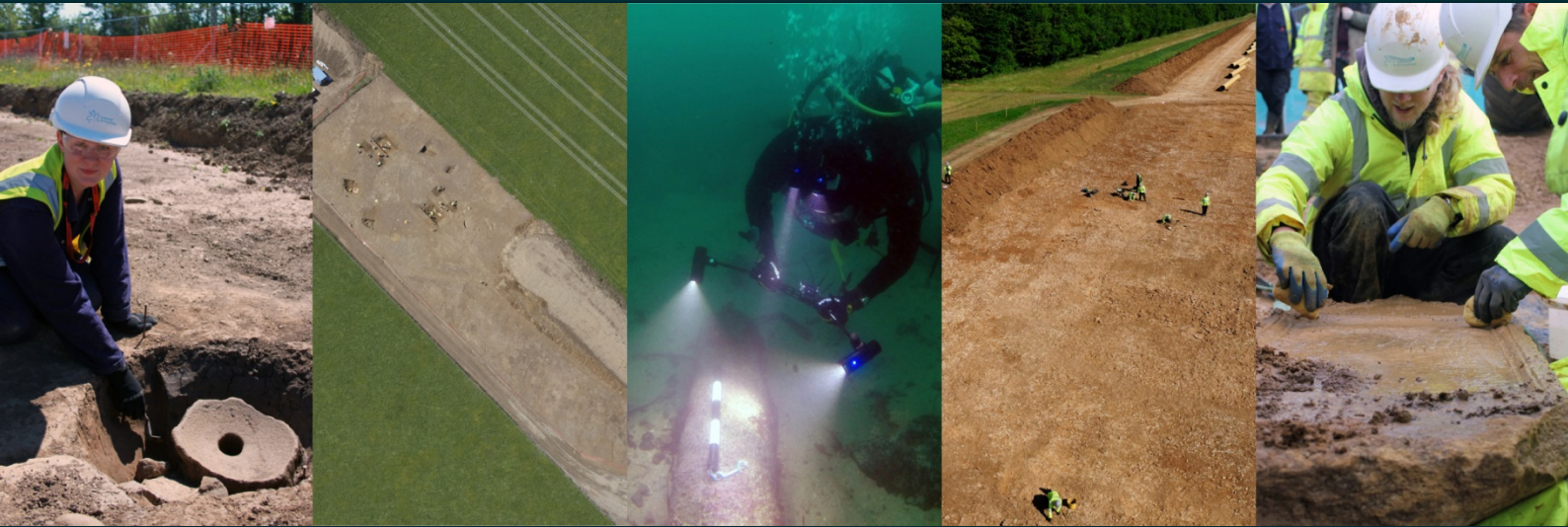


Land at West Buckland Junction, A361 Devon

Archaeological SMS Excavation



for
Devon County Council

CA Project: EX0038
CA Report: EX0038_1

October 2019



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Document Control Grid						
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by
A	23 October 2019	Jonathan Orellana	Derek Evans	Internal review	–	Duncan Coe

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SUMMARY

Project Name:	Land at West Buckland Junction, A361
Location:	West Buckland, Devon
NGR:	265602 129582
Type:	SMS Excavation
Date:	5–13 June 2019
Location of Archive:	To be deposited with the Archaeology Data Service (ADS)
OASIS ID:	cotswold2-371212
Site Code:	WEBU 19

In June 2019, Cotswold Archaeology undertook an archaeological strip, map and sample excavation on land adjacent to the A361 West Buckland Junction, Devon. Two excavation areas with a combined area of 2,490 m² were excavated within the site. These areas were targeted upon features identified during a previous geophysical survey and trial trench evaluation.

The excavation recorded part of a rectilinear enclosure. No artefactual material was present, but an Early Roman period radiocarbon date was obtained. The previous geophysical survey and evaluation results indicate that this rectilinear enclosure system continues north-westwards within the site, apparently forming a field system.

Also recorded were a small number of undated ditches and pits. The undated ditches were mainly on different alignments to both the Roman period enclosure and the extant field system. Their provenance is unclear.



1. INTRODUCTION

- 1.1 In June 2019, Cotswold Archaeology (CA) carried out a programme of archaeological Strip, Map and Sample (SMS) excavation on land adjacent to the A361 West Buckland Junction, Devon (centred at NGR: 265602 129582; Fig. 1). This SMS excavation was undertaken for Devon County Council.
- 1.2 The SMS excavation formed part of the archaeological mitigation strategy associated with the proposed improvement scheme for the North Devon Link Road, as developed by Devon County Council. The wider scheme comprises a number of separate elements, including road widening, junction improvements, junction upgrades and areas of new land take alongside the road to provide additional vegetation screening.
- 1.3 The scope of the SMS excavation was defined in consultation with Stephen Reed, Senior Historic Environment Officer, Devon County Council Historic Environment Team (DCCHET). The excavation was carried out in accordance with a detailed Written Scheme of Investigation (WSI) produced by CA (2018a) and approved by Stephen Reed. The fieldwork also followed *Specification for Archaeological Excavation* (Devon County Council 2016), *Standard and guidance for archaeological excavation* (ClfA 2014), *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015) and *Management of Research Projects in the Historic Environment (MoRPHE): Project Manager's Guide* (Historic England 2015).
- 1.4 The fieldwork was monitored by Bill Horner (DCCHET), including a site visit on 12 June 2019.

The site

- 1.5 The site is situated some 1.75km south of West Buckland. It lies to the immediate north-west of the junction between the North Devon Link Road (the A361) and the road leading northwards to West Buckland.
- 1.6 The site as a whole encloses c. 2.77ha. At the time of the fieldwork it comprised the southern half of a pasture field. It is bounded by the A361 to the south, by the road to West Buckland to the east, and by further pasture/arable land to the north and west.
- 1.7 The underlying bedrock geology of the site is mapped as Pilton Mudstone Formation, which formed during the Devonian and Carboniferous periods. No superficial deposits are recorded at the site (BGS 2018).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The archaeological background of the site and the wider North Devon Link Road improvement scheme is detailed in a desk-based heritage assessment (CA 2018b).

The site has also been the subject of a geophysical survey (Stratascan 2018) and an archaeological trial trench evaluation (CA 2018c). The following text is summarised briefly from these sources, which should be referred to for a full background.

Prehistoric (pre-AD 43) and Roman (AD 43–AD 410)

- 2.2 There is only very limited evidence for prehistoric activity within the area, and no previously-known evidence for Roman activity.

Early medieval (AD 410–1066) and medieval (1066–1539)

- 2.3 There is no known evidence for early medieval activity in the vicinity of the site. The site is likely to have been in agricultural use during the medieval period.

Post-medieval (1540–1800) and modern (1801–present)

- 2.4 It is likely that the present field plan evolved from the enclosure of medieval agricultural fields. The tithe map for Chittlehampton (1840) records a number of field boundaries within the site which had been removed by the time of the later 19th century Ordnance Survey mapping.

- 2.5 The former route of the mid-19th century Devon and Somerset Railway is closely followed by the A361 (which runs along the southern boundary of the excavation site). The old railway cutting survives on the southern side of the road and it was considered possible that further associated remains may survive within the excavation site. Any such remains would be considered of low significance.

Geophysical survey

- 2.6 The geophysical survey recorded a series of linear anomalies running on a different alignment to the extant field system. It was considered possible that these represented part of an earlier, pre-medieval field system.

- 2.7 The survey also recorded anomalies associated with former field boundaries depicted on the 1840 tithe plan.

Archaeological evaluation

- 2.8 The evaluation recorded three ditches at the site, corresponding to linear anomalies detected by the geophysical survey. These ditches were undated artefactually. A single worked flint of possible Mesolithic or Neolithic date was recovered from one ditch, but the poor condition of this flint was consistent with re-deposition in a later feature. The ditches were on a different alignment to the extant field system; as such, it was considered likely that they represent elements within a pre-medieval field system.



3. AIMS AND OBJECTIVES

3.1 The general objectives of the archaeological SMS excavation were to:

- identify, investigate and record any significant buried archaeological deposits/features at the site prior to their destruction by the proposed development;
- recover and analyse any artefactual evidence;
- sample and analyse environmental remains to create a better understanding of past land use and economy; and
- archive, report on and publish the archaeological results at a level appropriate to their significance.

3.2 The specific aims of the archaeological SMS excavation were to further investigate the potential pre-medieval field system recorded by previous archaeological works at the site, and to ensure its preservation by record prior to its destruction by the proposed development.

4. METHODOLOGY

4.1 The programme of archaeological work comprised the SMS excavation of two areas (Areas 7 and 8; numbering continues from the previous evaluation trenches; CA 2018c). These areas measured c. 130m² and c. 2,360m², respectively (Fig. 2). The excavation areas were centred on the possible pre-medieval field system ditches recorded by the previous evaluation (Trenches 4 and 5; CA 2018c). The other possible field system ditch recorded by the evaluation (Trench 1) was outside of the development impact area and as such was not subject to further investigation.

4.2 The two excavation areas were set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with *CA Technical Manual 4: Survey Manual*. Topsoil and subsoil layers were stripped from the excavation areas by a mechanical excavator equipped with a toothless grading bucket. All machining was conducted under archaeological supervision and ceased when the natural substrate was revealed (which was the level at which significant archaeological features were first exposed). Where archaeological deposits were encountered, they were excavated by hand in accordance with *CA Technical Manual 1: Fieldwork Recording Manual*.

4.3 Deposits were assessed for their palaeoenvironmental potential and samples were taken in accordance with *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites* (see Section 6 and Appendix B).

4.4 As no artefactual material was recovered during the SMS excavation, no material archive will be prepared. A digital archive will be deposited with the Archaeology Data Service (ADS). A summary of information from this project, as set out in

Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain (OASIS ID: cotswold2-371212).

5. RESULTS

5.1 This section provides an overview of the evaluation results. Detailed summaries of the recorded contexts can be found in Appendix A. Details of the palaeoenvironmental evidence can be found in Section 6 and Appendix B. Figures 2 and 3 present plans of the excavation areas and the recorded archaeological features.

5.2 The natural substrate comprised yellow silty clay with outcrops of degraded siltstone and patches of bluish clay. It was exposed at a depth of 0.35m–0.5m below the present ground level. The natural substrate was sealed by 0.15m–0.25m of silty subsoil, which was sealed in turn by the modern topsoil.

5.3 All archaeological features were cut into the natural substrate and were sealed by the subsoil.

Area 7

5.4 Ditch C ran on a north-east/south-west alignment. It was exposed for a total length of 11.5m and extended beyond the limits of Area 7. It was 0.45m–0.5m wide and 0.2m deep (Fig. 5, Sec CC), with a single undated fill.

Area 8

5.5 Ditch A featured a 90° bend. Its northern arm was aligned north-east/south-west; its western arm was aligned north-west/south-east. This ditch was 0.95m–1.4 wide and 0.65m–0.75m deep (Fig. 5, Sec AA). It contained a sequence of up to five undated fills.

5.6 Ditch B continued the alignment of Ditch A's western arm, from which it was separated by c. 4.2m. Ditch B was 1.2m–1.55m wide and 0.47m–0.63m deep (Fig. 5, Sec BB). It contained a sequence of up to four fills. The fills were undated artefactually, but a radiocarbon date of c. AD 160–AD 210 (i.e. Early Roman period) was obtained from single fill 8049 in ditch terminus 8048 (see Appendix C).

5.7 Ditch A was truncated by three ditches, all of which were on broad north-east/south-west alignments. Ditch D was 0.82m wide and 0.42m deep, with a single undated fill (Fig. 6, Sec. DD). Ditch E was 0.65m wide and 0.06m–0.12m deep, with a single undated fill (Fig. 6, Sec EE.). Ditch E was intermittent due to truncation; its alignment crossed Ditch D, but the stratigraphic relationship between these two ditches was impossible to establish.

5.8 Ditch F was 0.4m wide and 0.07 deep, with a single undated fill (Fig. 6, Sec. FF). Again, this ditch was heavily truncated and its line was intermittent.

- 5.9 A total of eight pits were also recorded (e.g. Fig. 7, Secs. GG and HH). None of these pits yielded any artefactual material and their function was unclear. One pit (8030) was cut by ditch 8032 (which may have been the continuation of either Ditch E or Ditch F).

6. THE BIOLOGICAL EVIDENCE

- 6.1 Two samples from the undated fills of a ditch and a ditch terminus were investigated for wood charcoal, charred plant remains any plant material suitable for radiocarbon dating:

- Sample 1: context 8049 (cut 8048, Ditch B); and
- Sample 2: context 8058 (cut 8057, Ditch B).

- 6.2 The samples, contexts and plant remains are summarised in Appendix B. Sample 1 produced moderate amounts of wood charcoal, largely oak (*Quercus*) and a hazel (*Corylus avellana*) nut shell fragment. The wood charcoal from Sample 1 was fully identified, together with two small fragments from Sample 2. There were no other identifiable charred plant macrofossils in either sample. Material suitable for radiocarbon dating was extracted from Sample 1, including a hazel nut shell, and fragments of oak roundwood, alder/hazel (*Alnus glutinosa/Corylus avellana*), birch (*Betula*) and oak charcoal with bark attached. The plant remains are discussed below.

Methodology

- 6.3 The samples were processed by standard methods, with flots collected on sieves with mesh sizes of 1 mm and 0.25 mm, and the heavy residues, on 0.5 mm meshes. The flots, together with 0.5mm–2 mm residue fractions, were sorted for plant remains. The hazel nut shell fragment was easily recognisable. The wood charcoal was prepared and identified using methods and keys described in Hather (2000), Gale and Cutler (2000) and Schweingruber (1990), aided by a Leica GZ6 microscope (with x10–x40 magnifications) and Biolam-Metam P1 metallurgical microscope (up to x400 magnifications). Plant nomenclature follows Stace (2010).

Results

Wood charcoal

- 6.4 The seven tree and shrub taxa identified in the West Buckland samples (largely from Sample 1 from ditch 8048) are listed below. Full results, as fragment counts per sample, can be found in Appendix B.

Rosaceae	Subfamily Pomoideae – hawthorn group, includes <i>Crataegus</i> spp., hawthorn, <i>Malus</i> sp., apple, and <i>Sorbus</i> spp., rowan, whitebeam and/or wild service species
Fagaceae	<i>Quercus</i> spp., oak (<i>Q. robur</i> L., <i>Q. petraea</i> , or their hybrids),
Betulaceae	<i>Betula</i> , birch, <i>Alnus glutinosa</i> (L.) Gaertn., alder, <i>Corylus avellana</i> L., hazel, and <i>Alnus glutinosa/Corylus avellana</i> , alder/hazel
Oleaceae	<i>Fraxinus excelsior</i> L., ash

Aquifoliaceae *Ilex aquifolium* L., holly

Charred plant remains

- 6.5 As noted above, a single hazel (*Corylus avellana*) nut shell fragment was present in Sample 1, together with an indeterminate root/tuber fragment. A single, silt encrusted, unidentified seed was present in Sample 2, with another indeterminate root/tuber fragment.

Discussion

- 6.6 The charcoal remains from ditch 8048 (Sample 1) were very largely from oak, which included near equal quantities of heartwood and sapwood fragments, indicating that this was the main source of the fuel refuse dumped in the ditch. There was a little oak roundwood. Ring curvature was observed on some alder, birch and holly fragments, pointing to the presence of roundwood and/or immature timber in these taxa also. This material may have been collected together with the oak fuel(s), or may represent debris from different burning episodes that became mixed post-deposition. There were no additional charcoal taxa in from ditch 8057 (Sample 2), and little further can be said on the basis of just two fragments.
- 6.7 The wood charcoal remains from the West Buckland site generally represent mixed deciduous woodland (including oak, ash and hazel), with damper areas (supporting alder), and higher ground/areas of regenerating woodland (with birch). There is little published charcoal evidence from sites located close to the West Buckland site, but oak and hazel seem to be the main taxa present in assemblages from Devon and Cornwall, from the Neolithic to the Iron Age (Smith 2002). The other taxa from West Buckland are also fairly widespread in assemblages from sites across the region. The single Pomoideae fragment from West Buckland provides the only evidence for thorny scrub. The absence of remains of broom/gorse (*Cytisus/Ulex*) and heather/heath (*Calluna vulgaris/Erica* species) was also surprising, given the site's proximity to Exmoor. They are reasonably common elsewhere, in small to moderate quantities (Smith 2002).

7. DISCUSSION

- 7.1 The evaluation recorded a small number of ditches and pits. No artefactual material was present, but an Early Roman period radiocarbon date was obtained from one of the ditches.
- 7.2 There was a good correlation between the excavation results and the previous geophysical survey (Substrata 2018). All of the geophysical anomalies were found to correspond to below-ground archaeological features. Ditches D, E and F and the Area 8 pits had not been identified by the geophysical survey, presumably due to their generally shallow nature.

Early Roman (AD 43–AD 200)

- 7.3 The excavation recorded part of a rectilinear enclosure (Ditches A and B). This enclosure was aligned north-east/south-west–north/west/south-east (a different

alignment to the extant field system) and featured a 4.2m-wide opening in its southern side. A radiocarbon date of c. AD 160–AD 210 was obtained from single fill 8049 in ditch terminus 8048 (Ditch B).

- 7.4 The previous geophysical survey and evaluation results (Stratascan 2018; CA 2018c; see Fig. 2) indicate that this rectilinear enclosure system continues north-westwards within the site, where it was picked up in evaluation Trench 1. These ditches apparently represent an Early Roman period field system. The wood charcoal recovered from Ditch B (see Section 6) represents waste from burning episodes, but the nature of the burning (e.g. a domestic hearth, industrial waste, etc.) cannot be determined. The lack of artefactual material within these ditches suggests that the associated settlement was at some remove from the site.
- 7.5 Ditch A was cut across by three shallow ditches (Ditches D, E and F). Of these, Ditch D was on a broadly similar alignment to the Roman period enclosures, and may represent a later Roman period feature.
- 7.6 The only Roman period sites recorded by the Devon Historic Environment Record (HER) within the broad vicinity of the West Buckland site are at Brayford, which is c. 6km north-east of the present site. The HER notes the discovery of several Roman ironworking slag sites at Brayford (e.g. HER Numbers MDV62571, MDV64014, MDV80037), and archaeological works in the grounds of Brayford School (HER Number MDV106016) recorded part of a Roman period enclosure, as well as apparently associated ditches and a spread of iron smelting debris. Radiocarbon dates of c. AD 75–AD 225 were obtained at Brayford School, indicating that the activity at Brayford was broadly contemporary with that at the present site.

Undated

- 7.7 A total of eight pits were recorded in the vicinity of the Early Roman period enclosure. These were all undated, and it is uncertain if they are associated with the Early Roman field system. One pit (8030) was cut by ditch 8032 (Ditch E/Ditch F; see below).
- 7.8 Ditch C was undated artefactually. The relatively substantial nature of this ditch suggests that it is a boundary feature, but it was on a different alignment to both the extant field system and the Early Roman period system. No corresponding field boundaries are visible on 19th and 20th century mapping. The provenance of this feature is uncertain.
- 7.9 Ditches E and F cut across the Early Roman period enclosure and one of the undated pits. These shallow ditches were on different alignments to both the Roman features and the extant field system (and to each other). Their provenance is unclear.



8. CA PROJECT TEAM

- 8.1 Fieldwork was undertaken by Jonathan Orellana, assisted by Jake Godfrey, Tim Brown and Parris Stubbings. This report was written by Jonathan Orellana. The biological evidence report was written by Sheila Boardman. The report illustrations were prepared by Aleksandra Osinska. The project archive has been compiled and prepared for deposition by Hazel O'Neill. The project was managed for CA by Derek Evans.

9. REFERENCES

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- Stratascan 2018 *An archaeological magnetometer survey: Land at West Buckland junction, A361, Devon*

APPENDIX A: CONTEXT DESCRIPTIONS

Area	Context No.	Type	Fill of	Context interpretation	Description	Length (m)	Width (m)	Depth/thickness (m)	Feature label
7	7000	Layer		topsoil	mid greyish brown silty clay			0.22	
7	7001	Layer		subsoil	mid reddish brown silty clay			0.26	
7	7002	Layer		natural substrate	light yellowish grey silty clay with frequent stones				
7	7003	Cut		ditch	NE/SW orientated, moderate sloping sides and concave base		0.43	0.2	Ditch C
7	7004	Fill	7003	single fill of ditch	mid reddish brown silty clay		0.43	0.2	Ditch C
7	7005	Cut		ditch	NE/SW orientated, moderate sloping sides and concave base		0.48	0.2	Ditch C
7	7006	Fill	7005	single fill of ditch	mid reddish brown silty clay		0.48	0.2	Ditch C
8	8000	Layer		topsoil	mid greyish brown silty clay			0.3	
8	8001	Layer		subsoil	mid reddish brown silty clay			0.15	
8	8002	Layer		natural substrate	light yellowish silty clay with outcrops of degraded siltstone and patches of bluish clay				
8	8003	Cut		ditch	NE/SW orientated, steep sides, V-shaped profile and concave base		1.3	0.75	Ditch A
8	8004	Fill	8003	1st fill of ditch	mid grey silty clay		0.56	0.24	Ditch A
8	8005	Fill	8003	2nd fill of ditch	mid yellowish grey sandy clay		0.88	0.36	Ditch A
8	8006	Fill	8003	3rd fill of ditch	light brownish grey silty clay		1.08	0.37	Ditch A
8	8007	Fill	8003	4th fill of ditch	light whitish grey silty clay		1.28	0.18	Ditch A
8	8008	Fill	8003	5th fill of ditch	dark blackish brown sandy silt		1.28	0.08	Ditch A
8	8009	Cut		ditch	NE/SW orientated, steep sides and flat base		0.82	0.42	Ditch D
8	8010	Fill	8009	single fill of ditch	light grey silty clay		0.82	0.42	Ditch D
8	8011	Cut		pit	sub-oval in plan, steep sides and flat base		1.05	0.33	
8	8012	Fill	8011	single fill of pit	mid grey silty clay		1.05	0.33	
8	8013	Cut		ditch	NW/SE orientated, steep side, base not reached		1.2	>0.35	Ditch A
8	8014	Fill	8013	1st fill of ditch	light whitish grey silty clay		1.2	0.17	Ditch A
8	8015	Fill	8013	2nd fill of ditch	mid greyish brown silty clay		1.2	0.17	Ditch A
8	8016	Cut		ditch	NE/SW orientated, steep side and concave base		0.8	0.36	Ditch D
8	8017	Fill	8016	single fill of ditch	mid greyish brown clayey silt		0.8	0.36	Ditch D
8	8018	Cut		ditch	NW/SE orientated, steep sides, V-shaped profile and concave base		1	0.65	Ditch A
8	8019	Fill	8018	1st fill of ditch	mid brownish grey silty clay		0.86	0.43	Ditch A
8	8020	Fill	8018	2nd fill of ditch	dark greyish brown clayey silt		1	0.33	Ditch A
8	8021	Cut		ditch	NE/SW orientated, moderate sloping sides and flat base		0.6	0.06	Ditch E
8	8022	Fill	8021	single fill of ditch	mid grey silty clay		0.6	0.06	Ditch E
8	8023	Cut		ditch	NE/SW orientated, moderate sloping sides and flat base		>0.27	0.25	Ditch E
8	8024	Fill	8021	single fill of ditch	mid grey silty clay		>0.27	0.25	Ditch E
8	8025	Cut		ditch	NW/SE orientated, steep side, base not reached		>0.45	>0.2	Ditch A

Area	Context No.	Type	Fill of	Context interpretation	Description	Length (m)	Width (m)	Depth/thickness (m)	Feature label
8	8026	Fill	8025	1st fill of ditch	light grey silty clay		>0.45	0.13	Ditch A
8	8027	Fill	8025	2nd fill of ditch	dark brownish grey silty clay		>0.45	0.08	Ditch A
8	8028	Cut		ditch	NE/SW orientated, moderate sloping sides and concave base		0.4	0.07	Ditch F
8	8029	Fill	8028	single fill of ditch	mid greyish brown silty clay		0.4	0.07	Ditch F
8	8030	Cut		pit	elongated in plan, steep sides and flat base		>0.46	0.11	
8	8031	Fill	8030	single fill of pit	mid greyish brown silty clay		>0.46	0.11	
8	8032	Cut		ditch	NE/SW orientated, moderate sloping sides and concave base		0.67	0.12	Ditch E
8	8033	Fill	8032	single fill of ditch	mid greyish brown silty clay		0.67	0.12	Ditch E
8	8034	Cut		pit	oval in plan, moderate sloping sides and concave base	0.36	0.32	0.09	
8	8035	Fill	8034	single fill of pit	dark brown silty clay	0.36	0.32	0.09	
8	8036	Cut		pit	circular in plan, steep sides and flat base	0.72	0.72	0.26	
8	8037	Fill	8036	single fill of pit	mid grey silty clay	0.72	0.72	0.26	
8	8038	Cut		pit	sub-oval in plan, moderate sloping sides and concave base	1.58	0.8	0.34	
8	8039	Fill	8038	single fill of pit	mid brown silty clay	1.58	0.88	0.34	
8	8040	Cut		pit	sub-circular in plan, steep sides and flat base	0.68	0.56	0.15	
8	8041	Fill	8040	single fill of pit	mid greyish brown clayey silt	0.68	0.56	0.15	
8	8042	Cut		pit	circular in plan, steep sides and uneven base	0.36	0.36	0.14	
8	8043	Fill	8042	single fill of pit	dark blackish brown silty clay	0.36	0.36	0.14	
8	8044	Cut		ditch	NE/SW orientated, moderate sloping sides and concave base		0.38	0.07	Ditch E
8	8045	Fill	8044	single fill of ditch	mid brownish grey silty clay		0.38	0.07	Ditch E
8	8046	Cut		ditch	NE/SW orientated, steep side, base not reached		0.6	>0.3	Ditch D
8	8047	Fill	8046	single fill of ditch	mid greyish brown silty clay		0.6	>0.3	Ditch D
8	8048	Cut		ditch terminus	NW/SE orientated, moderate sloping sides and concave base		1.25	0.23	Ditch B
8	8049	Fill	8048	single fill of ditch	mid yellowish brown silty clay		1.25	0.23	Ditch B
8	8050	Cut		ditch terminus	NW/SE orientated, moderate sloping sides and flat base		1.45	0.19	Ditch A
8	8051	Fill	8050	single fill of ditch	mid yellowish grey silty clay		1.45	0.19	Ditch A
8	8052	Cut		ditch terminus	NE/SW orientated, moderate sloping sides and flat base		0.5	0.07	Ditch F
8	8053	Fill	8052	single fill of ditch	mid grey silty clay		0.5	0.07	Ditch F
8	8054	Cut		pit	circular in plan, moderate sloping sides and concave base	0.57	0.57	0.08	
8	8055	Fill	8054	1st fill of pit	dark blackish brown silty clay	0.27	>0.3	0.03	
8	8056	Fill	8054	2nd fill of pit	mid greyish brown silty clay	0.57	0.57	0.08	
8	8057	Cut		ditch	NW/SE orientated, moderate sloping sides and concave base		1.5	0.47	Ditch B
8	8058	Fill	8057	1st fill of ditch	light greyish brown silty clay		0.58	0.17	Ditch B
8	8059	Fill	8057	2nd fill of ditch	mid greyish yellow silty clay		1.16	0.36	Ditch B

Area	Context No.	Type	Fill of	Context interpretation	Description	Length (m)	Width (m)	Depth/thickness (m)	Feature label
8	8060	Fill	8057	3rd fill of ditch	light brownish grey silty clay		1.12	0.24	Ditch B
8	8061	Fill	8057	4th fill of ditch	dark greyish brown silty clay		0.35	0.08	Ditch B
8	8062	Cut		pit	sub-oval in plan, moderate sloping sides and concave base		0.3	0.08	
8	8063	Fill	8062	single fill of pit	mid brown silty clay		0.3	0.08	
8	8064	Cut		ditch	NW/SE orientated, steep sides and flat base		1.35	0.63	Ditch B
8	8065	Fill	8064	1st fill of ditch	mid reddish brown silty clay		1.35	0.63	Ditch B
8	8066	Fill	8064	2nd fill of ditch	mid greyish brown silty clay		0.88	0.35	Ditch B
8	8067	Fill	8064	3rd fill of ditch	mid reddish brown silty clay		0.77	0.15	Ditch B

APPENDIX B: THE PALAEOENVIRONMENTAL EVIDENCE

Feature Type	Cut	Context	Sample	Vol (L)	Flot size (ml)	Roots %	Grain	Chaff	Charred Other	Charcoal > 2mm
ditch	8048	8049	1	30	c.40	30	0	0	Hazel nut shell, root/tuber	100F+
ditch terminus	8057	8058	2	30	c.20	50	0	0	Unid. seed; root/tuber	2F

Table B1: Sample data

Feature type		Ditch	Ditch terminus
Cut No.		8048	8057
Context No.		8049	8058
Sample No.		1	2
Soil volume (litres)		30	30
Rosaceae			
Pomoideae	hawthorn group (see below *)	1	-
Fagaceae			
<i>Quercus</i>	oak	83hrs	1
Betulaceae			
<i>Betula</i>	birch	3r	-
<i>Alnus glutinosa</i> (L.) Gaertn.	alder	4	-
<i>Corylus avellana</i> L.	hazel	1	1
<i>Alnus glutinosal Corylus avellana</i>	alder/hazel	2	-
Oleaceae			
<i>Fraxinus excelsior</i> L.	ash	1	-
cf. <i>Fraxinus excelsior</i>	cf. ash	1	-
Aquifoliaceae			
<i>Ilex aquifolium</i> L.	holly	2r	-
cf. <i>Ilex aquifolium</i>	cf. holly	1	-
Indeterminate charcoal		5b	-
Total fragments		104	2
KEY: Counts include: h - heartwood; s - sapwood; r - roundwood; b- bark. *Pomoideae may be: from: <i>Malus</i> (apple), <i>Crataegus</i> (hawthorn) or <i>Sorbus</i> (rowan, service, whitebeam).			

Table B2: Charcoal identifications

Feature type		Ditch fill	Ditch terminus
Cut No.		8048	8057
Context No.		8049	8058
Sample No.		1	2
Soil volume (litres)		30	30
<i>Corylus avellana</i> L.	hazel, nut shell fragment	1	-
Indeterminate	seed	-	1
Indeterminate	root/tuber fragment	1	1

Table B3: Plant remains identifications

APPENDIX C: RADIOCARBON DATING

Radiocarbon dating was undertaken in order to confirm the date of fill 8049 of ditch 8048 (Ditch B). The sample was analysed during August/September 2019 at Scottish Universities Environmental Research Centre (SUERC), Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow, G75 0QF, Scotland. The methodology employed by SUERC Radiocarbon Laboratory is outlined in Dunbar *et al.* (2016).

The uncalibrated dates are conventional radiocarbon ages. The radiocarbon ages were calibrated using the University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.3.2 (2017) (Bronk Ramsey 2017) using the IntCal13 curve (Reimer *et al.* 2013).

The radiocarbon dating certificate follows overleaf.

Feature	Lab No.	Material	Radiocarbon age	$\delta^{13}\text{C}$	Calibrated radiocarbon age 95.4% confidence	Calibrated radiocarbon age 68.2% confidence
Context 8049 Feature 8048	SUERC 89053	Oak (<i>Quercus</i>) roundwood frag with pith and bark	1765± 25r BP	-24.7‰	145-150 cal AD (0.3%) 170-194 cal AD (2.0%) 211-350 cal AD (92.4%) 369-378 cal AD (0.6%)	239-260 cal AD (21.9%) 280-325 cal AD (46.3%)

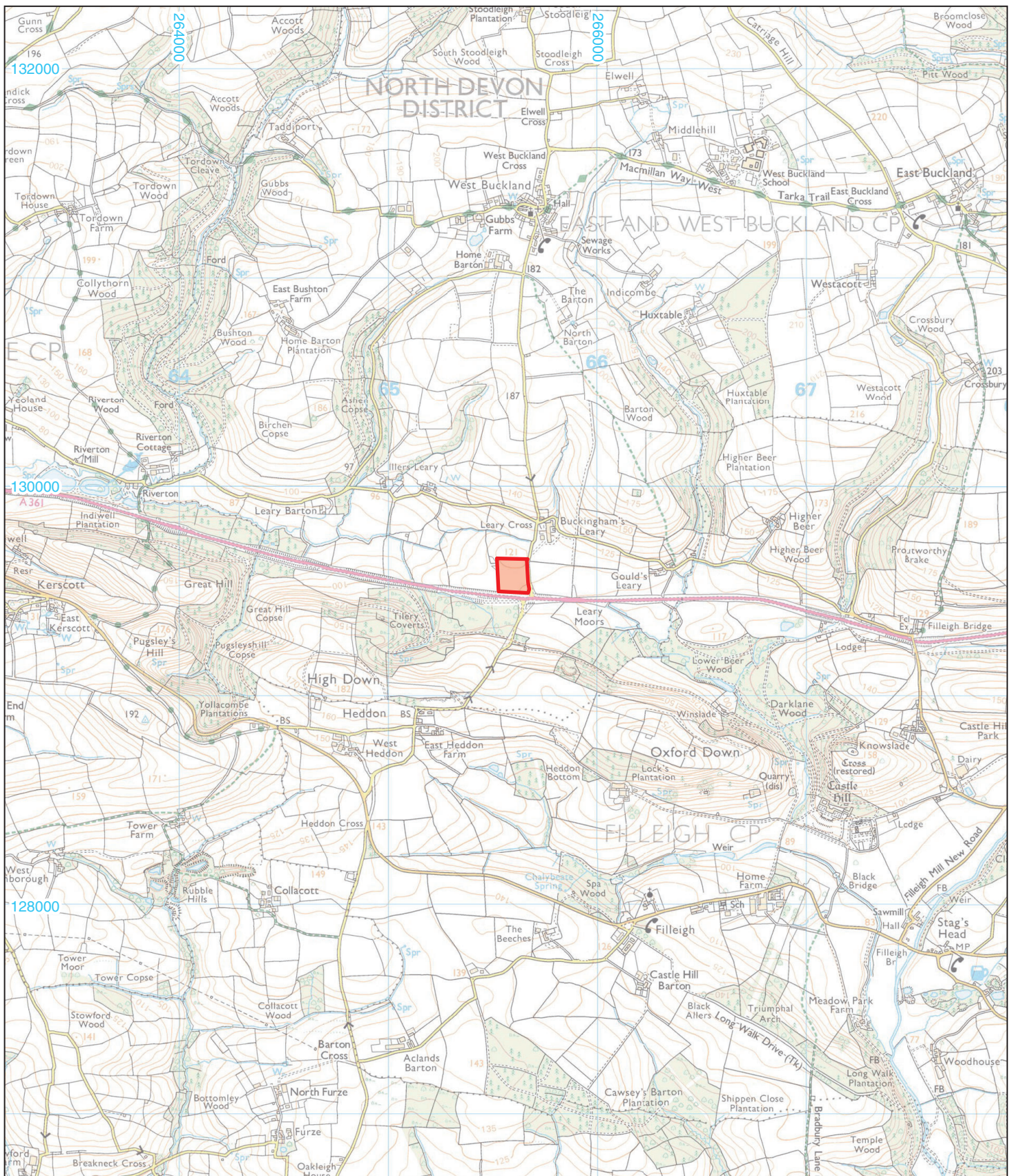
Table C1: Radiocarbon dating results

References

- Bronk Ramsey, C. 2009 'Bayesian analysis of radiocarbon dates', *Radiocarbon* **51 (1)**, 337–360
- Dunbar, E., Cook, G.T., Naysmith, P., Tripney, B.G., Xu, S. 2016 'AMS 14C dating at the Scottish Universities Environmental Research Centre (SUERC)', *Radiocarbon* **58 (1)**, 9–23
- Reimer, P.J., Bard, E., Bayliss, A., Beck, J.W., Blackwell, P.G., Bronk Ramsey, C., Grootes, P.M., Guilderson, T.P., Hafliðason, H., Hajdas, I., HattĹ, C., Heaton, T.J., Hoffmann, D.L., Hogg, A.G., Hughen, K.A., Kaiser, K.F., Kromer, B., Manning, S.W., Niu, M., Reimer, R.W., Richards, D.A., Scott, E.M., Southon, J.R., Staff, R.A., Turney, C.S.M., & van der Plicht, J. 2013 'IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP', *Radiocarbon* **55 (4)**, 1869–1887

APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS		
Project name	Land at West Buckland Junction, A361, Devon	
Short description	<p>In June 2019, Cotswold Archaeology undertook an archaeological strip, map and sample excavation on land adjacent to the A361 West Buckland Junction, Devon. Two excavation areas with a combined area of 2,490 m² were excavated within the site. These areas were targeted upon features identified during a previous geophysical survey and trial trench evaluation.</p> <p>The excavation recorded part of a rectilinear enclosure. No artefactual material was present, but an Early Roman radiocarbon date was obtained. The previous geophysical survey and evaluation results indicate that this rectilinear enclosure system continues north-westwards within the site, apparently forming a field system.</p> <p>Also recorded were a small number of undated ditches and pits. The undated ditches were mainly on different alignments to both the Roman enclosure and the extant field system. Their provenance is unclear.</p>	
Project dates	5–13 June 2019	
Project type	SMS excavation	
Previous work	DBA (CA 2018) Geophysical Survey (Stratascan 2018) Evaluation (CA 2018)	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Land at West Buckland Junction, A361, Devon	
Study area (m ² /ha)	c. 2.77ha	
Site co-ordinates	265602 129582	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	N/A	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Derek Evans	
Project Supervisor	Jonathan Orellana	
MONUMENT TYPE	Roman field system	
SIGNIFICANT FINDS	None	
PROJECT ARCHIVES		
	Intended final location of archive	Content
Physical	N/A	N/A
Paper	N/A	N/A
Digital	Archaeology Data Service (ADS)	Born-digital data (photographs, survey data); digital copies (scans) of all other relevant written and drawn data
BIBLIOGRAPHY		
Cotswold Archaeology 2019 <i>Land at West Buckland Junction, A361, Devon: Archaeological SMS Excavation</i> CA typescript report EX0038_1		



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PROJECT TITLE

Land at West Buckland Junction, A361, Devon

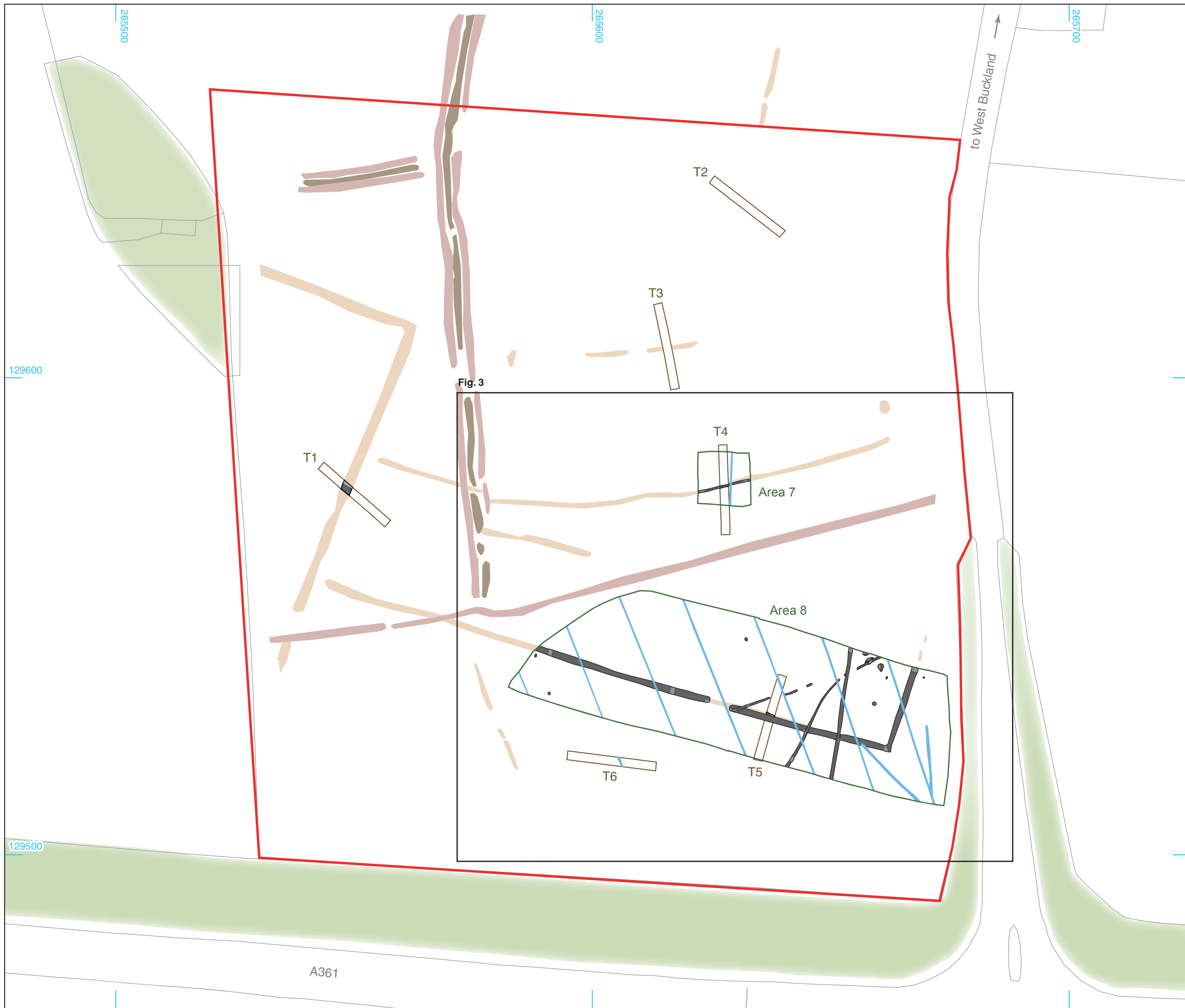
FIGURE TITLE

Site location plan



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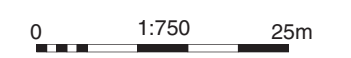
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- Site boundary
- Excavation area
- Evaluation trench (CA 2018)
- Archaeological feature (excavated/unexcavated)
- Field drain

Geophysical Survey Results by Substrata, 2018

- Potential archaeology:
- likely, positive
 - likely, negative
 - possible, positive



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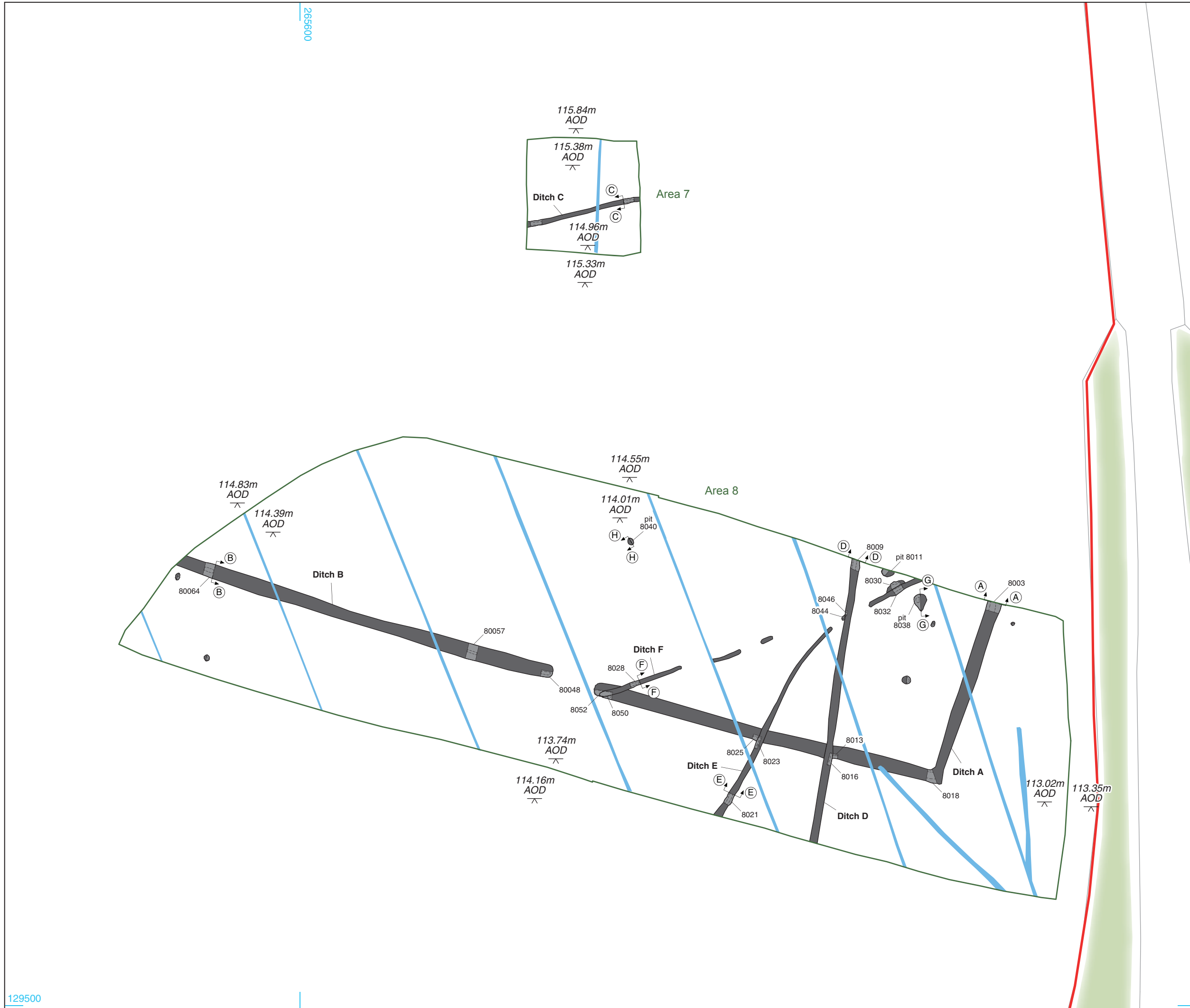
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PROJECT TITLE
Land at West Buckland Junction, A361, Devon

FIGURE TITLE
The site, showing archaeological features, excavation areas, geophysical survey results and previous evaluation trenches

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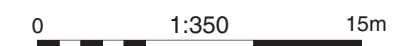


265600

129500



- Site boundary
- Excavation area
- Archaeological feature (excavated/unexcavated)
- Base of feature
- Field drain
- A ↑ ↓ Section location



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PROJECT TITLE
 Land at West Buckland Junction, A361, Devon

FIGURE TITLE
 Excavation areas, showing archaeological features

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General view of Area 8, looking north-east



General view of Area 7, looking west (1m scale)



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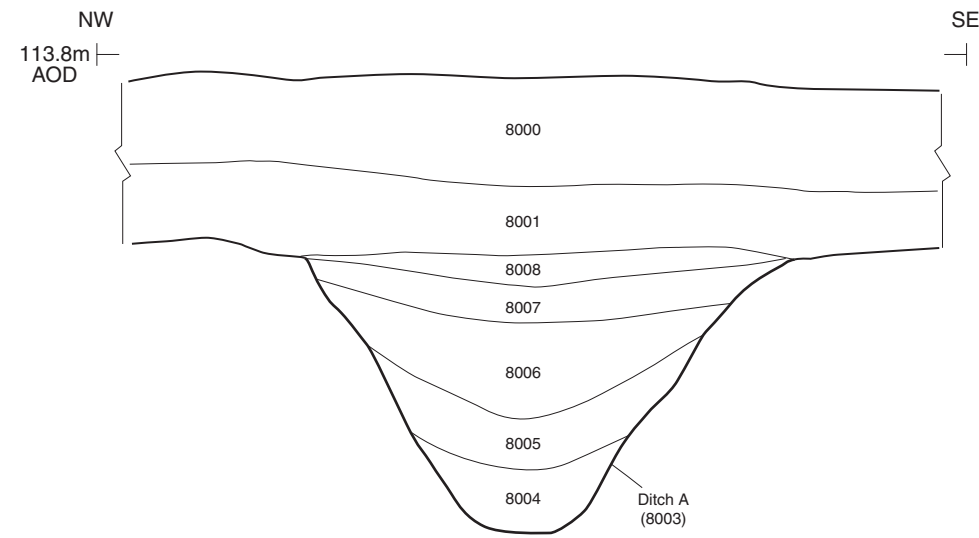
Land at West Buckland Junction, A361,
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FIGURE TITLE

Photographs

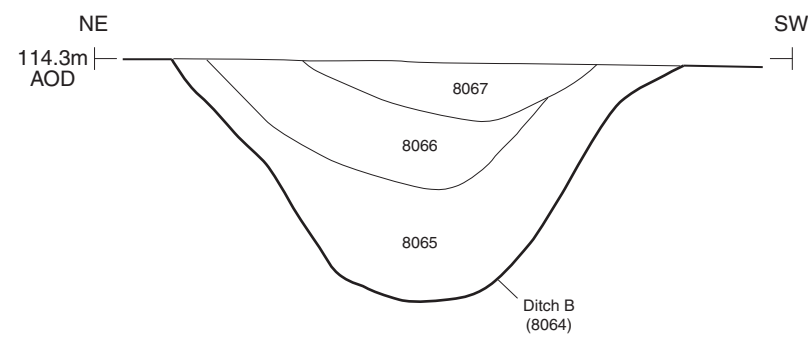
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Section AA



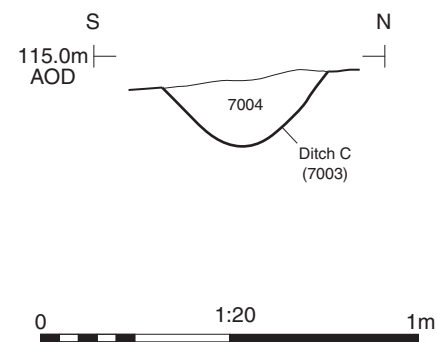
Ditch A, looking north-east (1m scale)

Section BB



Ditch B, looking south-east (1m scale)

Section CC



Ditch C, looking south-west (0.3m scale)

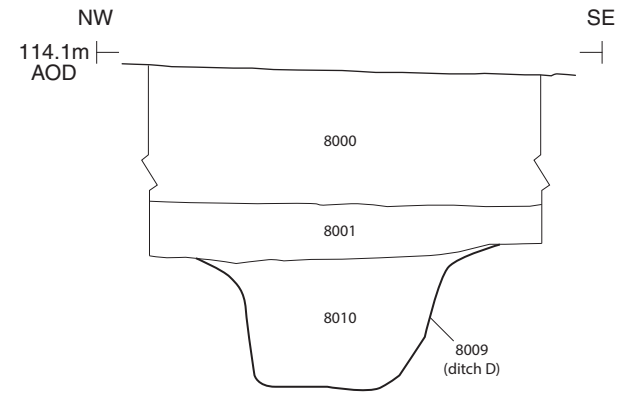

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PROJECT TITLE
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FIGURE TITLE
 Sections and photographs

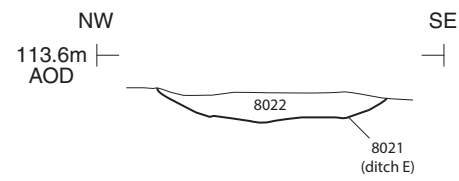
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Section DD



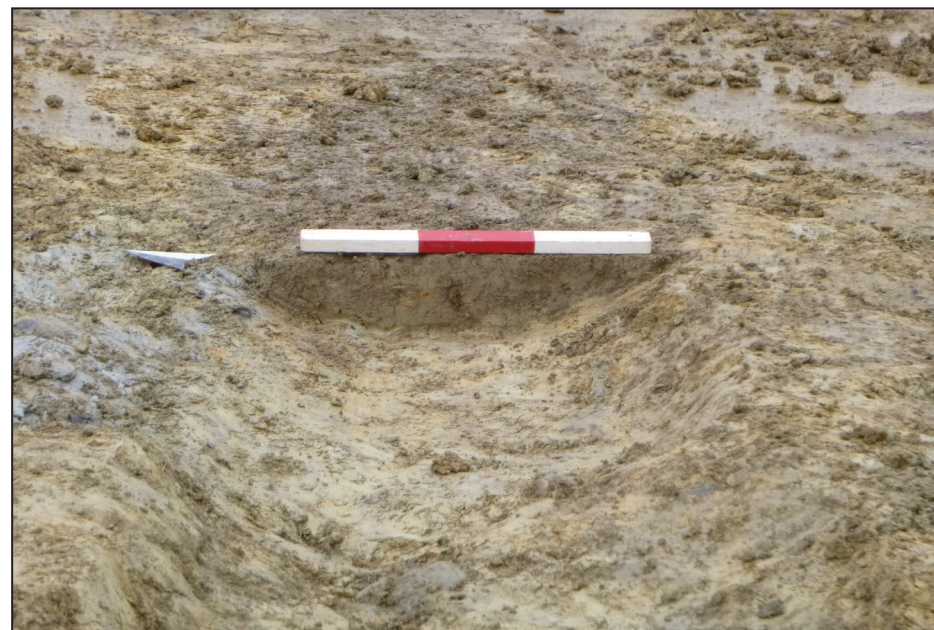
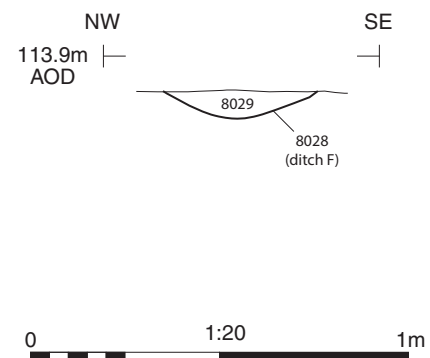
Ditch D, looking north-east (1m scale)

Section EE



Ditch E, looking north-east (0.4m scale)

Section FF



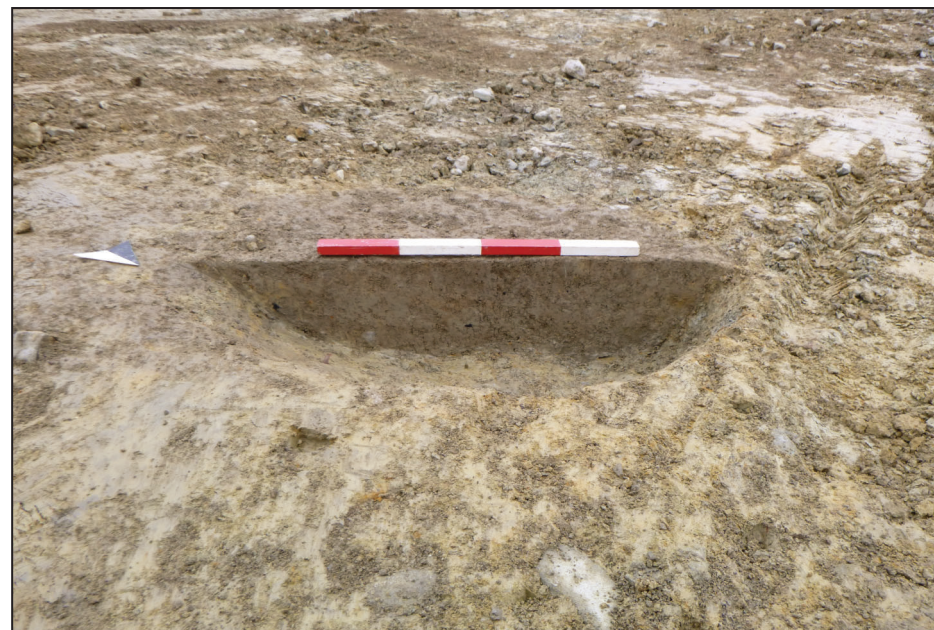
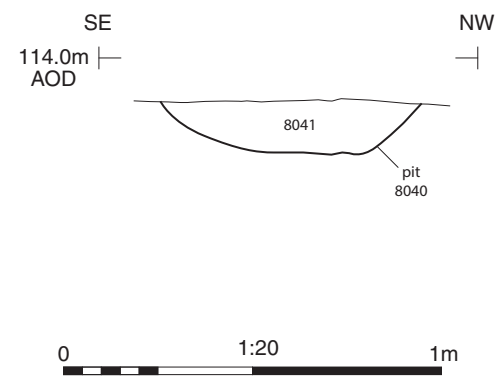
Ditch F, looking north-east (0.3m scale)

Section GG



Pit 8038, looking east (1m scale)

Section HH



Pit 8040, looking south-west (0.4m scale)

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PROJECT TITLE
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FIGURE TITLE
Sections and photographs

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