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Historic Building Recording

Site & Landscape Survey

Interpretation, Design & Display

Trevemper Solar farm Crantock Cornwall

Archaeological Watching Brief

Report No. Y021/11

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Trevemper Solar farm Crantock Cornwall

Archaeological Watching Brief

Report No. Y021/11

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SUMMARY

An archaeological watching brief was undertaken by CFA Archaeology Ltd during groundbreaking works associated with the construction of a solar farm at Trevemper, near Crantock, Cornwall. Construction was monitored to ensure that significant archaeological remains were not disturbed.

Two historic field boundaries were recorded and finds recovered from the surface consisted of modern pottery and glass and medieval, post-medieval pottery and a piece of worked flint of unknown but likely prehistoric date.

1. INTRODUCTION

1.1 General

This report presents the results of an archaeological watching brief undertaken by CFA Archaeology Ltd (CFA) during July and August 2011 on trenching for cabling routes and other construction, for a solar farm near Trevemper, Cornwall. The work was commissioned by NextPower Trevemper Ltd.

The development included the installation of PV panels and associated supporting structures, cabling, inverters, transformers and grid equipment housing, along with access tracks, fencing, gates and CCTV.

All work was undertaken in accordance with a written scheme of investigation (WSI) produced by CFA (2011). The WSI was a response to a brief prepared by the Historic Environment Planning Advice Officer (HEPAO), Dan Ratcliffe, (2011).

Appendices 1 and 2 consist of a context summary table and a list of all photographs taken during the project, Appendix 1 consists of the project brief and Appendix 2 the Written Scheme of Investigation (WSI). Plates and figures are bound into the rear of this report. CFA's code and unique number for the project is TREV/2014

1.2 Site Location and Description

The development area is centred at NGR SW 8112 5992 (Fig. 1), to the north of Crantock and to the south of the Gannel Estuary. Its use immediately prior to the development was as agricultural land.

1.3 Archaeological and Historic Background

The site lies within the landscape setting of Treringey Iron Age/Romano-British Round, a Scheduled Monument (SM CO399), within an area defined as of 'very high archaeological potential' (Ratcliffe, 2011, Appendix 3). Geophysical survey has shown archaeological features across the area characteristic of the Bronze Age (2500BC-800BC) onwards (Fig. 2).

1.4 Previous Archaeological work

Previous archaeological work on the site consisted of an archaeological assessment (Sharpe and Sturgess 2011) and a geophysical survey (magnetometer) which indicated the site had a high archaeological potential (Fig. 2).

Geophysical Survey

Archaeological features were recorded across the survey area showing human activity from the late Neolithic period onwards. Likely archaeological remains included a cluster of large circular pits 5-6m in diameter in the north-western part of the site, similar in form to sunken floor buildings known from nearby sites in the area and dating to the late Neolithic to Middle Bronze Age. A large Bronze-Age barrow was also recorded along with at least two phases of a later prehistoric field system associated with open-settlement features (e.g. 'roundhouse' ditches) and a well-developed medieval field pattern (Fig. 2).

1.5 Objectives

The general objectives were to establish the presence or absence of archaeological remains; assess their character, interpret them in terms of their significance and; produce a report on the results.

In accordance with the brief (Ratcliffe 2011) the project specific objectives were to:

- Establish the presence / absence of archaeological remains;
- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered;
- Establish the nature of the activity on the site;
- Identify any artefacts relating to the occupation or use of the site, and;
- Advance the understanding of the site from any archaeological remains encountered

2. WORKING METHODS

The removal of soil deposits was carried out using 360° tracked excavators equipped with smooth-bladed ditching buckets under constant archaeological monitoring. All further excavation required to fulfil the terms of the brief were carried out by hand.

Groundbreaking works consisted of two phases. The groundworks observed in the first phase comprised the excavation of trenches for high-voltage cabling across five fields with a total length of approximately 600m. The trenches were 0.6m wide and 1.2m deep. A trench for an earth cable was cut, approximately 200m long, 0.6m wide and 0.8m deep, and a trench for the base of a transformer / substation was 3m by 4m and 1.5m deep. Trenches approximately 80m long 0.8m wide and 0.8m deep for cabling were excavated in the eastern field.

The groundworks observed in the second phase comprised; in the eastern field, 3 trenches for cabling 0.6m wide, 0.7m deep totalling 260m, with 25 short $(1 - 1.5 \text{ m} \log)$ trenches perpendicular to them; two trenches for high-voltage cabling 0.6m wide, 1.2m deep totalling 200m in length, and a trench 6m x 7m x 0.9m deep for a substation base, and; in the western field 13 trenches were excavated for cabling 0.6m wide, 0.8m deep totalling 360m (with 96 x 1 - 1.5m long perpendicular trenches). Four trenches were excavated to locate a water pipe, 0.6m wide, 0.9m - 1.5m deep totalling 20m, and 1 trench for a substation $3.1m \times 2.2m \times 0.45m$ in depth. An archaeologist was present during all intrusive groundworks.

All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, by photography and by completing standard CFA record forms.

2.4 Standards and Guidance

CFA Archaeology is a registered organisation (RO) with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1994, 2001), English Heritage guidance (EH 2002, 2005, 2006, 2008a, 2008b and 2008c), and CFA's standard methodology.

2.5 Monitoring

The project was monitored by Dan Ratcliffe (HEPAO), who was informed in advance of the works taking place and was kept updated throughout.

2.6 Archiving

The project archive, comprising all CFA record sheets, finds, plans and reports, will be deposited with Royal Cornwall Museum according to an agreed timescale, will be ordered according to current guidelines and to nationally recognised standards (UKIC 1990, 2001, MGC 1994, SMA 1995, Ferguson and Murray 1997 and Brown 2007).

3. **RESULTS**

In some cases trenches were predicted to intersect features identified by the geophysical survey and an attempt was made to identify archaeological remains. The east to west running field boundaries identified on the survey and shown on the first edition Ordnance Survey map (1880) (Sharpe & Sturgess, 2011), were not observed at any point during the works, even though at least two of the cabling trenches running north to south intersected them. Other features identified as Iron Age / Romano-British field systems were also not observed at any point below the modern ground level.

3.1 Archaeological Features

A v-shaped ditch 0.55m wide and 0.3m deep (003) was observed running east to west in the south-eastern area of the eastern field. Its location and description matched the cultivation furrows indicated on the geophysical survey and it is therefore interpreted as such.

In accordance with evidence from the archaeological assessment (Sharpe & Sturgess 2011), two historic field boundaries, the north to south boundary that divides eastern and western fields (014) and the east to west boundary that forms the southern edge of the western field (015), were recorded where they were disturbed by the works. Only in the western edge of the north to south boundary were the remains of a rubble wall identified (016).

Finds recovered through visual scanning of the surface of the fields during the works included fragments of modern pottery and glass, post-medieval and medieval pottery from both fields, and one piece of worked flint from the western field indicating prehistoric activity.

3.4 Finds assessment

A small amount of modern pottery, glass and ceramic building material was noted as unstratified surface finds. These have been recorded but not retained within the archive, the finds assessed below will be incorporated into the project archive.

Pottery by John Allan, (Exeter Archaeology)

A single medieval fragment and seven post-medieval sherds were recovered; all were unstratified. The medieval piece is of the same type as material from Tintagel, now known to come from kilns at Lostwithiel. As is usual in North Cornwall, all the postmedieval sherds were imported into the site from the major kilns of North Devon, which were easily accessible by sea. Unless further work is carried out on the site the collection has no further research potential.

| Context | Fabric | No Sherds | Comments |
|-----------------|-----------------------------|--------------|---|
| 105 | Lostwithiel-type, medieval | 1 | Thin, unglazed, oxidised, probably hand-made, 13-14C. |
| | North Devon gravel-tempered | 2 | 1 sooted basal sherd, 1 orange-glazed, 18-19C |
| Field 3, 101 | North Devon gravel-free | 1 | Jug with incised diagonal line, 16-E17C |
| | Tile, 19C | 1 | |
| u/s | North Devon gravel-tempered | 3 | Jar sherd, 16-E17C; bowl rim, Type 1A, L16-18C; sooted base, post-medieval. |

Table 1: Summary of Pottery

Flint

by Martin Lightfoot (CFA Archaeology)

A single unstratified flint was recovered and submitted for assessment. It was small and highly-corticated flake, partially re-touched along one edge probably utilised as a scraper, though undiagnostic it is of probable prehistoric date. In isolation and unstratified it has no further research potential, though does support the evidence for prehistoric activity having occurred on or near the site.

4. CONCLUSIONS

Despite the archaeological importance of the area (see background above) the watching brief observed no significant archaeological remains within the area of the groundbreaking works. Even where features identified by geophysical survey were cut by trenches, no evidence for them was observed, except for the presence of a furrow in the southern half of the eastern field. Extra care was taken in areas where remains were predicted but no stratified finds were encountered, though stray finds of medieval and post-medieval pottery and a possible prehistoric flint may indicate activity on or near the site relating to these periods.

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APPENDIX 1: Context Register

| Context no. | Site | Description | |
|-------------|-------------------|---|--|
| 001 | Fields 1, 2, & 3 | Topsoil; mid brown sand | |
| 002 | Fields 4 & 5 | Topsoil; mid – dark brown sand | |
| 003 | Field 1 | Cut of feature | |
| 004 | Field 1, 2, & 3 | Light grey / yellow clay natural | |
| 005 | Fields 4 & 5 | Subsoil; dark brown sand | |
| 006 | All fields | Shale deposits | |
| 007 | All fields | Slate deposits | |
| 008 | East field | Topsoil; mid brown silty sand | |
| 009 | East field | Subsoil; mid reddish brown silty sand | |
| 010 | East field | Natural; mid greenish yellow clay with shale inclusions | |
| 011 | West field | Topsoil; mid brown silty sand | |
| 012 | West field | Subsoil; mid reddish brown silty sand | |
| 013 | West field | Natural; mid greenish yellow clay with shale inclusions | |
| 014 | East / west field | Fill of hedge bank field boundary; mid brown silty sand | |
| 015 | West field | Fill of hedge bank field boundary; mid brow silty sand | |
| 016 | East/west field | Shale stone blocks forming stone wall in hedge bank (014) | |

| Shot | Description | From | Conditions |
|---------|---|------------|------------|
| 1 - 2 | Transformer pit | | Sunny |
| 3 - 16 | High voltage cable trench | | Sunny |
| 17 - 21 | Re-cut of transformer pit | | Sunny |
| 22 - 26 | Mid array cable trench | | Sunny |
| 27 - 36 | High voltage cable trench | | |
| 37 - 41 | Array - transformer trench | | |
| 42 | Possible v - shaped ditch in A - T trench | | |
| 43 - 46 | Array - transformer trench | | |
| 47 - 49 | Earth cable trench | | |
| 50 - 57 | High voltage cable trench | | |
| 58 - 64 | General site shots | | |
| 65 | General site shot (east field) | North | Overcast |
| 66 | General site shot (east field) | East | Overcast |
| 67 | Working shot of excavation of trench 4 (east field) | North-east | Overcast |
| 68 | Shot of east facing section in trench 4 (east field) | East | Sunny |
| 69 | General shot of trench 4 (east field) | South-west | Sunny |
| 70 | Shot of west facing section in trench 4 (east field) | East | Sunny |
| 71 | View of trench 4 - unfinished (east field) | South | Sunny |
| 72 | View of trench 4 - unfinished (east field) | East | Sunny |
| 73 | View of trench 4 - finished (east field) | East | Sunny |
| 74 | View of trench 4 - finished (east field) | South | Sunny |
| 75 | Shot of trench 1 (east field) | North | Sunny |
| 76 | Working shot of trench 1 (east field) | South-west | Sunny |
| 77 | Shot of section through north-south hedge bank (east field) | West | Overcast |
| 78 | Shot of trench 1 (east field) | North | Overcast |
| 79 | Water flowing from ditch (east field) | North | Sunny |
| 80 | Water in road (east field) | West | Sunny |
| 81 | Broken pipe (east field) | North | Overcast |
| 82 | Broken pipe (east field) | North | Overcast |
| 83 | Shot of slot next to trench 1 (east field) | East | Overcast |
| 84 | Shot of slot next to trench 1 (east field) | East | Overcast |
| 85 | Shot of slot next to trench 1 (east field) | East | Overcast |
| 86 | Shot of slot next to trench 1 (east field) | East | Overcast |
| 87 | Shot of trench 2 (east field) | North | Overcast |
| 88 | Shot of trench 2 (east field) | South | Overcast |
| 89 | Shot of trench 2 (east field) | North | Sunny |
| 90 | Shot of section in trench 1 where field boundary should be (east field) | West | Overcast |
| 91 | Shot of trench 1 (east field) | North | Sunny |
| 92 | | South | Overcast |
| 93 | Shot of trench 1 (east field) | North | Overcast |
| 94 | Shot of section in trench 1 where field boundary should be (east field) | West | Overcast |
| 95 | Shot of trench 1 (east field) | South | Overcast |
| 96 | Shot of trench 1 (east field) | North | Overcast |
| 97 | Shot of trench 1 (east field) | South | Overcast |
| 98 | Shot of trench 3 (east field) | East | Overcast |
| 99 | Shot of trench 1 (east field) | North | Overcast |
| 100 | Shot of trench 1 (east field) | South | Sunny |
| 100 | Shot of slot through north - south hedge bank | West | Sunny |
| 101 | Shot of slot through north - south hedge bank | West | Sunny |
| 102 | Shot of slot through north - south hedge bank | West | Sunny |
| 103 | Shot of trench 1 (east field) | North | Sunny |

APPENDIX 2: Photographic Register

| Shot | Description | From | Conditions |
|------|--|------------|------------|
| 105 | Shot of trench 1 (east field) | South | Sunny |
| 106 | Shot of trench 3 (east field) | East | Sunny |
| 107 | Shot of trench 3 (east field) | West | Sunny |
| 108 | Shot of trench 3 - backfilled (east field) | West | Sunny |
| 109 | Shot of slot - looking for water pipe | North | Sunny |
| 110 | Shot of slot - looking for water pipe | North | Sunny |
| 111 | Shot of trench 1 (east field) | South-east | Overcast |
| 112 | Shot of trench 1 - looking for water pipe (west field) | South | Overcast |
| 113 | Shot of trench 1 - looking for water pipe (west field) | North | Sunny |
| 114 | Shot of trench 2 - looking for water pipe (west field) | South | Overcast |
| 115 | Shot of trench 3 - looking for water pipe (west field) | South | Overcast |
| 116 | Shot of cable trench (east field) | North-west | Sunny |
| 117 | Shot of substation's concrete base (east field) | South | Overcast |
| 118 | Shot of trench 5 (east field) | West | Overcast |
| 119 | Shot of trench 5 (east field) | East | Overcast |
| 120 | Shot of trench 6 (east field) | West | Overcast |
| 120 | Overview of trenches 5 and 6 (east field) | West | Overcast |
| 121 | Shot of trench 6 (east field) | East | Overcast |
| 122 | Shot of trench 5 (east field) | North | Overcast |
| 123 | Shot of trench 5 (east field) | South | |
| | | | Overcast |
| 125 | Shot of trench 4 - looking for water pipe (west field) | South-west | Overcast |
| 126 | Shot of trench 5 (west field) | West | Sunny |
| 127 | Shot of trench 5 (west field) | East | Sunny |
| 128 | Shot of trench 5 (west field) | North | Overcast |
| 129 | Shot of trench 5 (west field) | South | Overcast |
| 130 | General site shot (west field) | East | Overcast |
| 131 | Shot of trench 6 (west field) | West | Overcast |
| 132 | Shot of trench 6 (west field) | South | Sunny |
| 133 | Shot of trench 7 (west field) | West | Sunny |
| 134 | Shot of trench 7 (west field) | East | Sunny |
| 135 | Shot of trench 8 (west field) | South | Overcast |
| 136 | Shot of trench 8 (west field) | North | Overcast |
| 137 | Close up of water pipe | North | Overcast |
| 138 | Shot of trench 9 (west field) | North | Sunny |
| 139 | Shot of trench 9 (west field) | South | Sunny |
| 140 | Shot of trench 10 (west field) | East | Sunny |
| 141 | Shot of trench 10 (west field) | West | Sunny |
| 142 | Shot of trench 11 (west field) | North | Sunny |
| 143 | Shot of trench 11 (west field) | South | Sunny |
| 144 | Shot of trench 12 (west field) | East | Sunny |
| 145 | Shot of trench 12 (west field) | West | Sunny |
| 146 | Shot of trench 7 (east field) | South | Sunny |
| 147 | Shot of trench 7 with spurs (west field) | South-west | Overcast |
| 148 | Shot of trench 13 (west field) | East | Overcast |
| 149 | Shot of trench 13 (west field) | South | Overcast |
| 150 | Shot of trench 13 and slot through hedge bank (west | East | Overcast |
| 100 | field) | Lust | S vereast |
| 151 | Shot of trench 14 (west field) | South | Overcast |
| 151 | Shot of trench 14 (west field) | North | Overcast |
| 152 | Shot of trench 15 (west field) | North | Overcast |
| 155 | | | |
| | Shot of trench 15 (west field) | South | Overcast |
| 155 | Shot of trench 16 (west field) | South | Sunny |
| 156 | Shot of trench 16 (west field) | North | Sunny |
| 157 | Shot of trench 17 (west field) | South | Sunny |
| 158 | Shot of trench 17 (west field) | North | Sunny |
| 159 | Shot of trench 12 (west field) | South | Sunny |
| 160 | Shot of trench 12 (west field) | North | Sunny |

| Shot | Description | From | Conditions |
|------|--|------------|------------|
| 161 | General site shot (west field) | North-east | Sunny |
| 162 | General site shot (west field) | North-west | Sunny |
| 163 | Shot of slot in trench 13 (west field) | West | Sunny |
| 164 | Shot of section through east - west hedge bank (west | East | Sunny |
| | field) | | |
| 165 | Shot of trench 18 (west field) | North | Sunny |
| 166 | Shot of trench 18 (west field) | South | Sunny |
| 167 | Shot of extension to trench 7 (west field) | East | Sunny |

APPENDIX 3: Brief for Archaeological Recording

BRIEF FOR ARCHAEOLOGICAL RECORDING

Date:06/05/2011Address:Trevemper Solar Farm, Crantock, CornwallApplicant:TGC EuropeAgent:Contemporation

Historic Environment Planning Advice Officer: Dan Ratcliffe, Cornwall Council, Historic Environment Service, Kennall Building, Old County Hall, Truro TR1 3AY. Tel. 01872 E-mail. Dratcliffe@cornwall.gov.uk

Local Planning Authority Officer: Dan Mitchell

This brief is only valid for six months. After this period the Historic Environment Planning Advice Officer (HEPAO) should be contacted. Any written scheme of investigation (WSI) resulting from this brief shall only be considered for the same period. The contractor is strongly advised to visit the site before completing their WSI as there may be implications for accurately costing the project.

Contractors Written Scheme of Investigation (WSI)

No ground works are to be undertaken until the HEPAO and the Local Planning Authority (LPA) have approved the archaeological contractor's WSI.

1 Introduction

This brief has been written by the HEPAO and sets out the minimum requirements for archaeological recording at the above photo-voltaic development. This work is required to discharge condition 16 of planning application PA11/00374 placed on the development.

2 Site Location and Description

This site is located at SW 8112 5992 to the north of Crantock and to the south of the Gannel Estuary. It is currently in use as agricultural enclosures.

3 Planning Background

Planning application PA11/00374 was submitted on the 20th of Jan, 2011 and was for the "the development of a solar photovoltaic farm on existing agricultural land. Planning permission is sought for the installation of PV panels and associated supporting structures. Cabling, inverters, transformers and grid equipment housing along with associated access tracks, fencing, access gates and CCTV". This application has been approved subject to a number of conditions. Condition 16 states:

No development shall take place within the site until the applicant has secured a programme of archaeological recording work in accordance with a written scheme of investigation to be submitted by the applicant and approved in writing by the LPA. Once agreed the written scheme of investigation shall be implemented in full.

The applicant, their agents and any subcontractors should note that where there are other conditions requiring satisfaction in advance of the

commencement of works on site; it is the responsibility of the applicant to liaise with the planning officer concerned to ensure that the timetabling of these works is managed .

4 Archaeological Background

This site which lies in the immediate landscape setting of a Scheduled Treringey Round has been geophysically surveyed on behalf of the developers and at the request of the Historic Environment Service during the process of determination of the application. Although at the time of determination deliberations only an initial interpretation of the results was available we have advised that the remains indicate land with a very high archaeological potential. Archaeological features are shown across the survey area and are indicative of features from the Bronze Age (2500BC-800BC) onwards. These include a cluster of large circular pits 5-6m diameter in the north western part of the site, similar in form to sunken floor buildings known from nearby sites in the area and dating to the late Neolithic to Middle Bronze Age, at least two phases of later prehistoric field system associated with putative open settlement features (circular 'roundhouse' ditches) and a clearer well developed medieval field pattern. The feature marked as '7' on the survey may represent a large funerary monument or 'barrow' of the Bronze Age.

To summarise these features add up to a complex multi period archaeological landscape, parts of which – particularly the settlement, barrow and other discrete features such as pits – would be particularly sensitive to even slight ground impacts from piling or cable laying. Their significance as a group, particularly in close geographical location with the Scheduled site to the north, should be seen as certainly in excess of local significance and certainly of regional or greater significance should an opportunity for further research arise.

5 Requirement for Work

HES has secured prior approval of foundation and ground impact locations and designs across the site under a separate condition and is working with the applicant to develop a scheme for preservation in situ of key areas however there is still a potential for ground disturbance in other areas to disturb buried archaeological remains. It is therefore important that a suitably qualified archaeologist(s) is/are present during these works in order to identify and record any features of interest.

The site specific aims are to:

- Establish the presence/absence of archaeological remains
- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered
- To establish the nature of the activity on the site
- To identify any artefacts relating to the occupation or use of the site
- To advance understanding on the archaeology of the site from any archaeological remains encountered and through comparative analysis and dissemination of the results of both the geophysical survey and watching brief results.

6 General Methodology

- 6.1 All stages of the investigation shall be supported by a written scheme of investigation (WSI).
- 6.2 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA).
- 6.3 Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.
- 6.4 All of the latest Health and Safety guidelines shall be followed on site.
- 6.5 The IfA's Standards and Guidance should be used for additional guidance in the production of the WSI, the content of the report and the general execution of the project.
- 6.6 Terminology will be consistent with the English Heritage Thesaurus.

7 Archaeological Recording Methodology

- 7.1 Prior to the commencement of on site works the archaeological contractor should familiarise themselves with the site by examining the information held by the Cornwall and Scilly Historic Environment record (HER), the Cornwall Records Office at Truro and the Cornwall Centre at Redruth, where appropriate.
- 7.2 The general methodology shall follow that outlines in the IfA's relevant Standard and Guidance for an Archaeological Watching Brief (1994 & 2008).
- 7.3 Any surviving remains which will be disturbed or destroyed by the development shall be archaeologically excavated and recorded.
- 7.4 Details of how all archaeological contexts and artefacts will be excavated, surveyed, recovered and recorded shall be provided. The site will be tied into the national grid.
- 7.5 Details of the site planning policy shall be given in the WSI. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections 1:10, unless circumstances indicate that other scales would be more appropriate.
- 7.6 The photographic record shall consist of prints in both black and white and colour together with the negatives. Digital photography may be used for report illustration. For both general and specific photographs, a photographic scale shall be included. In the case of detailed photographs it may be appropriate to include a north arrow. The photographic record shall be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.

7.7 If significant archaeological deposits are exposed, all works must cease and a meeting convened with the client and the HEPAO to discuss the most appropriate way forwards.

8 Finds

- 8.1 All finds, where appropriate, will be retained from each archaeological context excavated.
- 8.2 All finds, where appropriate, shall be washed.
- 8.3 All pottery, and other finds, where appropriate, shall be marked with the site code and context number.
- 8.4 The WSI shall include an agreed list of specialist consultants, who may be required to conserve and/or report on finds, and advise or report on other aspects of the work including environmental sampling.
- 8.5 The requirements for conservation and storage shall be agreed with the Royal Cornwall Museum prior to the start of work, and confirmed in writing to the HEPAO.
- 8.6 Finds work should be to accepted professional standards and adhere to the Institute for Archaeologists *Guidelines for Finds Work*.
- 8.7 Environmental sampling should be guided by *Environmental Archaeology* (English Heritage Centre for Archaeological Guidelines. 2001/02).
- 8.8 Further English Heritage guidance that may be helpful includes *Geoarchaeology* (2004) and *Archaeometallurgy* (2001).
- 8.9 The English Heritage Advisor for Archaeological Science will be able to provide archaeological science advice if required (Vanessa Straker 0117 975 0689).

9 Human Remains

- 9.1 Any human remains which are encountered must initially be left in situ and reported to the HEPAO and the appropriate authorities (the Coroner), where appropriate. If removal is necessary this must comply with the relevant Government regulations. If burials are encountered their legal status must be ascertained and recording and/or removal must comply with the legal guidelines.
- 9.2 If human remains are not to be removed their physical security must be ensured, preferably by back filling as soon as possible after recording.
- 9.3 If human remains are to be removed this must be done with due reverence and in accordance to current best practice and legal requirements. The site must be adequately screened from public view. Once excavated, human remains must not be exposed to public view.

10 Results

- 10.1 The full report including all specialist assessments of artefact assemblages shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the archaeological contractor, Cornwall County Council Historic Environment Service and the Royal Cornwall Museum. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.
- 10.2 The archaeological contractor will undertake the English Heritage/ADS online access to the index of archaeological investigations (OASIS).
- 10.3 This report will be held by the Cornwall and Scilly Historic Environment Record (HER) and made available for public consultation.
- 10.4 The report must contain:
 - A concise non-technical summary of the project results.
 - The aims and methods adopted in the course of the investigation.
 - A discussion of the archaeological findings in terms of both the site specific aims, the desk based research, and comparable sites.
 - A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.
 - All specialist reports and assessments.
 - A summary of the archive contents and date of deposition.
 - A context register with brief descriptions shall be included as an appendix.
 - A copy of the brief and the approved WSI will be included as an appendix.
- 10.5 The WSI shall contain proposals for the publication of a summary of the results in a note in *Cornish Archaeology* or a similar publication and for the production of an appropriate press release for general publication.

11 Archive Deposition

- 11.1 An ordered and integrated site archive will be prepared in accordance with: *Management of Research Projects in the Historic Environment (MoRPHE) English Heritage 2006* upon completion of the project. The requirements for archive storage shall be agreed with the Royal Cornwall Museum.
- 11.2 If the finds are to remain with the landowner a full copy of the documentary archive shall be housed with the Cornwall County Record Office and with the Courtney Library of the Royal Institution of Cornwall.
- 11.3 The archive including a copy of the written report shall be deposited with the Royal Cornwall Museum within two months of the completion of the full report and confirmed in writing with the HEPAO.
- 11.4 Where there is only a documentary archive this will be deposited with the Cornwall Record Office as well as the Courtney Library of the Royal Institution of Cornwall.
- 11.5 A copy of the report will be supplied to the National Monuments Record (NMR) in Swindon.
- 11.6 A summary of the contents of the archive shall be supplied to the HEPAO.

11.7 Only on completion of 11.1 to 11.5 (inclusive) will there be a recommendation for the discharge of any archaeological recording condition.

12 Monitoring

- 12.1 The HEPAO will monitor the work and should be kept regularly informed of progress.
- 12.2 Notification of the start of work shall be given preferably in writing to the HEPAO at least one week in advance of its commencement.
- 12.3 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.

APPENDIX 4: Written Scheme of Investigation for a Watching Brief

CFA Archaeology Ltd

Trevemper Solar Farm, Crantock, Cornwall

(Ref PA11/00374)

Written Scheme of Investigation

16 May 2010

1. Background

This Written Scheme of Investigation (WSI) has been produced by CFA Archaeology Ltd for The Green Company (Europe) Limited, to detail the programme of archaeological works to be undertaken in order that condition 16 of the planning consent (PA11/00374) may be discharged.

The WSI is a response to a brief for archaeological work during the construction of a Solar Farm at Trevemper, Crantock, Cornwall, prepared by the Historic Environment Planning Advice Officer (HEPAO) Daniel Ratcliffe Cornwall Council, Historic Environment Service.

This WSI provides the detailed method statement for an archaeological watching brief. If features of archaeological significance are found then further archaeological work in mitigation may be required.

2. Development Background

A planning application has been approved for the development of a solar farm on agricultural land at grid reference SW 8112 5992 to the north of Crantock Cornwall. The development includes the installation of PV panels and associated supporting structures, cabling, inverters, transformers and grid equipment housing along with access tracks, fencing, gates and CCTV. The is subject to a number of conditions including Condition 16 which specifies that a written scheme of investigation be agreed in advance of development works.

3. Historical and Archaeological Background

This site lies within the landscape setting of Treringey Round, a Scheduled monument. The site has been subjected to a geophysical survey indicating the area is of high archaeological potential, with archaeological features indicating activity from the Late Neolithic period onwards. Identified probable archaeological remains include a cluster of large circular pits 5-6m diameter in the north western part of the site, similar in form to sunken floor buildings known from nearby sites in the area and dating to the late Neolithic to Middle Bronze Age; at least two phases of later prehistoric field systems, ring ditches and a well developed medieval field pattern, remains collectively of potential regional of greater significance (Ratcliffe 2011).

4. **Project Objectives**

Despite the generally low impact of the development there is still the potential for the disturbance of buried archaeological remains.

In accordance with the brief (Ratcliffe 2011) the project objectives are to:

- establish the presence/absence of archaeological remains;
- determine the extent, condition, nature, character, date and significance of any archaeological remains encountered;
- establish the nature of the activity on the site;
- identify any artefacts relating to the occupation or use of the site, and;
- advance the understanding of the site from any archaeological remains encountered and through comparative analysis and dissemination of the results of both the geophysical survey and watching brief.

5. Methods Statement

CFA Archaeology is a registered organisation with the Institute for Archaeologists. Work will be conducted with regard to the Institute's Standards documents (IfA 1994), English Heritage guidance documents (EH 2005, 2006, 2008a and 2008b), the brief (Ratcliffe 2011) and this WSI. Recording of all elements will be done following established CFA procedures.

We provide the following code of practice to allow the watching brief to be conducted as efficiently as possible and to allow monitoring by the HEPAO.

To enable proper monitoring, the client will ensure that CFA are timorously informed of the work programme.

If, during the course of work, any isolated features of potential archaeological interest are located, the archaeologist will excavate and record them to an appropriate level.

If archaeological remains, groups of features, or artefacts are identified which appear to be extensive or archaeologically significant, the client, the HEPAO and the contractor will be informed immediately, and excavation work will be suspended in the affected area until a strategy has been agreed for avoidance or further excavation and recording in accordance with Planning Policy Statement 5.

Archaeological recording will be undertaken by means of standard recording sheets, drawings and photographs. Site plans will be located on development plans supplied by the client. Archaeological sections will normally be drawn at 1:10 and plans at 1:20 or at an appropriate scale.

Significant archaeological remains will be photographed in black and white and colour supplemented by digital photography. Photographs will include an appropriate scale and where necessary a north arrow. All photographs will be recorded on a photographic register detailing subject, location and direction of shot. The English Heritage Advisor for Archaeological Science will be consulted, and be invited to make a site visit if necessary. Any human remains encountered will be reported to the HEPAO and appropriate authorities and left *in situ*. If removal is necessary this will comply with the relevant Government regulations and guidance.

6 Analysis and reporting

The full report including all specialist assessments of artefact assemblages shall be completed within an agreed timescale a digital copy of the report will be supplied in 'Adobe Acrobat' PDF format.

All finds, if appropriate, will be retained, washed and where appropriate, be marked with the site code and context number in accordance to accepted professional standards (IFA 2001).

A submission will be made to access to the index of archaeological investigations (OASIS).

In accordance with the brief (Ratcliffe 2011) the report will contain:

- a concise non-technical summary of the project results;
- the aims and methods of the project;
- a discussion of the archaeological findings in terms of both the site specific aims, any desk based research, and comparable sites;
- a location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid;
- all specialist reports and assessments;
- a summary of the archive contents and date of deposition;
- a context register with brief descriptions as an appendix, and;
- a copy of the brief and the approved WSI as an appendix.

Should there be significant results; a note will be supplied to *Cornish Archaeology* or a similar publication, appropriate press releases or outreach will be considered.

7 Archiving

The requirements for conservation and storage shall be agreed with the Royal Cornwall Museum prior to the start of work, and confirmed in writing to the HEPAO. The project archive, comprising all CFA record sheets, plans and reports, will be deposited. Appropriate conservation of finds will be conducted before disposal. The archive will be ordered, indexed and conform to the requirements of the depositing museum and to all relevant professional guidance (MGC 1994, SMA 1995, UKIC 1996 and 2001).

8 Monitoring

Close contact will be maintained with the client and the HEPAO for the purposes of managing the project. Important or unexpected discoveries will be communicated to the client and HEPAO as soon as is practicable. Contact numbers for the site will be forwarded in advance of the work starting. HEPAO will be provided with at least one weeks notice in advance of of the start of works. Any variation to this WSI shall be agreed with the HEPAO, prior to being carried out.

9. Project Personnel

Martin Lightfoot (BA MA MIfA) is a Regional Manager for CFA. Martin has project managed numerous archaeological projects of all periods throughout the country including those undertaken for large infrastructure projects (see cv).

The **Site Archaeologist** for CFA will be selected from CFA's pool of staff, all of whom have appropriate experience. If appointed, CVs for the appropriate staff can be forwarded prior to the start of the project.

CFA's **Graphic's Manager** is Kevin Hicks BA AAAI&S. Mr Hicks has a professional qualification in graphic design as well as archaeological experience dating from 1989, and has worked on research projects since 1992.

Post-excavation will be managed by CFAs post-excavation manager Sue Anderson; cvs for CFAs 'in house' specialists or external consultants can be supplied on request.

10 Health and Safety

All CFA staff have been inducted into CFA's Health and Safety Policy, which can be supplied on request.

11 References

Brown, DH, 2007, Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation, Institute of Field Archaeologists

EH 2005, *Management of Research Projects in the Historic Environment*, English Heritage

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EH, 2008a, Management of Research Projects in the Historic Environment: Archaeological Excavation, English Heritage PPN3

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IfA, 1994, *Standard and Guidance for an Archaeological Watching Brief*, (Revised 208), Institute for Archaeologists

IfA, 2001 Standard and Guidance for the collection, documentation, conservation and research of archaeological materials, (Revised 208), Institute for Archaeologists

Ferguson, L. M. and Murray, D. M., 1997, *Archaeological Documentary Archives: Preparation, Curation and Storage,* Paper 1, Institute for Archaeologists

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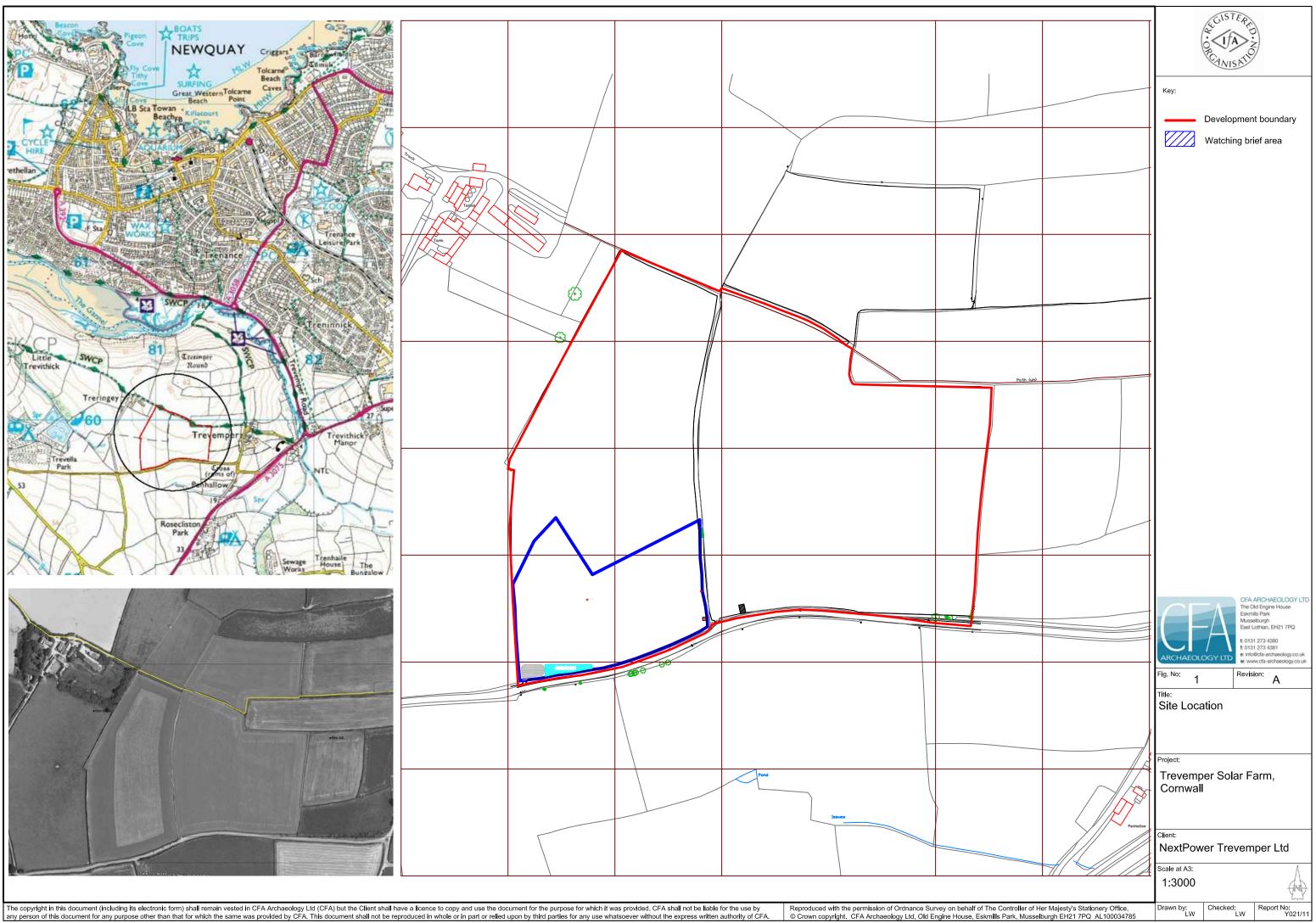
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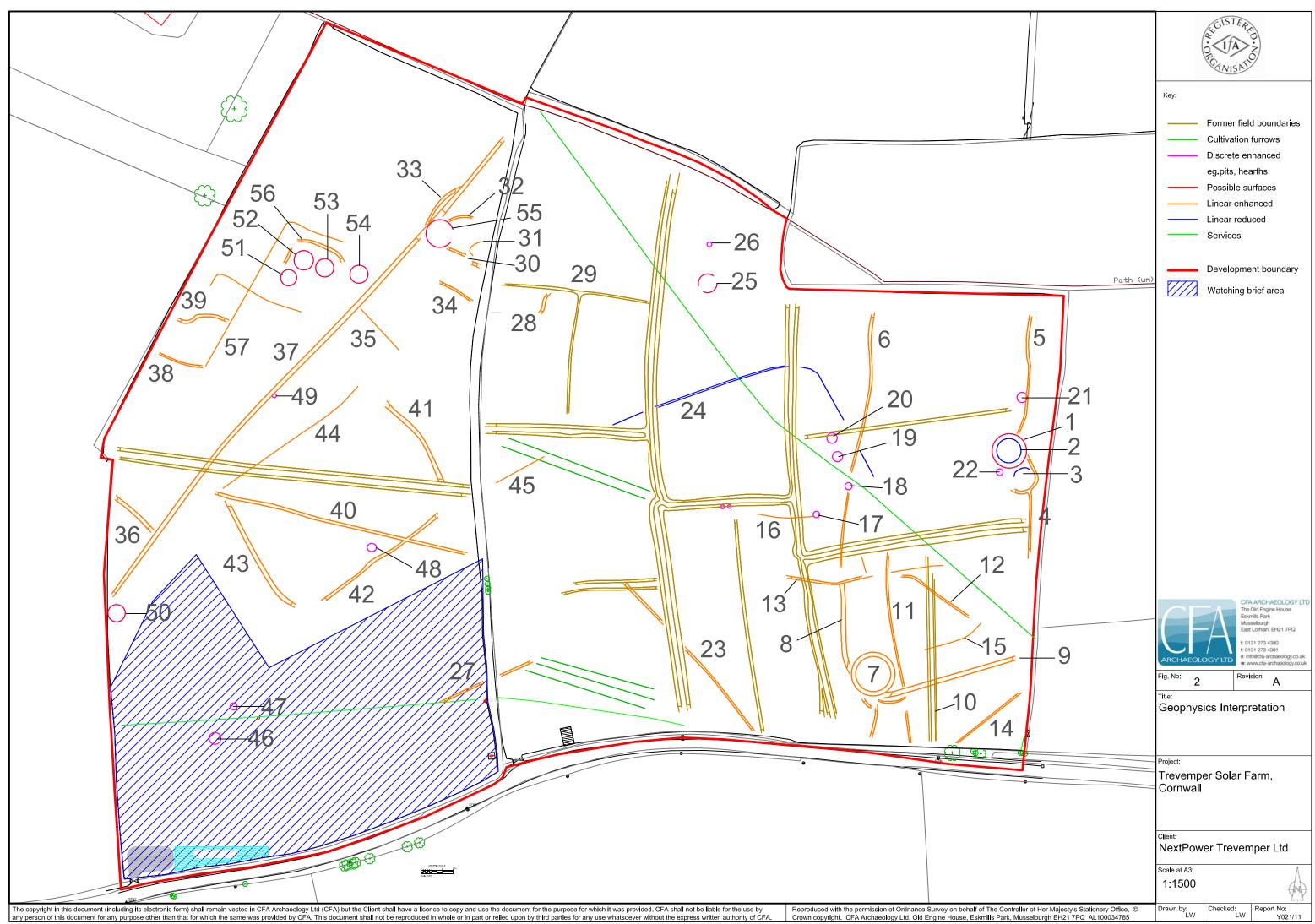
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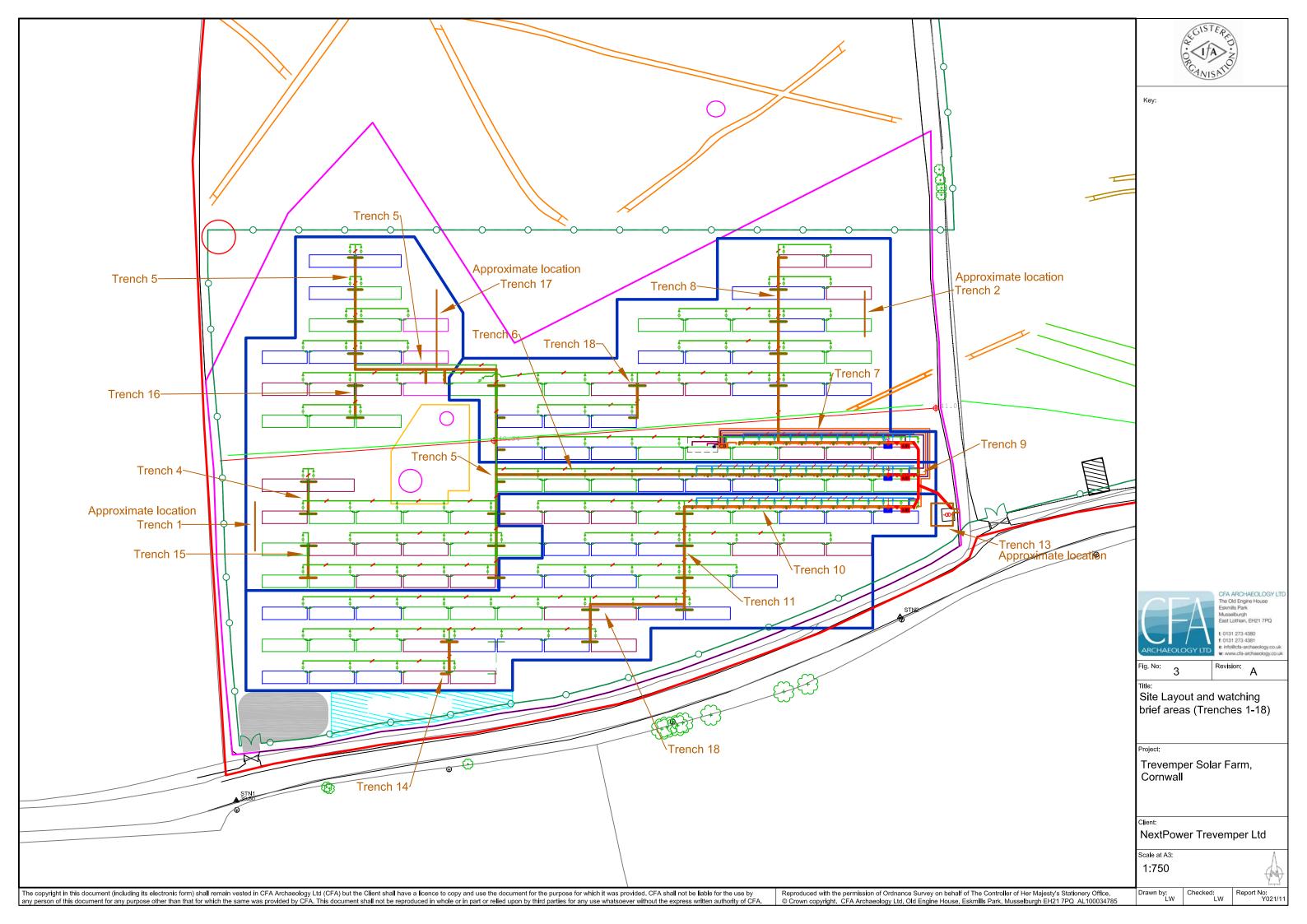
UKIC, 1990, *Guidelines for the Preparation of Excavation Archives for Long term Storage*, United Kingdom Institute for Conservation

UKIC, 2001, *Excavated Artefacts and Conservation*, United Kingdom Institute for Conservation, Guideline No. 1

Figures 1 – 3







Plates 1 – 5



Plate1: General Site View



Plate 2: View of Trench in Western Field



Plate 3: West-facing Section through Field Boundary



Plate 4: View of Trench and Slot through Field Boundary



Plate 5: View of v-shaped ditch section