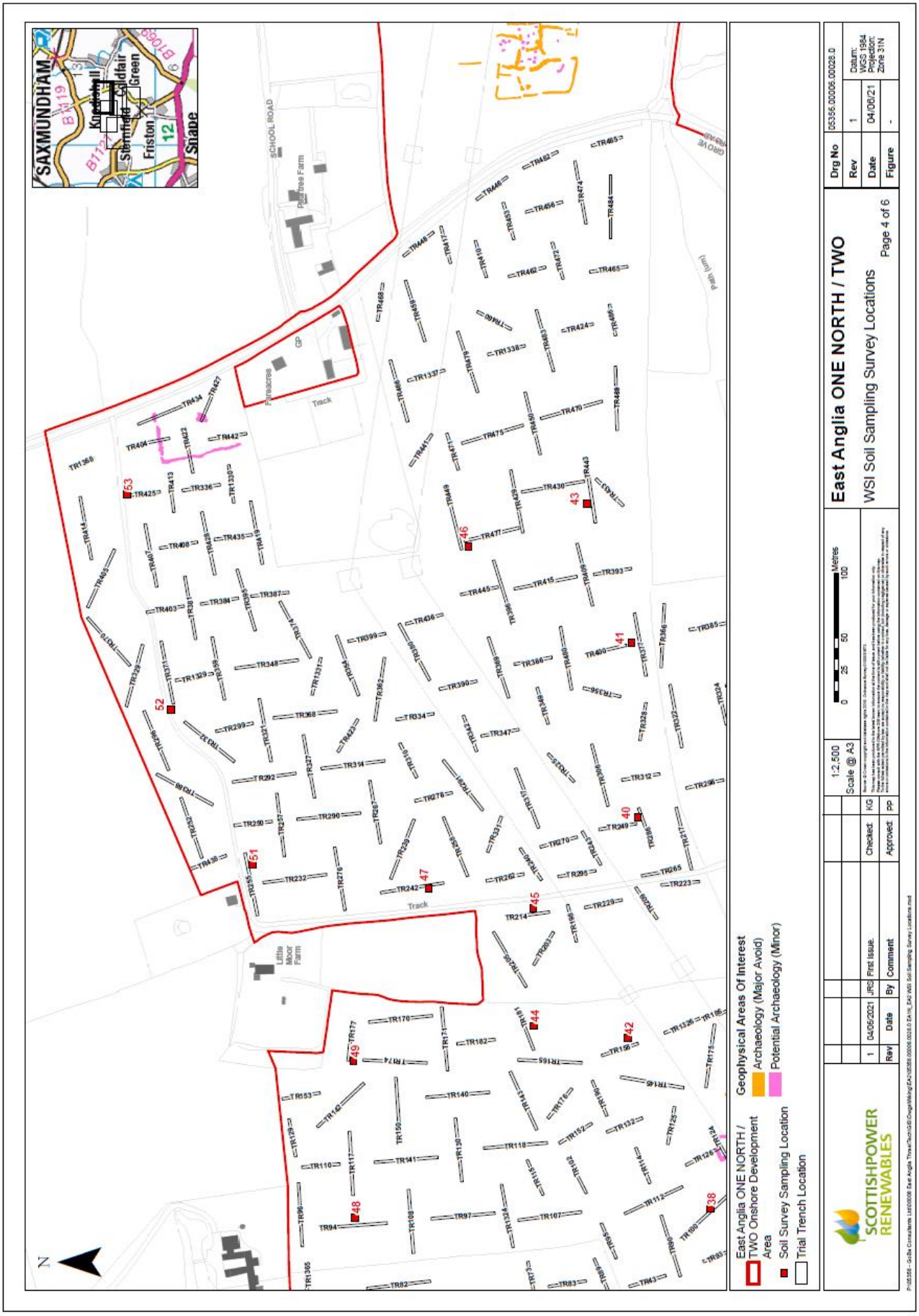
7.1. Figure 1. Site Location

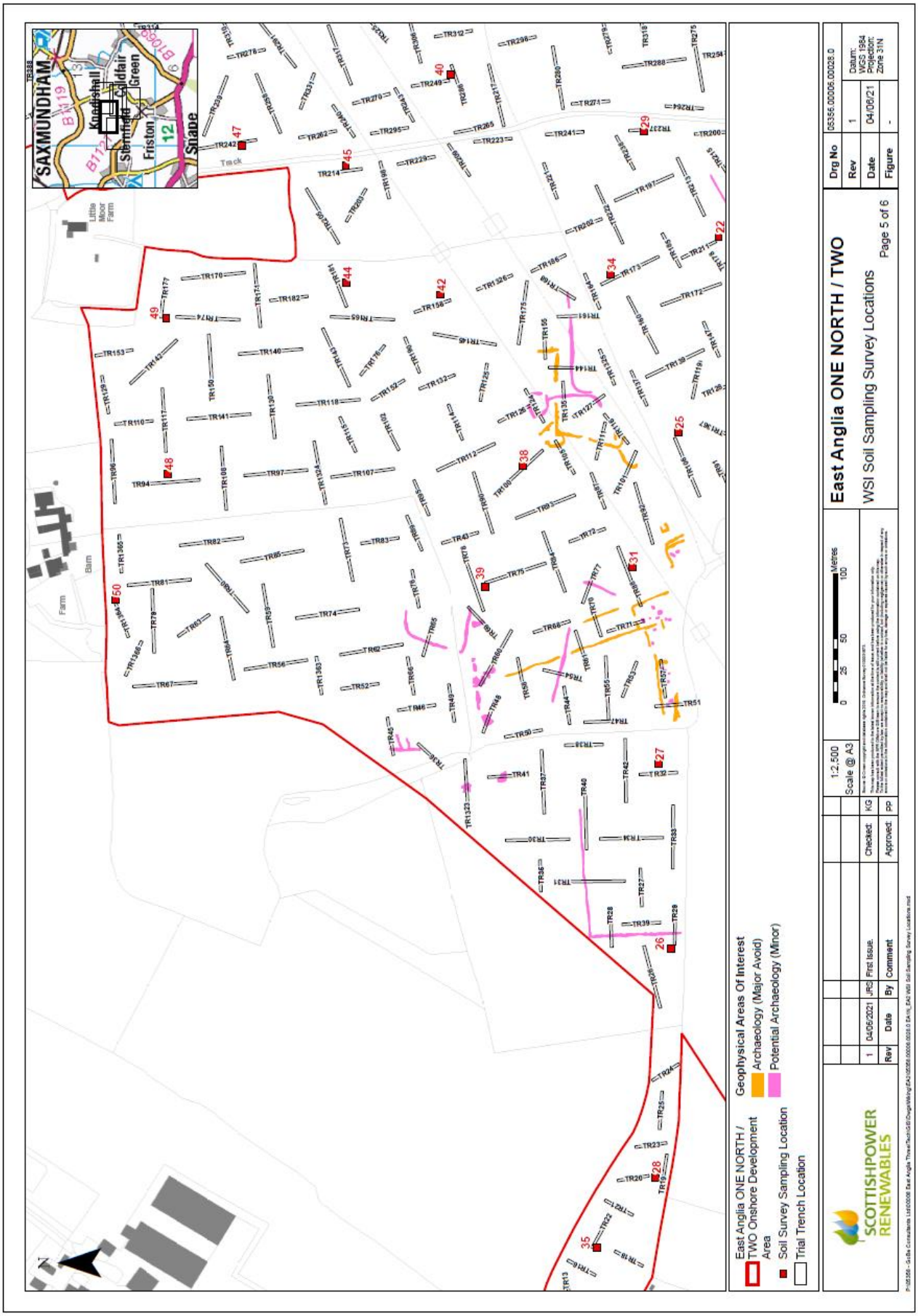


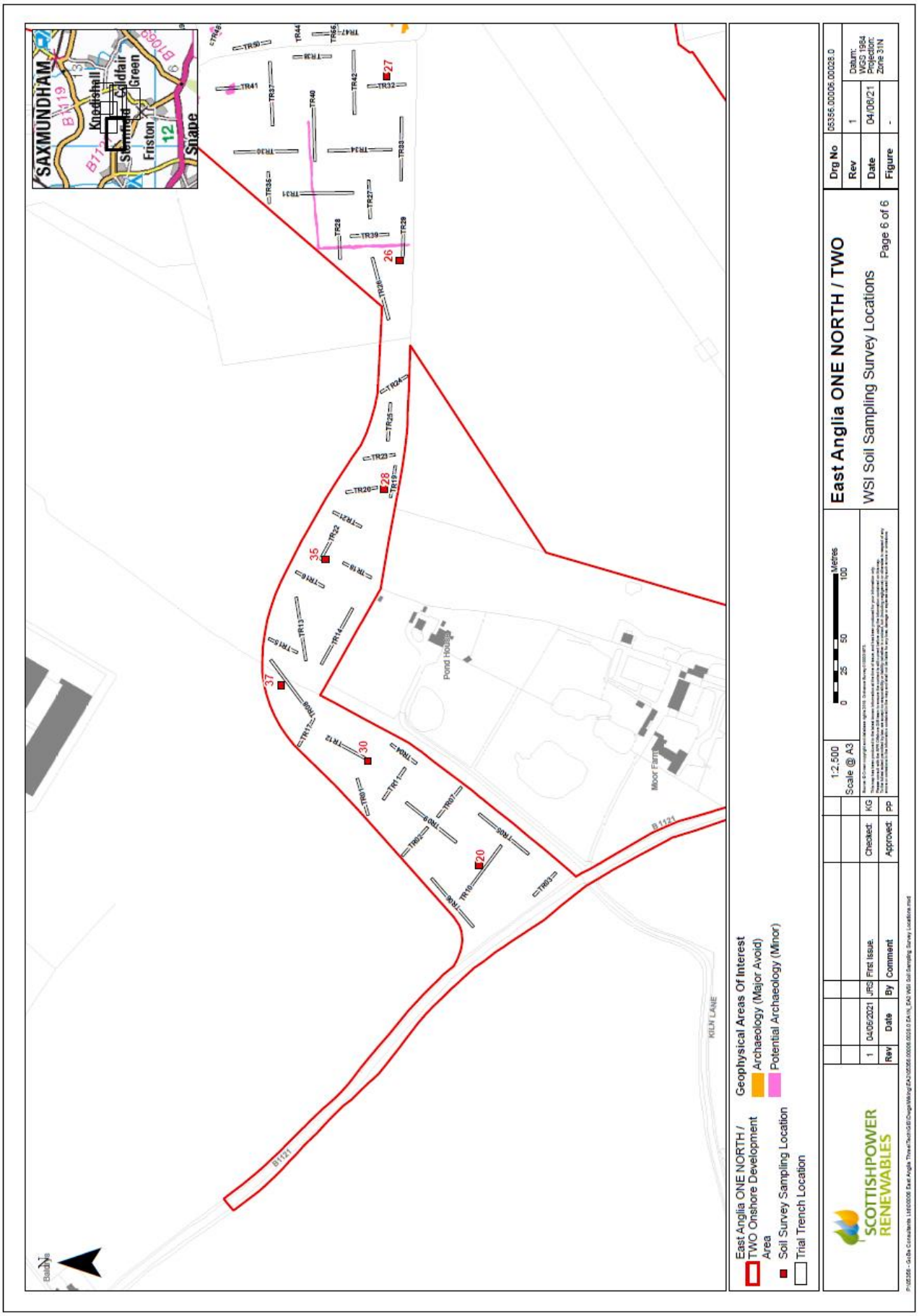
7.2. Figure 2. Detailed Location of SRS Trial Holes











APPENDIX 5: OASIS RECORD SUMMARY SHEET

Summary for slrconsu1-502371

OASIS ID (UID)	slrconsu1-502371
Project Name	Archaeological Watching Brief Report of Investigation for Soil Resource Survey works
Activity type	Watching Brief
Project Identifier(s)	EA1N-ONS-CNS-REP-IBR- 000002
Planning Id	
Reason For Investigation	Planning: Between application and determination
Organisation Responsible for work	SLR Consulting
Project Dates	13-Jul-2021 - 15-Jul-2021
Location	EA One North and EA TWO Onshore Substation Sites NGR : TM 41380 61150 LL : 52.1957028489903, 1.53052115879405 12 Fig : 641380,261150
Administrative Areas	Country : England County : Suffolk District : East Suffolk Parish : Knodishall

Project Methodology	Archaeological works involved the monitoring of two soil scientists from TOHA while they excavated a series of 53 trial holes, either spade excavated to remove topsoil and hand-augered to a depth of 1.0m, or hand-augered to a depth of 1.0m. Several locations of trial holes were micro sited on the day to avoid disturbing crops, disturbed ground, spoil heaps, or the location of possible geophysical anomalies. No archaeological features or deposits were observed or disturbed by the works and no further mitigation is suggested in relation to these specific trial holes. Please note, despite this being one archaeological campaign, due to the twin project approach of the shared grid route for EA One North and EA Two separate reports have to be submitted for the same archaeological works. The document number for this report - EA1N-ONS-CNS-REP-IBR-000002 refers to the document that will be submitted as part of the EA One North project. A separate document will be uploaded for EA Two, titled EA1N-ONS-CNS-REP-IBR-000003. Aside from the title both documents are identical and only one OASIS number has been generated.
Project Results	No archaeological features or artefacts were uncovered or recovered.
Keywords	
HER	Suffolk HER - unRev - STANDARD
HER Identfiers	
Archives	