

West Raynham Solar Park (Cable Run) Norfolk

Programme of Archaeological Mitigation Work

for Good Energy West Raynham Solar Park (030) Limited

> CA Project: 660295 CA Report: 14429

> > October 2014

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CA Project: 660295 CA Report: 14429

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SUMMARY

Project Name:	West Raynham Solar Park (Cable Run)		
Location:	Near West Raynham, Norfolk		
NGR:	Between TF 9042 2938 and TF 8529 2443		
Туре:	Archaeological strip, map and sample and archaeological watching		
	brief		
Date:	1 July–22 August 2014		
Planning Reference:	PF/14/0019		
Location of Archive:	To be deposited with the Norfolk Museum Service		
Site Code:	WRSP 14		
Norfolk HES Ref:	CNF45573		

In July–August 2014, Cotswold Archaeology carried out a programme of archaeological mitigation work during the installation of a new cable run for the proposed West Raynham Solar Park, Norfolk. The work comprised both a watching brief and a narrow strip, map and sample investigation along the line of the cable run.

Several archaeological features were recorded, the majority of which were ditches. Features were generally shallow with single fills only. Dating evidence was scarce, but a small number of features were Late Bronze Age to Roman in date. A limited number of medieval furrows were also recorded, and there were several post-medieval features, some of which related to the 17th-century Raynham Park.

The limited width of the stripped area meant that it was difficult to interpret the archaeological features and place them in their wider contexts. Features were generally scattered along the route, with few close relationships.

It is concluded that the landscape in the area of the cable run was exploited in the Late Bronze Age and Early Iron Age, but this exploitation was not intensive. There was also residual lithic evidence for earlier activity spanning the Mesolithic to the Bronze Age.

The cable run was tunnelled beneath a road preserving the line of a known Roman thoroughfare. No associated roadside ditches or structures were exposed. There was no evidence for a postulated second Roman road crossing the cable run, indicating either that this road does not exist, or it has been completely removed by later activity.

1. INTRODUCTION

- 1.1 In July and August 2014, Cotswold Archaeology (CA) carried out a programme of archaeological mitigation work during groundworks associated with the installation of a new cable run between the proposed sites of West Raynham Solar Park and an associated electricity substation (running between NGR: TF 9042 2938 and TF 8529 2443; Fig. 1). This work was commissioned by Good Energy West Raynham Solar Park (030) Limited.
- 1.2 Planning permission for the cable run was granted by North Norfolk District Council (NNDC; the local planning authority), conditional on a programme of archaeological work (planning ref: PF/14/0019). The scope of this programme of archaeological mitigation work was defined in a subsequent brief issued by James Albone, Planning Archaeologist, Norfolk County Council Historic Environment Service (NCCHES 2014), the archaeological advisor to NNDC.
- 1.3 The watching brief was carried out in accordance with a detailed written scheme of investigation (WSI) produced by CA (2014a) and approved by James Albone. The fieldwork also followed the *Standards for Field Archaeology in the East of England* (Gurney 2003), the *Standard and Guidance for an Archaeological Watching Brief* (IfA 2009), the *Management of Archaeological Projects 2* (English Heritage 1991) and the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (English Heritage 2006). It was monitored by James Albone, including site visits on 23 July and 6 August.

The site

1.4 The cable route runs on a broad south-west/north-east alignment and is approximately 8.5km in length. From south-west to north-east, the cable run crosses part of the former West Raynham Airfield, then passes through farmland and into the southern side of Raynham Park, where it runs parallel with the A1065. After leaving the park, the route then turns to the north-east, where it passes through more farmland before ending at the proposed site of a new electricity substation to the south of Shereford Road, west of Hempton. The cable run crosses gently sloping land, which lies between 40m and 65m aOD.

1.5 The underlying bedrock geology of the area is mapped as Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation, all of which are of the Cretaceous Period. The superficial deposits are recorded as Briton's Lane sands and gravels, alluvium and Lowestoft Formation diamicton (BGS 2014).

Archaeological background

- 1.6 The cable run has been the subject of a desk-based heritage statement (CA 2013). The following account is largely summarised from this document. See Fig. 1 for the locations of the major heritage assets discussed in this text.
- 1.7 The cable run crosses the line of a known Roman road leading northwards from the small Roman town at Toftrees. The line of this Roman thoroughfare is preserved by an extant road where it runs across the cable run. The cable run also crosses the postulated line of another Roman road running through Raynham Park, the existence of which is less certain.
- 1.8 The north-eastern terminus of the cable route is to the immediate south-west of the former site of St Andrew's Church, which was abandoned at the end of the medieval period. The church site is surrounded by numerous earthworks, thought to represent a medieval moat, tofts and a large pond. However, an archaeological evaluation of the proposed electricity substation site at the north-eastern terminus of the cable run (CA 2014b) uncovered no significant archaeological remains.
- 1.9 The central part of the cable route crosses through the Grade II-Registered Raynham Park (List entry number: 1001015) for approximately 2.5km of its length. The park was developed from the 17th century onwards. A hall within the park was originally built *c*. 1619–1637, replacing an earlier structure.
- 1.10 The western end of the cable route passes through part of Raynham Airfield, a WWII and Cold War-era airbase.

Archaeological objectives

1.11 As defined by the brief (NCCHES 2014), the objective of the archaeological work was to recover as much information as possible on the origins, date, development,

phasing, spatial organisation, character, function, status, significance and nature of past social, economic and industrial activities associated with heritage assets present along the proposed cable route.

- 1.12 The regional historic environment research framework is set out in Medlycott (2011). As the cable route crosses the likely lines of two Roman roads, near a deserted medieval settlement, through a 17th-century park and into a WWII/Cold War-era airbase, this project was considered to have the potential to contribute to the following regional research priorities:
 - research into Roman infrastructure, including the routes and forms of roads (p.48);
 - research into the origins and development of medieval rural settlements and small hamlets (p.70);
 - research into the development of post-medieval parks and gardens (p.79); and
 - research into post-medieval and modern defensive sites (p.80).

Methodology

- 1.13 The programme of archaeological mitigation work comprised two main fieldwork elements:
 - an archaeological watching brief maintained during topsoil/subsoil stripping works associated with the creation of a 9m-wide easement along the length of the cable run; and
 - an archaeological strip, map and sample investigation of a narrow corridor running along the length of the cable run. The width of this corridor was specified as being 1.8m in the brief (NCCHES 2014) and the WSI (CA 2014a), but in places this was reduced to 1.5m and 1.3m, with the approval of James Albone.

Archaeological watching brief

1.14 The watching brief comprised the archaeological monitoring of all topsoil/subsoil stripping works within the 9m-wide easement. These stripping works were carried out by mechanical excavators equipped with toothless buckets. The easement was

stripped to a general depth of 0.3m below the pre-development ground level (BGL), which meant that the geological substrate was not exposed.

Archaeological strip, map and sample investigation

1.15 After the 9m-wide easement had been established, the remaining topsoil and subsoil deposits were removed from a continuous 1.3m to 1.8m-wide trench running along the entire line of the cable run. Overburden deposits were removed under close and continuous archaeological supervision, using a mechanical excavator fitted with a toothless bucket. Stripping was halted when the geological substrate was exposed.

General

- 1.16 The cable run was tunnelled beneath any extant roads or structures which lay on its route.
- 1.17 Where archaeological deposits were encountered, written, graphic and photographic records were compiled in accordance with *CA Technical Manual 1: Fieldwork Recording Manual* (2013).
- 1.18 Deposits were assessed for their environmental potential and samples were collected and processed in accordance with CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites (2003).
- 1.19 The stripped areas and the generated spoil were subject to metal detecting in order to increase artefact retrieval.
- 1.20 The archive and artefacts from this project are currently held by CA at their offices in Milton Keynes. Subject to the agreement of the legal landowner, the archive and artefacts will be deposited with the Norfolk Museum Service. A summary of information from this project, as set out within Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain.

2. RESULTS

- 2.1 This section provides an overview of the archaeological fieldwork results. Detailed summaries of the recorded contexts, artefacts and environmental samples are to be found in Appendices A, B and C, respectively.
- 2.2 The archaeological works recorded several archaeological features, the majority of which were ditches. These features were generally scattered along the route, and there were few close relationships. Features tended to be shallow and generally contained single fills only. There was little in the way of material culture, although artefacts dating from the Bronze Age to the Iron Age were recovered, as well as some residual lithics from the earlier prehistoric era.

General stratigraphy/geological

- 2.3 The geological substrate generally comprised chalky clay in the south-western part of the cable run (from West Raynham Airfield to Raynham Park), with the geological substrate in the remainder of the cable run comprising orange-brown sandy gravel. The depth of the geological substrate BGL generally increased as the cable run moved north-eastwards, from an average of 0.32m BGL in the area of West Raynham Airfield, to 0.52m BGL at Raynham Park, to 0.7m BGL at the cable run's north-eastern limit near Hempton.
- 2.4 To the north-east of Raynham Park, the geological substrate was sealed by two silty clay subsoil layers (101 and 180) with a combined thickness of 0.4m–0.55m. Within Raynham Park, the subsoil (166) comprised yellowish-red gravelly sand with an average thickness of 0.36m. In the remainder of the cable run, there was a single layer of silty clay subsoil (101; 0.1m–0.28m thick). The sequence was sealed along the cable run by the topsoil, which was 0.24m–0.36m thick.

Late Bronze Age/Early Iron Age (1100-400 BC)

2.5 Three shallow ditches (two of which were intercutting) lay to the east of West Raynham Airfield, in agricultural land adjacent to Barn Close and Wicks's Wood (Fig. 3). Two of these ditches were undated, but north-west/south-east-aligned ditch 144 contained Late Bronze Age/Early Iron Age pottery. This ditch was 4.98m wide and 0.28m deep. It had been re-cut on the same alignment by ditch 142, which was

5.21m wide and 0.18m deep. Ditch 146 was exposed some 16m north-east of ditch 144 and shared its north-west/south-east alignment, which might indicate that these features were contemporary. Ditch 146 was 1.52m wide and 0.33m deep.

- 2.6 Shallow pit 151 (Fig. 4) lay to the north of South Raynham, to the immediate east of West Raynham Road and to the immediate south of Top Coppice. This pit was 0.58m–0.67m in diameter and 0.14m in depth. It contained sherds of Late Bronze Age/Early Iron Age pottery and a large quantity of flint, some of which had been worked. Much of the flint (both worked and unworked) had been burnt, and the pit contained a small amount of charcoal. Where the flint could be dated, it was Mesolithic to Bronze Age in date, indicating that at least some of it was residual.
- 2.7 Two ditches containing Early Iron Age pottery were exposed to the west of the road between Toftrees and Shereford, near the junction of this thoroughfare and the road running south-westwards to Hellhoughton. As noted in *Historic background*, above, the Toftrees road preserves the line of a Roman thoroughfare. These ditches were:
 - east/west-aligned ditch 190 (Fig. 10; 1.03m wide, 0.34m deep); and
 - the terminus of north-west/south-east-aligned ditch 172 (Fig. 11; 1.12m wide, 0.41m deep).
- 2.8 In addition to Early Iron Age pottery, ditch 172 also contained some residual Neolithic worked flint and a quantity of oak charcoal.

Iron Age to Roman (700 BC–AD 410)

- 2.9 North-west/south-east-aligned ditch 162 (Fig. 7) was exposed within Raynham Park. This feature was 0.48m wide and 0.14m deep, and contained pottery dating from the Iron Age to the 1st century AD.
- 2.10 The cable run was tunnelled beneath the extant road which preserves the line of the known Roman road leading northwards from the small Roman town at Toftrees, and as such the Roman thoroughfare was not observed. No associated roadside ditches or structures were exposed.
- 2.11 The strip exposed no evidence for the possible Roman road through Raynham Park. An undated ditch (198; Fig. 9) lay close to the postulated line of the road, but the

east/west alignment of this ditch did not tally with the projected line of the Roman thoroughfare. The ditch was also an isolated feature, with no opposing roadside ditch and no evidence of road metalling. For further discussion of ditch 198, see *Undated*, below.

Medieval (1066–1539)

2.12 A series of furrows lay to the immediate south of Mill Covert, north-west of South Raynham (Fig. 3). These furrows were generally aligned north/south, although the westernmost examples were on a north-west/south-east orientation. Raynham Park contained a total of 17 north-west/south-east-aligned furrows (Figs. 6 and 8). These furrows are the remnants of medieval ridge and furrow agricultural field systems.

Post-medieval to modern (1540–present)

- 2.13 Surface 187 was lay within with Raynham Park (Fig. 6). This surface was constructed of flints laid in a silty clay matrix and survived to a width of 5.28m. A 0.18m-thick layer of clayey silt with frequent charcoal and ash inclusions (188) was present to the immediate north of this surface. This clayey silt deposit contained 18th/19th-century artefacts.
- 2.14 Wall 182 was exposed to the north of surface 187 (Fig. 6). This north-west/southeast-aligned wall survived to three courses (0.28m) in height. The foundation course comprised rounded flint gravels in a sandy mortar. This was covered by a course of larger, more angular flints, and the wall was topped by a course of unfrogged red bricks.
- 2.15 The cable trench crossed the line of the extant ha-ha within Raynham Park (Fig. 6), which was probably constructed in the 18th century. The ha-ha survives to *c*. 8m in width, but the trench through this feature (context 178) revealed that it has partially silted up, and was originally 13.15m wide and 1.8m deep.
- 2.16 North-west/south-east-aligned ditch 149 (Fig. 3) lay north-west of South Raynham, to the immediate south of Mill Covert. This feature was 1.68m wide and 0.56m deep and contained modern brick and glass.

- 2.17 Ditch 160 (Fig. 5) was exposed to the east modern of ditch 149 and ran on the same north-west/south-east alignment, which might indicate that these features were contemporary. Ditch 160 was 1.27m wide and 0.65m deep.
- 2.18 Two quarry pits (194 and 196, not illustrated) were backfilled with 20th-century waste.
- 2.19 The structures and surfaces associated with West Raynham Airfield were removed from the line of the cable run prior to the commencement of the programme of archaeological mitigation work. The monitored works did, however, cut through two bunds associated with the airfield. These were formed of gravelly clay and contained large quantities of modern waste. This waste was generally of a military character and included a total of 209 ADEN ammunition tins (Figs. 12–14).

Undated

- 2.20 North/south-aligned ditch 135 lay to the immediate east of West Raynham Airfield. This feature measured 0.86m in width by 0.24m in depth. While ditch 135 was to the west of Late Bronze Age/Early Iron Age ditch 144, these features differed in alignment, suggesting that they were not contemporary.
- 2.21 North-west/south-east-aligned ditch 154 (Fig. 5) was exposed to the north of South Raynham and immediately south of Top Coppice. This ditch was cut through a palaeochannel (156) and measured 0.86m in width by 0.28m in depth.
- 2.22 The extant plot boundaries and the below-ground furrows within Raynham Park were generally aligned north-west/south-east, and the section of the strip within the Park exposed several undated ditches on this alignment:
 - ditch 176 (Fig. 6; 1.18m wide, 0.41m deep);
 - ditch 170 (Fig. 7; 0.49m wide, 0.32m deep); and
 - ditch 192 (Fig. 8; 2.92m wide, 0.26m deep).
- 2.23 Additionally, east/west-aligned ditch 198 (Fig. 9) was present at the north-eastern limit of Raynham Park. This feature measured 1.16m in width and 0.33m in depth. This undated ditch lay close to the postulated line of the possible Roman road

passing through Raynham Park, but there were no indications that it was associated with a Roman thoroughfare (for further discussion, see *Roman*, above).

2.24 A further east/west-aligned ditch (200; width 0.85m, depth 0.41m; Fig. 9) was exposed to the north of ditch 198, immediately outside of the Park boundary.

The finds

- 2.25 This section presents a summary discussion of the artefactual material recovered during the programme of archaeological mitigation. For a full discussion of the artefacts, please see Appendix B.
- 2.26 Although few contexts yielded artefactual material, finds recovered during the programme of archaeological mitigation work included pottery, glass, clay tobacco pipe and worked flint.
- 2.27 A total of 31 sherds of Late Bronze Age to Early Iron Age pottery were recovered from the fills of ditch 145 and pit 151.
- 2.28 Ditch 172 yielded a large group of 136 pottery sherds dating from the Early Iron Age.Five sherds of similar pottery were recovered from ditch 190.
- 2.29 A single sherd of pottery dating broadly to the Iron Age or early Roman period was retrieved from ditch 160.
- 2.30 Layer 188 produced fragments of pottery, glass and clay tobacco pipe of postmedieval/modern date.

Worked flint

- 2.31 A total of 219 worked flint items and 1,054 pieces of burnt, unworked flint were recovered from the fills of Late Bronze Age/Early Iron Age pit 151 and Early Iron Age ditch 172. The substantial majority of the burnt flint came from pit 151.
- 2.32 Where the flint could be dated, it was Mesolithic to Bronze Age in date. As this material was retrieved exclusively from contexts which also yielded pottery dating

from the Late Bronze to Early Iron Age (fill 152, pit 151) and Early Iron Age (fill 173, ditch 172), some or all of the flint must have been redeposited.

The palaeoenvironmental evidence

- 2.33 This section presents a summary discussion of the results of the analysis of the environmental samples taken during the programme of archaeological mitigation. For a full discussion of the environmental evidence, please see Appendix C.
- 2.34 Two environmental samples were retrieved from two deposits with the intention of recovering evidence of industrial or domestic activity and material for radiocarbon dating.
- 2.35 Fill 152 within Late Bronze Age/Early Iron Age pit 151 contained a small amount of charcoal identified as oak, cherry, willow/poplar and elm. This mixture of species is typical of waste associated with a domestic hearth.
- 2.36 Fill 173 of Early Iron Age ditch 172 contained a moderate amount of oak charcoal. Oak burns efficiently and is often associated with activities that require high temperatures, such as metal working or cremating human remains. There was no evidence for such activities at the site, however, and the charcoal in ditch 172 may simply represent a single oak branch that had been burnt.

3. DISCUSSION

- 3.1 The archaeological works recorded several archaeological features, the majority of which were ditches. Features tended to be shallow and generally had single fills only. Dating evidence was scarce, but artefactual material indicated that a small number of features were Late Bronze Age to Roman in date. A limited number of medieval furrows were also recorded, and there were several post-medieval features, some of which related to the 17th-century Raynham Park.
- 3.2 The limited width of the cable run strip meant that it was generally difficult to interpret the recorded archaeological features and place them in their wider contexts. Features were generally scattered along the route, and there were few close relationships.

- 3.3 It is possible to conclude from the archaeological works that the landscape in the area of the cable run was exploited in the Late Bronze Age and Early Iron Age, but this exploitation was not intensive. There was also residual lithic evidence for earlier activity spanning the Mesolithic to the Bronze Age.
- 3.4 Evidence for Roman activity was restricted to a single pottery sherd of Iron Age or early Roman date. The cable run was tunnelled beneath the extant road which preserves the line of the known Roman thoroughfare leading northwards from the small Roman town at Toftrees, and as such the Roman road was not observed. No associated Roman roadside ditches or structures were exposed. It may be notable that two Early Iron Age ditches were recorded in the immediate vicinity of the road, but the limited width of the cable run means that it is difficult to draw any definite conclusions regarding possible relationships between the Early Iron Age archaeology and the Roman thoroughfare.
- 3.5 There was no evidence for the possible Roman road through Raynham Park. This indicates that either the postulated line of this road is incorrect, that the thoroughfare does not exist, or that all traces of the road have been removed by later ploughing.
- 3.6 The remnants of medieval ridge and furrow agricultural field systems were recorded in three separate areas, and it is possible that these field systems originally covered a larger area but have been removed by post-medieval ploughing. No archaeological remains were uncovered at the north-eastern terminus of the cable route, supporting the conclusion of the previous archaeological evaluation (CA 2014b) that remains associated with medieval settlement around the former St Andrew's Church do not extend this far south-west.
- 3.7 The archaeological works recorded several features associated with the 17thcentury Raynham Park, including the ha-ha and the fragmentary remains of a wall and a surface. A number of ditches on the same general alignment as the extant boundaries within the park were also recorded.

4. CA PROJECT TEAM

Fieldwork was undertaken by Caoimhín Ó Coileáin, Jeremy Mordue, James Coyne and Paolo Clemente. This report was written by Derek Evans and Caoimhín Ó

Coileáin. The illustrations were prepared by Dan Bashford. The archive has been compiled by Emily Evans, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Derek Evans.

5. **REFERENCES**

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- NCCHES (Norfolk County Council Historic Environment Service) 2014 Brief for a Programme of Archaeological Mitigation Work on the West Raynham Solar Farm to Hempton Substation Cable Route, Raynham, Dunton and Hempton, Norfolk

APPENDIX A: CONTEXT DESCRIPTIONS

Context	Туре	Fill of	Interpretation	Context Description	Length (m)	Width (m)	Depth (m)	Spot-date
100	Layer		Topsoil	Dark grey-brown silty clay			0.36	
101	Layer		Subsoil	Mid brown silty clay			0.28	
102	Geology		Natural	Mid brown-yellow clay				
103–134				Void				
135	Cut		Ditch	North/south linear; steep, flat sides and concave base	>1.5	0.86	0.24	
136	Deposit	135	Ditch fill	Mid orange-brown silty clay	>1.5	0.86	0.24	
137–138				Void				
139	Geology		Natural	Orange gravel				
140–141				Void				
142	Cut		Ditch; re-cut of 144	North-west/south-east linear with concave sides and flat base	>1.62	5.21	0.18	
143	Deposit	142	Ditch fill	Mid reddish brown sandy clay	>1.62	5.21	0.18	
144	Cut		Ditch	North-west/south-east linear with concave sides and flat base	>1.62	4.98	0.28	
145	Deposit	144	Ditch fill	Dark reddish brown silty clay	>1.62	4.98	0.28	LBA–EIA
146	Cut		Ditch	North-west/south-east linear with concave sides and flattish base	>1.58	1.52	0.33	
147	Deposit	146	Ditch fill	Dark grey-brown silty clay	>1.58	1.52	0.33	
148	Geology		Natural	Reddish brown clayey silt				
149	Cut		Ditch	North-west/south-east linear with concave sides and concave base	>1.58	1.68	0.56	
150	Deposit	149	Ditch fill	Dark reddish brown sandy clay	>1.58	1.68	0.56	MOD
151	Cut		Pit	Sub-circular pit with concave base	0.67	0.58	0.14	
152	Deposit	151	Pit fill	Dark brown-grey sandy clay with frequent charcoal flecks and burnt flints	0.67	0.58	0.14	LBA–EIA
153	Geology		Natural	Mid reddish orange sandy clay with occasional gravel lenses				
154	Cut	454	Ditch	North-west/south-east linear with concave sides and tapered base	>1.58	0.86	0.28	
155	Deposit	154	Ditch fill	Grey clayey sand	>1.58	0.86	0.28	
156	Cut Deposit	156	Palaeochannel Fill of	North-west/south-east aligned; unexcavated Brown-yellow silty clay	>1.58	11.2 11.2	N/A N/A	
107	Deposit	100	palaeochannel	Brown yenew enty endy	21.00	11.2		
158–159	-			Void				
160	Cut		Ditch	North-west/south-east linear with steep concave sides and tapered base	>1.62	1.27	0.65	
161	Deposit	160	Ditch fill	Dark grey silty clay	>1.62	1.27	0.65	
162	Cut		Ditch	North-west/south-east linear with concave sides and base	>1.98	0.48	0.14	
163	Deposit	162	Ditch fill	Dark brownish grey silty clay	>1.98	0.48	0.14	IA–C1
164	Layer		Subsoil Natural	Mid greyish brown silty clay Yellow sand			0.24	
165 166	Geology	-	Subsoil	Mid yellowish-red gravelly sand	-		0.26	
166	Layer		Natural	, ,			0.36	
167	Geology	-	างลเนเลเ	Orange sandy gravel Void	-			
170	Cut		Ditch	North-west/south-east linear, with concave sides and tapered base	>1.98	0.49	0.32	
171	Deposit	170	Ditch fill	Mid greyish brown silty sand	>1.98	0.49	0.32	
172	Cut		Ditch	North-west/south-east linear with vertical sides and flat bottom	>1.72	1.12	0.41	
173	Deposit	172	4th fill of ditch	Mid reddish brown silty sand with charcoal inclusions	>1.72	0.96	0.25	EIA
174	Deposit	172		Pale yellowish white sand	>1.39	1.12	0.42	
175	Deposit	172	2nd fill of ditch	Dark greyish brown silt	>1.39	0.67	0.07	

Context	Туре	Fill of	Interpretation	Context Description	Length (m)	Width (m)	Depth (m)	Spot-date
176	Cut		Ditch	North-west/south-east linear with concave sides and tapered base	>2.1	1.18	0.41	
177	Deposit	176	Ditch fill	Mid yellow-brown clayey sand	>2.1	1.18	0.41	
178	Cut		Ha-ha	North-west/south-east linear	13.15	3.42	1.83	
179	Deposit	178	Fill of ha-ha	Mid orange-brown gravelly silty sand	13.15	3.42	1.83	
180	Layer		Subsoil	Mid yellow silty clay			0.35	
181	Geology		Natural	Orange-yellow/orange-red clayey sand with frequent gravel inclusions				
182	Structure		Wall	Upper course of bricks; medium course of angular flints and basal course of small flint gravels	>9.48	0.56	0.28	
183–186				Void				
187	Deposit		Surface	Rounded medium flints in a clayey silt matrix	5.28	>8.42	0.09	
188	Deposit		Layer	Mid grey clayey silt with frequent coal and ash flecks			0.18	C18–C19
189	Layer		Topsoil	Dark grey sandy silt			0.21	
190	Cut		Ditch	East/west linear with concave sides and base	>1.38	1.03	0.34	
191	Deposit	190	Ditch fill	Mid reddish brown sandy clay	>1.38	1.03	0.34	EIA?
192	Cut		Ditch	North-west/south-east linear with concave sides and concave base	>2.02	2.92	0.26	
193	Deposit	192	Ditch fill	Mid brown silty sand	>2.02	2.92	0.26	
194	Cut		Quarry pit	Sub-circular	13	>1.42	>1.5	
195	Deposit	194	Fill of pit	Mottled brownish blue-grey silty clay with frequent modern waste inclusions	13	>1.42	>1.5	MOD
196	Cut		Quarry pit	Sub-circular	16.32	>1.42	>1.5	
197	Deposit	196	Fill of pit	Mottled brownish blue-grey silty clay with frequent modern waste inclusions	16.32	>1.42	>1.5	MOD
198	Cut		Ditch	East/west linear	>1.34	1.16	0.33	
199	Deposit	198	Ditch fill	Mid brown silty sand	>1.34	1.16	0.33	
200	Cut		Ditch	East/west linear with concave sides and base	>1.34	0.85	0.41	
201	Deposit	200	Ditch fill	Mid grey-brown silty sand	>1.34	0.85	0.41	
202–205	1	1		Void				
206	Deposit	172	1st fill of ditch	Pale sand		0.11	0.19	

APPENDIX B: THE FINDS

By Jacky Sommerville and Ed McSloy, CA

Finds recovered during the programme of archaeological mitigation work included pottery, glass, clay tobacco pipe and worked flint.

Pottery

Late Bronze Age to Early Iron Age

A total of 31 sherds in a flint-tempered fabric was recovered from ditch fill 145 and pit fill 152. Included in the sherds from fill 152 was a bodysherd which featured a row of fingertip-impressed decoration. The fabric and decoration suggest a Late Bronze Age to Early Iron Age date for this pottery.

Early Iron Age

A large group of 136 sherds weighing 840g (including 76 sherds from environmental sample 2) was recovered from ditch fill 173. All material occurs in a handmade quartz sand-tempered fabric, fired variously to dark grey/black, red brown and buff brown. Five sherds representing four separate vessels are burnished. Identifiable forms consist of three carinated bowls, with deep (x2) or shorter concave neck zones. Rim sherds from the latter vessel are simple/squared. Two base sherds are present in the group; these are of a simple and a well-made pushed-out/short pedestal type. One of the deeper-necked carinated forms exhibits a double horizontal grooved decoration (furrowing) at the base of its neck. Elsewhere, decoration is restricted to a bodysherd with repeated, lightly impressed oblique strokes from a small round-ended implement. The form and surface treatment/decoration of the pottery from deposit 173 are strongly suggestive of an Early Iron Age date. There are similarities with Cunliffe's Darmsden-Linton group (Cunliffe 2005, 624) for which dating in the 5th to 3rd centuries BC (or a little earlier) is claimed.

Five sherds in a quartz-tempered fabric similar to that from deposit 173 were recovered from ditch fill 191. Featured sherds from this group were absent, though an earlier Iron Age date is suggested based on the similarities of fabric with the material described above.

Ditch fill 163 produced a single unfeatured bodysherd in a quartz-tempered fabric. The sherd is small and in isolation is not closely dateable. Broad dating to the Iron Age or early Roman period is thus suggested.

Post-medieval/modern

Layer 188 produced six sherds of pottery of post-medieval/modern date: four bodysherds of glazed earthenware (16th to 18th centuries); a bodysherd of Tin-glazed earthenware (late 17th to 18th centuries); and a base sherd from a bottle or tankard in refined whiteware (late 18th to 19th centuries).

Glass

A fragment from the base of a vessel in probable lead-glass of post-medieval date was recorded in layer 188.

Clay tobacco pipe

Layer 188 produced 11 fragments of clay tobacco pipe, 10 of which were stem fragments. The bowl was fragmentary but most likely conforms to Oswald's Type 7, 8 or 9. Clay tobacco pipes were in use from the late 16th to late 19th centuries and the Type 7 to 9 bowls date to between *c*. 1660 to 1710 (Oswald 1975, 37–9).

Worked flint

A total of 219 worked flint items (Table B2) and 1,054 pieces of burnt, unworked flint (the latter weighing a total of 7.138kg) were recovered from bulk soil samples of pit fill 152 and ditch fill 173. The lithics primarily consisted of débitage, including a substantial amount of chips (<10mm) which usually indicate *in situ* knapping or the deliberate deposition of knapping waste.

Pit fill 152

In addition to waste flakes, chunks, chips and an undiagnostic retouched flake, this fill contained two blades, one bladelet and several cores. The blades and bladelet are diagnostically Mesolithic or Early Neolithic in date. All of the cores were multi-platform (apart from one tested nodule) and had been used to produce flakes. One was very small and worked out, a type typically seen in the Neolithic period (Malone 2001, 217). Two were larger and

unsystematically worked, which is more in keeping with Later Neolithic or Bronze age technology (Butler 2005, 181). Both thin and chunky types were represented amongst the flakes and the surface condition was also variable, with some fresh and uncorticated items and others both rolled and corticated. Although a proportion of the material is in keeping with the potential Late Bronze Age date of the associated pottery, and in spite of the presence of 60 chips, it would appear that the lithic assemblage from this pit includes a mixture of material, at least some of which has been redeposited.

This fill also contained the vast majority of the burnt flint recovered from the site and a small proportion of the worked flint had also been burnt. Much of the burnt flint had not been fully calcined but had been burnt at a relatively low temperature, resulting in a reddish discolouration.

Ditch fill 173

The majority of the lithics from this fill were chips and other very small flakes. Also recovered was a well-made blade, which would most commonly date to the Mesolithic or Early Neolithic periods but has suffered considerable post-depositional edge damage. Despite the relatively large number of chips, which are ordinarily suggestive of knapping *in situ*, these flints would appear to be redeposited into a ditch fill which has been dated to the Early Iron Age.

The Faunal Remains

By Andy Clarke, CA

A total of four fragments (7g) of animal bone was recovered from deposit 161, all of which were identified as rabbit (*Lepus curpaeums*). As this species is a burrowing animal, its presence on site may be intrusive, therefore without secure association to datable artefacts, no interpretative inference can be made.

Context	Description	Count	Weight(g)	Spot-date
145	Late Prehistoric pottery: flint-tempered fabric	2	15	LBA-EIA
152	Late Prehistoric pottery: flint-tempered fabric	29	146	LBA-EIA
Sample <1>	Late Prehistoric pottery: flint-tempered fabric	173	102	
	Fired clay	1	<1	
Sample <1>	Worked flint: flakes, blades, bladelet, chunks, chips, cores, retouched flake	117	319	
	Burnt flint	4	235	
Sample <1>	Burnt flint	1006	6864	
161	Animal bone: rabbit	4	7	-
163	Late Prehistoric/Early Roman pottery: black-firing, sand-	1	4	IA-C1
	tempered fabric			
173	Late Prehistoric pottery: quartz-tempered fabric	60	701	EIA
Sample <2>	Late Prehistoric pottery: quartz-tempered fabric	76	139	
Sample <2>	Fired clay	2	<1	
Sample <2>	Worked flint: flakes, blade, chunk, chips	98	16	
Sample <2>	Burnt flint	136	172	
188	Post-medieval pottery: Tin-glazed earthenware; glazed	6	85	C18-C19
	earthenware; refined whiteware			
	Post-medieval glass: vessel	1	31	
	Clay tobacco pipe: stems, bowl	11	59	
191	Late Prehistoric pottery: quartz-tempered fabric	5	10	EIA?

Table B1: Finds concordance

Table B2: Breakdown of worked flint assemblage

	Pit fill 152	Ditch fill 173
Blade	2	1
Bladelet	1	
Chip	60	44
Chunk	5	1
Core	5	
Flake	43	11
Retouched flake	1	
Total	117	57

References

Butler, C. 2005 Prehistoric Flintwork Stroud: Tempus

Cunliffe, B. 2005 Iron Age Communities in Britain: An account of England, Scotland and Wales from the seventh century BC until the Roman Conquest (Fourth Edition) London: Routledge

Malone, C. 2001 Neolithic Britain and Ireland Stroud: Tempus

Oswald. A. 1975 Clay Pipes for the Archaeologist Oxford: British Archaeological Reports, British Series 14

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

By Sarah Cobain, CA

Two environmental samples (a total of 50 litres of soil) were retrieved from two deposits with the intention of recovering evidence of industrial or domestic activity and material for radiocarbon dating. The samples were processed by standard flotation procedures (*CA Technical Manual No. 2*, 2003).

Fill 152 within Late Bronze Age/Early Iron Age pit 151 (sample 1) contained no plant macrofossil material and a small amount of charcoal identified as oak (*Quercus*), cherry (*Prunus*) species, willow/poplar (*Salix/Populus*) and elm (*Ulmus glabra*). Where a mixture of species are identified, this often relates to waste from a domestic hearth; however, the absence of other ecofactual material means no further interpretative information can be gained from this sample other than the use of these species as fuel.

Fill 173 of Early Iron Age ditch 172 (sample 2) contained no plant macrofossil material and a moderate amount of charcoal identified as oak. Oak has a high calorific value, so burns efficiently and at high temperatures. Its sole presence within a context is often associated with activities that require high temperatures, such as metal working or cremating human remains. The absence of metal working residues or cremated remains means that it is unlikely these activities were taking place and the charcoal may simply represent a single oak branch that had been burnt.

With the exceptions of the oak or elm, any of the identifiable charcoal would be suitable for radiocarbon dating.

Context nu	152	173		
Feature nu	mber		151	172
Sample nui	mber (SS)		1	2
Flot volume	e (ml)		0	32
Sample vol	ume processed (I)		30	20
Soil remain	ning (I)		0	20
Period	LBA-EIA	IA		
Charcoal q	+++	++++		
Charcoal p	reservation		Moderate	Good
Family	Species	Common Name		
Fagaceae	Quercus petraea (Matt.) Liebl./Quercus robur L.	Sessile Oak/ Pedunculate Oak	7	10
Rosaceae	Prunus L.	Cherries	1	
Salicaceae	Salix L./Populus L.	Willow/Poplar	1	
Ulmaceae	Ulmus glabra Huds.	Wych Elm	1	
	10	10		

Table C1: Charcoal identifications

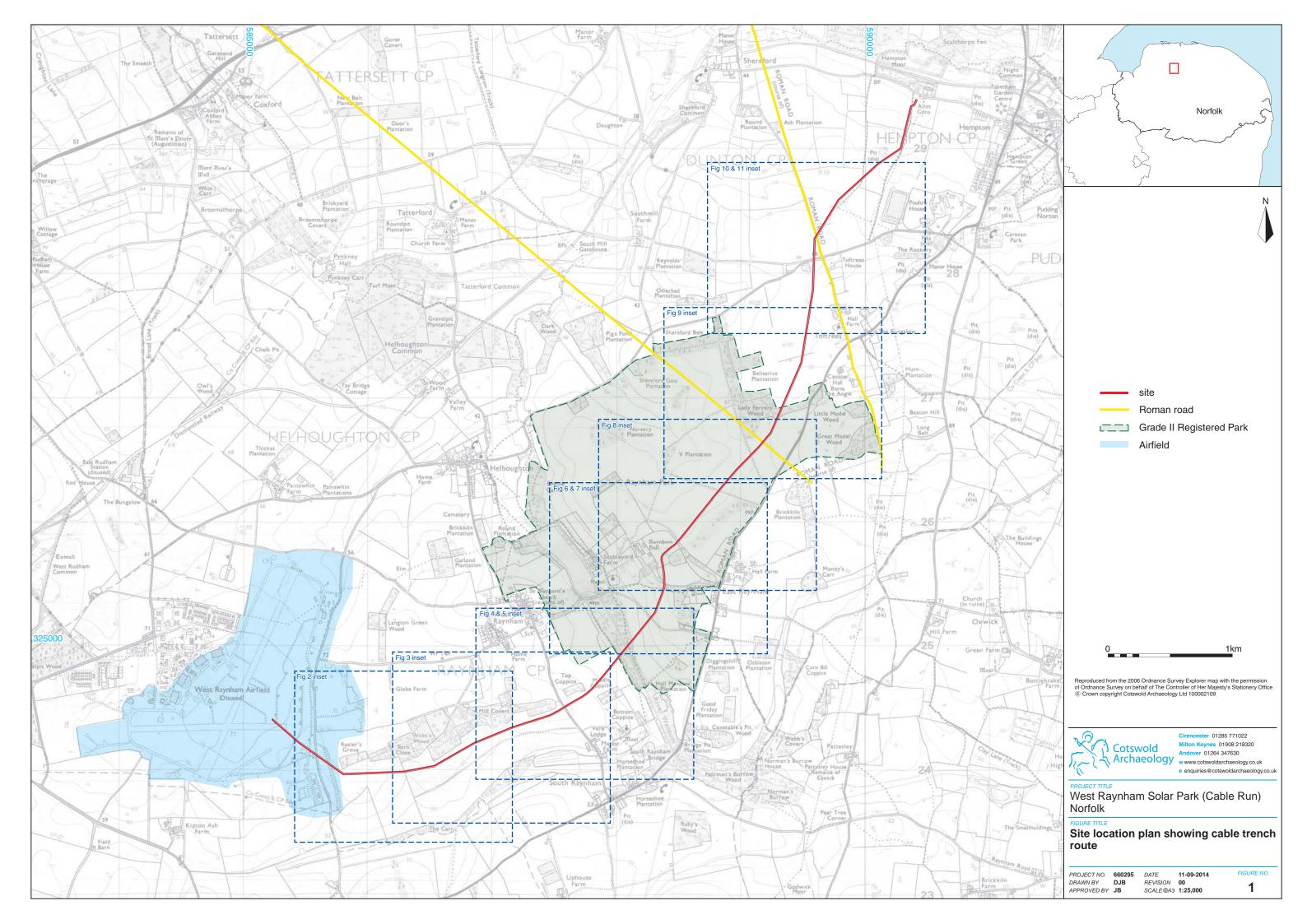
Key

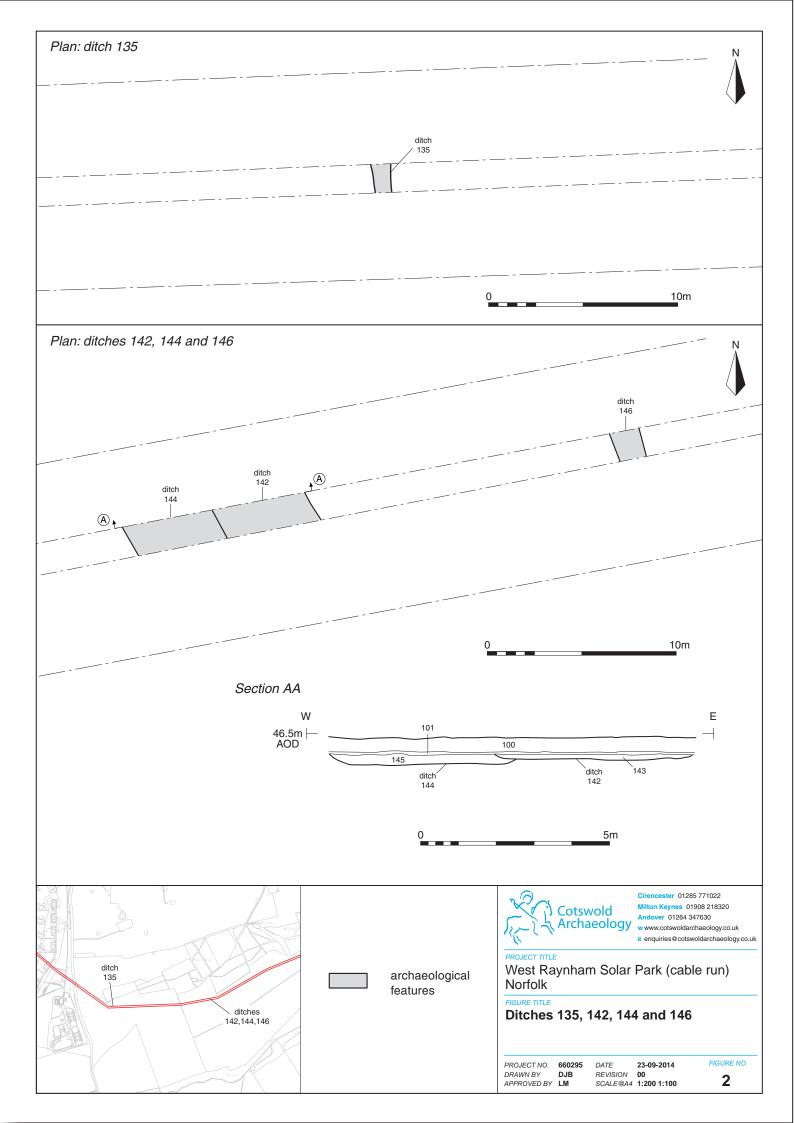
LBA = Late Bronze Age EIA = Early Iron Age IA = Iron Age + = 1-4 items' ++ = 5-20 items; +++ = 21-49 items; ++++ = 50-99 items

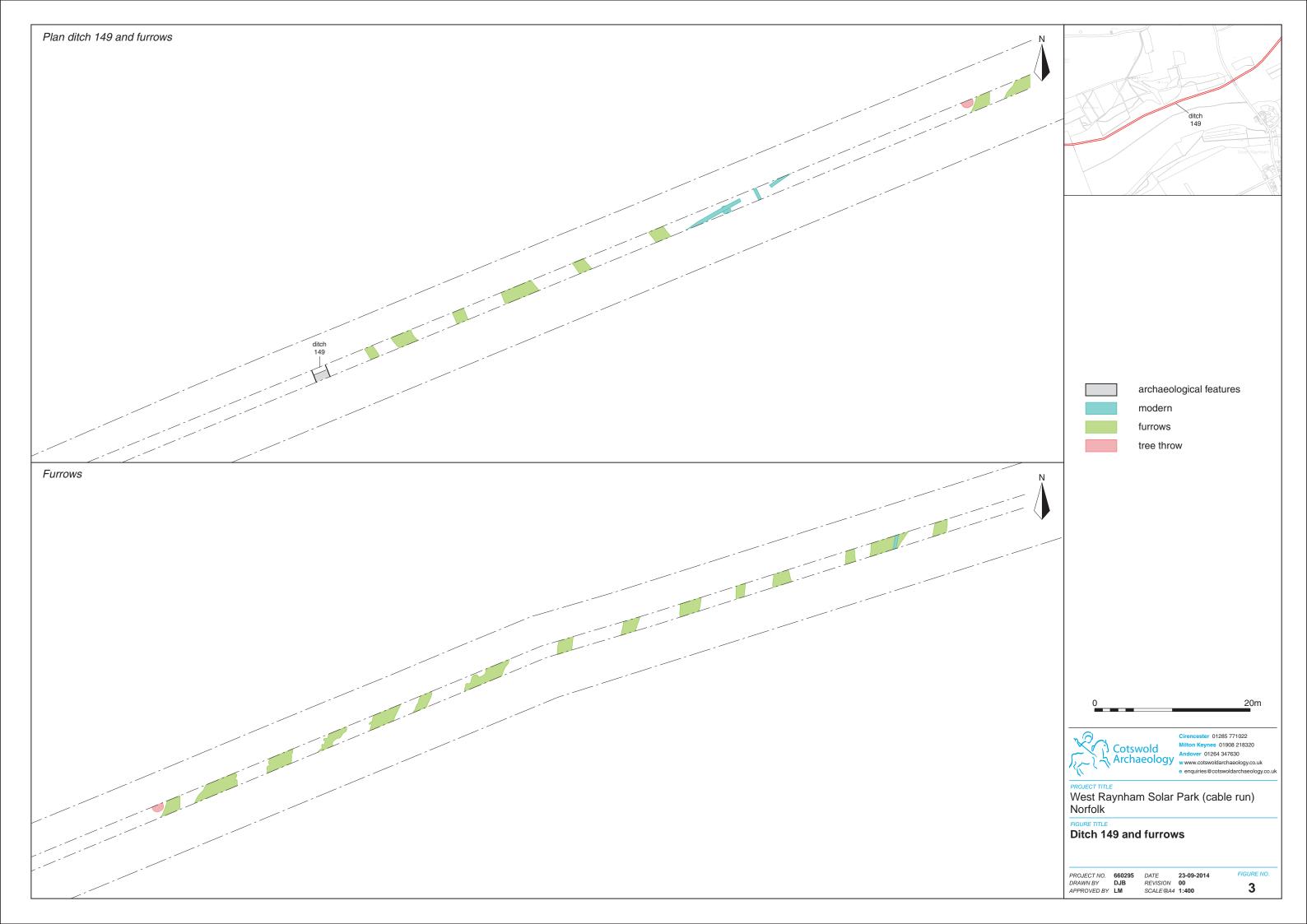
APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS				
Project Name	West Raynham Solar Park (Cable Run	n), Norfolk: Programme of		
Short description (250 words maximum)	Archaeological Mitigation Work In July–August 2014, Cotswold Archaeology carried out a programme of archaeological mitigation work during the installation of a new cable run for the proposed West Raynham Solar Park, Norfolk. The work comprised both a watching brief and a narrow strip, map and sample investigation along the line of the cable run.			
	Several archaeological features were recorded, the majority of which were ditches. Features were generally shallow with single fills only. Dating evidence was scarce, but a small number of features were Late Bronze Age to Roman in date. A limited number of medieval furrows were also recorded, and there were several post-medieval features, some of which related to the 17th-century Raynham Park. The limited width of the stripped area meant that it was difficult to interpret the archaeological features and place them in their wider contexts. Features were generally scattered along the route, with few close relationships.			
	It is concluded that the landscape in the area of the cable run was exploited in the Late Bronze Age and Early Iron Age, but this exploitation was not intensive. There was also residual lithic evidence for earlier activity spanning the Mesolithic to the Bronze Age.			
	The cable run was tunnelled beneath a road preserving the line o a known Roman thoroughfare. No associated roadside ditches o structures were exposed. There was no evidence for a postulated second Roman road crossing the cable run, indicating either tha this road does not exist, or it has been completely removed by late			
Project dates	activity. 1 July–22 August 2014			
Project type	Archaeological strip, map and sample ar	nd archaeological watching		
(e.g. desk-based, field evaluation, etc.)	brief			
Previous work (reference to organisation or SMR numbers, etc.)	Desk-based assessment (Cotswold Archaeology 2013)			
Future work	Unknown			
PROJECT LOCATION				
Site Location	Near West Raynham, Norfolk			
Study area (M ² /ha)	7.65ha	-		
Site co-ordinates (8 Fig Grid Reference) PROJECT CREATORS	Between TF 9042 2938 and TF 8529 244	13		
Name of organisation	Cotswold Archaeology			
Project Brief originator	Norfolk County Council			
Project Design (WSI) originator	Cotswold Archaeology			
Project Manager	Derek Evans			
Project Supervisor	Caoimhín Ó Coileáin			
MONUMENT TYPE	Raynham Park: Grade II-Registered Historic Park and Garden (List entry number: 1001015)			
SIGNIFICANT FINDS	None			
PROJECT ARCHIVES	Intended final location of archive (museum/Accession no.)	Content (e.g. pottery, animal bone, etc.)		
Physical	Norfolk Museum Service	Ceramics, flints, etc.		
Paper	Norfolk Museum Service	Context sheets, registers, drawing, etc.		
Digital	Norfolk Museum Service	Databases, digital		
BIBLIOGRAPHY		photos, etc.		
	1			

CA (Cotswold Archaeology) 2014 West Raynham Solar Park (Cable Run), Norfolk: Programme of Archaeological Mitigation Work CA typescript report **14429**

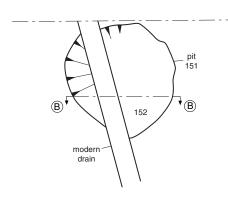










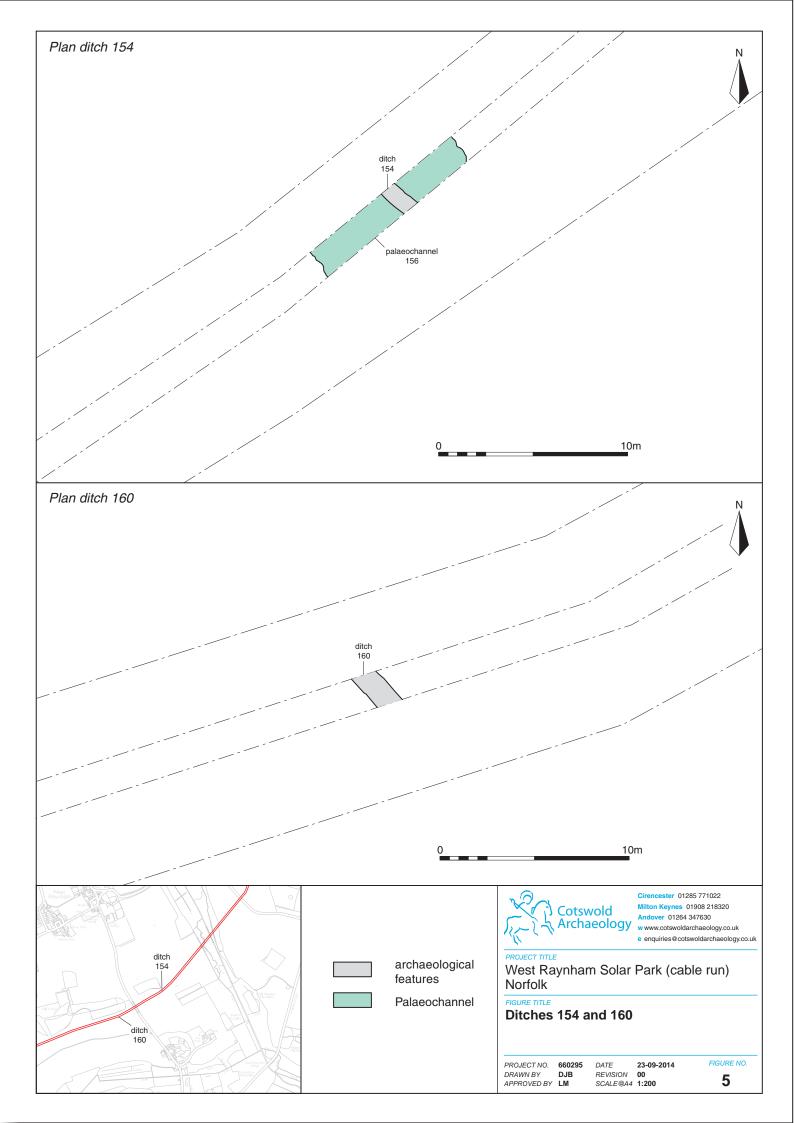




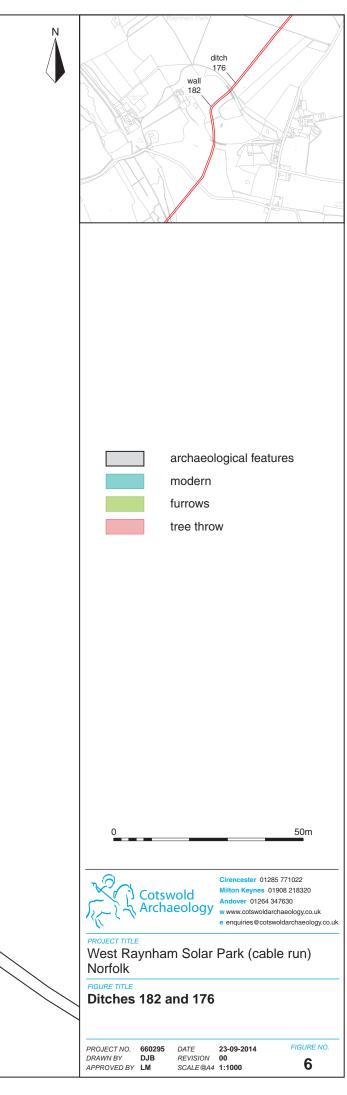


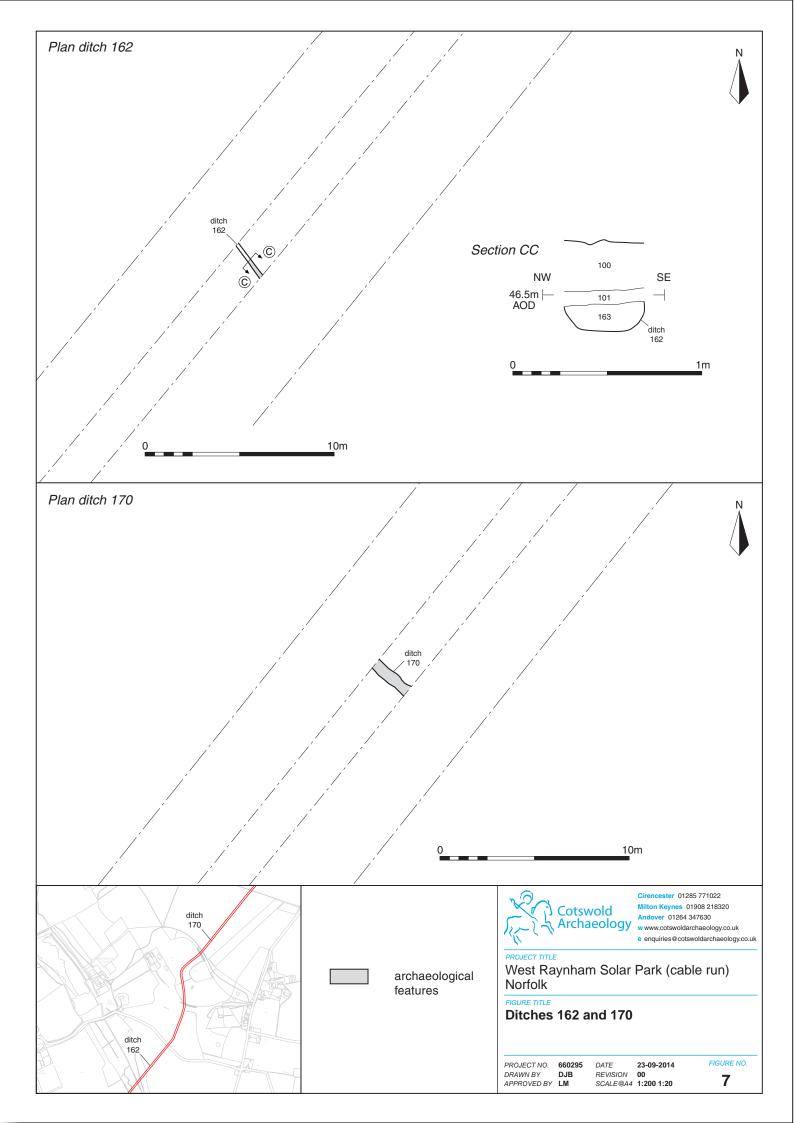
Pit 151 cut by modern drain (scale 0.5m)

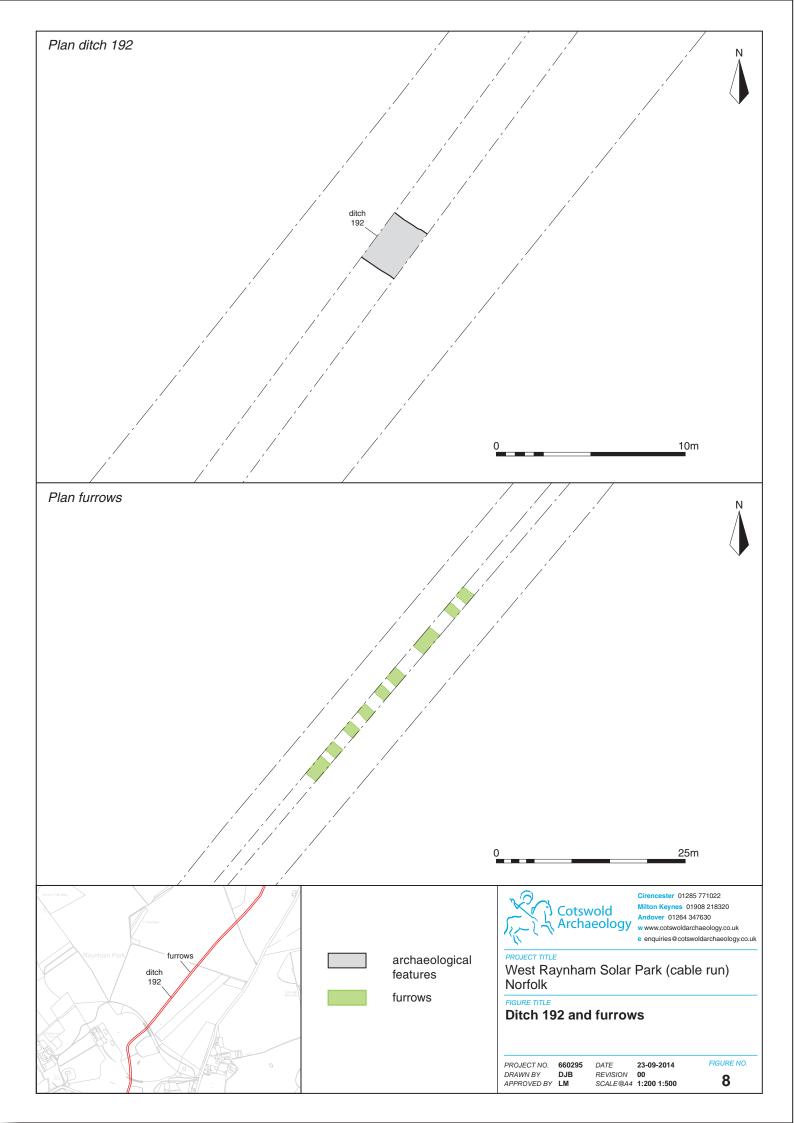
	Cirencester 01285 771022 Milton Keynes 01908 218320 Andover 01264 347630 www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk
	PROJECT TITLE West Raynham Solar Park (cable run) Norfolk
pit 151 war	FIGURE TITLE Pit 151: plan, section and photograph
	PROJECT NO. 660195 DATE 23-09-2014 FIGURE NO. DRAWN BY DJB REVISION 00 4 APPROVED BY LM SCALE@A4 1:20 4

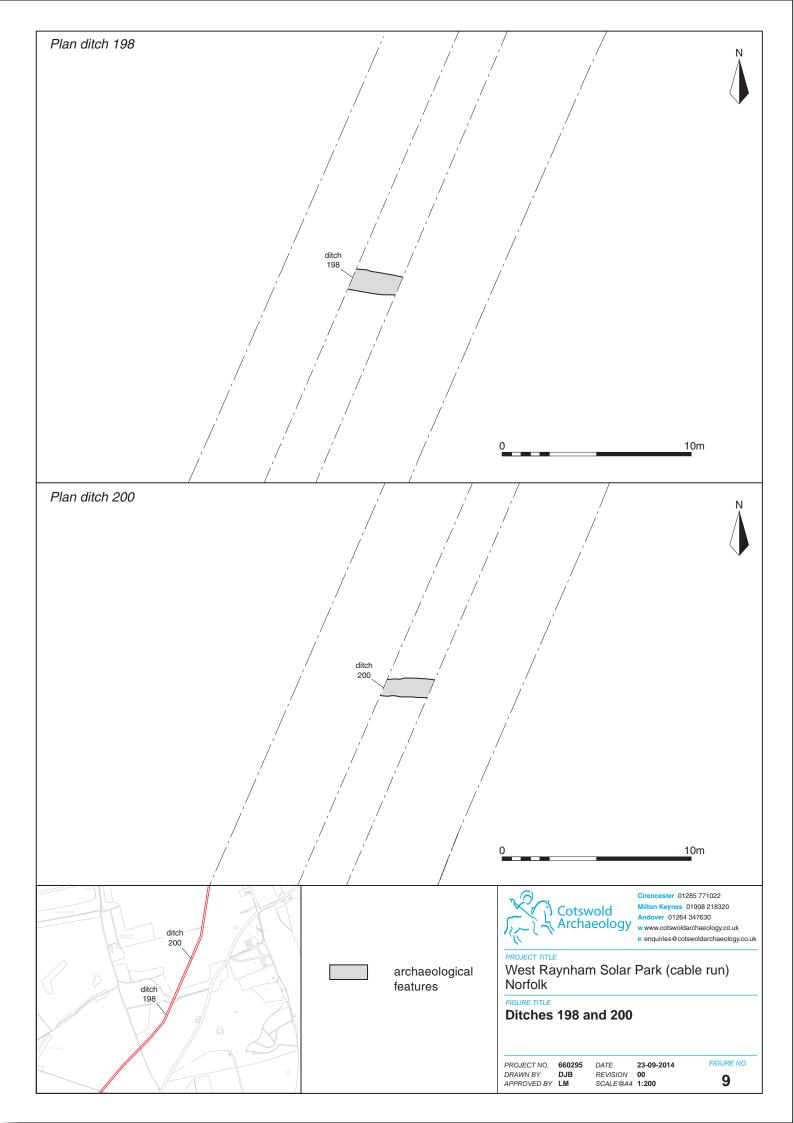


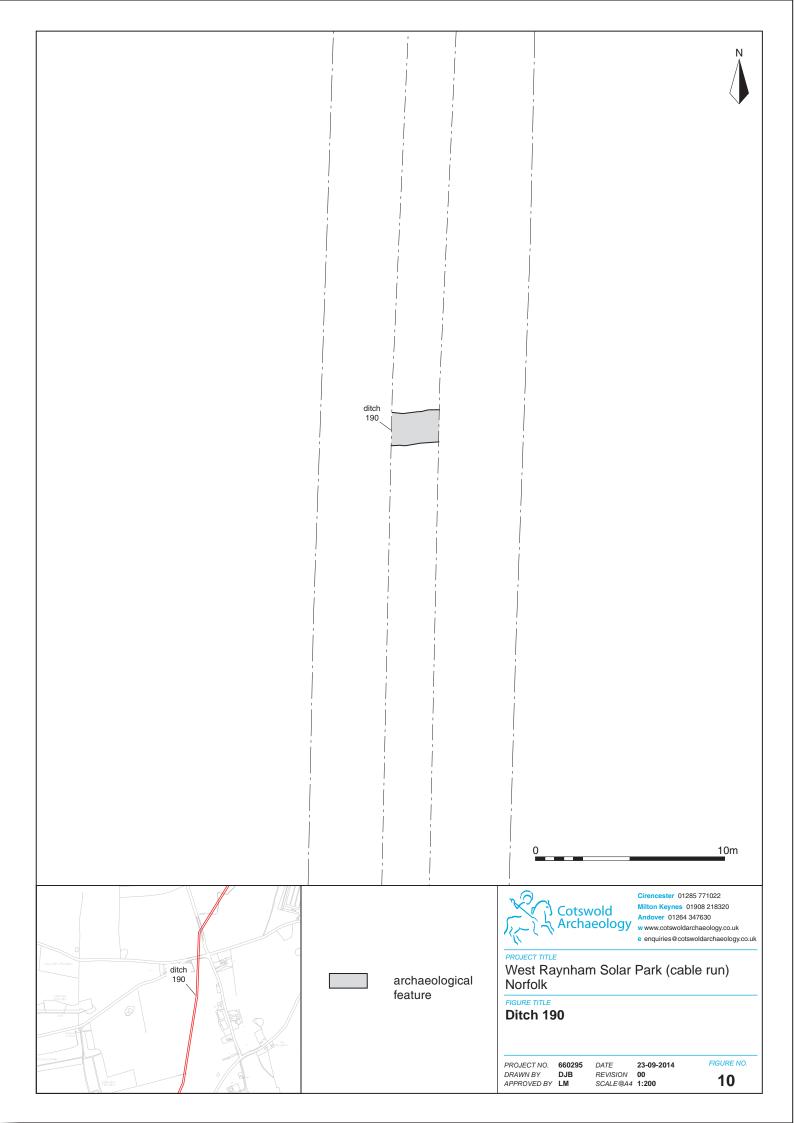


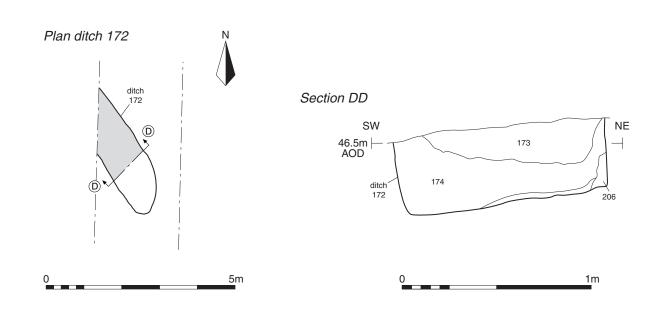






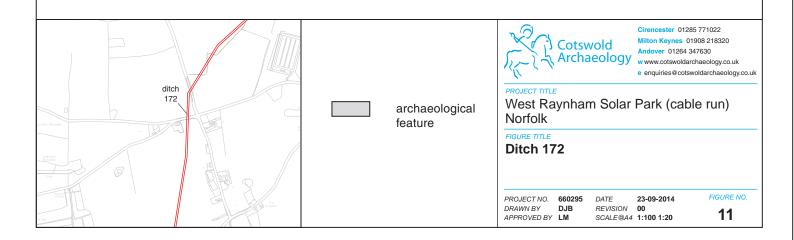








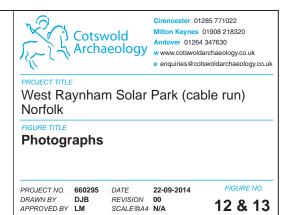
Pit 172 looking north-west (scale 1m)

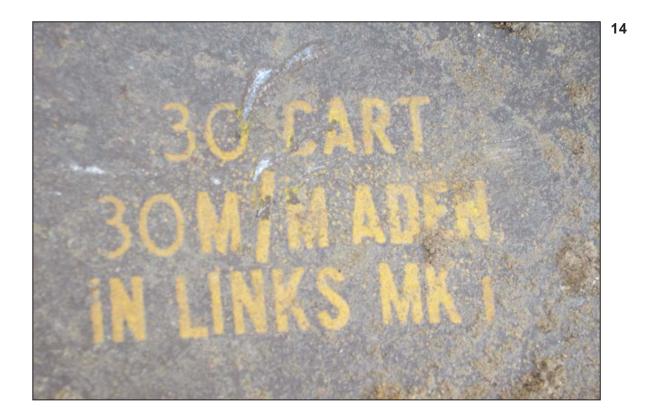






- 12 ADEN ammunition tins
- ammunition tin lid 13





14 Ammunition tin legend	Cotswold Archaeology www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk
	West Raynham Solar Park (cable run) Norfolk
	FIGURE TITLE Photograph
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