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Bronze Age Fields in Suffolk: a Preliminary Survey

By TOM WOOLHOUSE

Farming developed in Britain during the Neolithic period but across much of England the earliest good archaeological evidence for fields and enclosures in which crops were grown and livestock kept dates from the Middle Bronze Age, c. *1600/1500* BC. *While these Bronze Age sub-divided agricultural landscapes are widespread across southern and eastern England, Suffolk and Norfolk were, until recently, essentially a 'blank' in their distribution. Over the last 15 years an increasing number of such field systems have been excavated, particularly in Norfolk, and some have started to appear in print. This article adds to this developing picture by briefly describing parts of seven additional Bronze Age – and probable Bronze Age – field systems that have been investigated through recent development-led excavation in south-east Suffolk. Currently published and unpublished evidence from elsewhere in the county is also considered, with the aims of identifying how widespread such land divisions were and establishing the current state of knowledge regarding the location, date, development, layout, and agricultural function of Bronze Age fields in the county. Some of the implications are of wider interest for understanding Bronze Age landscape organisation and land use in lowland England.*

Keywords: Bronze Age, Suffolk, East Anglia, field system, sub-divided landscape, co-axial

Although crops had been cultivated and domestic livestock kept since the beginning of farming in Britain during the Neolithic, there is almost no archaeological evidence for the plots in which these crops were grown, or for enclosures for holding stock (Entwistle & Grant 1989, 208; Barrett 1994a, 143–5; 1994b, 84–5; Brück 1999a, 67; Pollard 1999, 77; Thomas 1999, 8–11, 25; Yates 2001, 65; Martin 2008, 7). It seems plausible that small-scale cultivation took place in clearings without physical boundaries, which might have been untended for parts of the year and perhaps abandoned after a few seasons; animals could have grazed over open pasture and people may have moved with them periodically or seasonally. Semi-mobility would help to explain the general scarcity of evidence, at least in southern Britain, for permanent houses or settlements in the Neolithic and Early Bronze Age (Barrett 1994a, 147; Whittle 1997; Brück 1999a; 2019, 118–24; Pollard 1999; 2001, 323; Thomas 1999, 9–11).

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However, this model is undoubtedly too simplistic. For one, impressions of 'nomadic pastoralists' (eg, Healy 1984, 118) are partly a product of low population density and archaeological visibility. More Neolithic and Early Bronze Age house structures are being found, including in East Anglia (eg, Evans 2009a, 66; Bradley 2019, 184–7). Environmental and experimental data show that cleared land could have remained in cultivation for considerable periods, opening the way to more sedentary agriculture and longer-lived settlements (English 2013, 137). Rather than necessarily reflecting impermanence of land plots, the lack of use of earthwork boundaries to define them probably betokens a fundamentally different outlook on land tenure – with rights of access to landed resources vested in wider communities and people/land relationships perhaps being expressed in the 'permanence of monuments rather than areas of food production' (English 2013, 2). By extension, although the earliest stages of landscape sub-division and genesis of individual field systems are usually extremely difficult to pin down and date, there is frequently a sense that ditches and other earthwork boundaries simply gave physical form to established patterns of land use and tenure that were already there

in the Early Bronze Age and perhaps before (Pryor 1998, 84–5, 142–3, 145; 2001, 407–8; Johnston 2005; Fleming 2008, 59–60, 196–8; Lambrick 2009, 74; Leivers 2010, 143; Knight & Brudenell 2020, 206, 210; Green & Gosden 2021, 221).

Nevertheless, the Middle Bronze Age (from *c*. 1600/1500 BC or a little earlier) saw the emergence of the first clearly sub-divided agricultural landscapes, or 'fields', in southern Britain (Barrett 1994b, 83–4). Perhaps the best known are the co-axial land divisions called 'reaves' on Dartmoor (Fleming 1978; 1983; 1988; 2008) and the 'Celtic fields' of the Wessex chalk downland (Bowen 1961; Bonney 1978; Fowler 2000; Field 2001; McOmish *et al.* 2002, 51–6; Yates 2007, 108). Similar Bronze Age field systems extend eastwards into Hampshire, Surrey, and Sussex (English 2013), and both cropmark and excavated examples are particularly extensive along the Thames Valley and at the confluences with its major tributaries (Yates 1999; 2001; 2007; Bradley & Yates 2007).

The archaeological evidence for early fields in East Anglia was summarised by Edward Martin in 2008. In eastern England sub-divided landscapes of rectilinear enclosures, sometimes incorporating droveways and first laid out in the Bronze Age, have been extensively excavated around the western edge of the Cambridgeshire Fens, most famously at Fengate (Pryor 1980, 23–87, 169–89; 1991, 58–9; 1998, 89–91; 2001; Evans 2009a, 42–66; 2009b, especially 242, fig. 6.1). Similar Bronze Age co-axial systems have been investigated along the western Fen edge at locations including Borough Fen, Earith, Eye, Fen Drayton, Needingworth, Over, Sutton, West Deeping, Welland Bank, and Whittlesey, mainly where the region's major rivers, the Great Ouse, Nene and Welland, emerge into the Fens (Pryor 1998, 109–13; 2002; Malim 2001, 15–17; Evans & Knight 2000; 2001; Yates 2007, 83–100; Evans 2009a, 42–66; Evans *et al* 2016; 2013; Knight & Brudenell 2020, 141–219). Similar evidence for Bronze Age field systems is now known from south/east Cambridgeshire, notably the Cam Valley (eg, Yates 2007, 97–8; Phillips & Mortimer 2012). In the south of the region, the Thames Valley, including south Essex, saw the emergence in the Middle Bronze Age of field systems similar in character to those in the Fens. By the Late Bronze Age there was a series of 'bounded landscapes' forming 'distinct enclaves' along the river valley and estuary, probably associated with livestock and usually of co-axial form (Yates 1999; 2001; 2007; Bradley & Yates 2007). The evidence for Bronze Age land division seen along the north side of the Thames Estuary at sites including South Hornchurch, Mucking, and North Shoebury continues up the Essex coast, notably around the lower Blackwater and Tendring peninsula (Guttman & Last 2000; Etté 1993; Evans *et al.* 2016, 99–105; Wymer & Brown 1995, 20–33; Yates 2007, 73–80, 110).

By contrast, the evidence for Bronze Age fields in Suffolk and Norfolk was, at least until recently, extremely limited. Mechthild Klamm's inclusion of Suffolk and Norfolk in her 1993 distribution of later prehistoric fields in north-west Europe was based on the undated relict co-axial landscapes that have been identified in parts of northern East Anglia through landscape survey and map regression (eg, Williamson 1987), rather than excavated evidence (Klamm 1993, 132–8, fig. 1). More recently, David Yates, in his systematic survey of the evidence for Bronze Age field systems across southern England (2007, 80), wrote of Suffolk:

'The paucity of dateable land blocks in this area is a surprise. Logic would suggest that the Orwell–Gipping–Lark routeway … would have formal land divisions to accompany the density of metalwork finds near this part of the coast. The reduction in evidence in Suffolk gets progressively worse as we move north'.

In the same vein, 'Norfolk appears at first sight to be devoid of any datable late second/early first millennium BC land divisions' (Yates 2007, 80). The 2011 iteration of the regional archaeological research agenda also highlighted the almost complete absence of evidence for Bronze Age field systems north of the river Stour and east of the Fens (Medlycott 2011, 20). Subsequently, the important publication of a radiocarbon dated Middle Bronze Age enclosure with underlying field system at Ormesby St Michael has started to address the lacuna in Norfolk (Gilmour *et al.* 2014). Furthermore, the evidence for Bronze Age fields across the 'eastern region' has expanded dramatically in the last 15 years or so through the sheer scale of development-led archaeological work being carried out. A recent review of the current state of knowledge regarding the region's Bronze Age notes that Middle Bronze Age land boundaries, fields, and droveways have now been identified across Norfolk and Suffolk, though most of the sites mentioned there are yet to appear in print (Cooper 2018, 4–5). Some of

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Fig. 1.
Locations of the sites

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this important, as yet unpublished, evidence is discussed later in this article.

Nevertheless, at present, the only published examples of Bronze Age field systems in Suffolk are the Middle–Late Bronze Age sub-divided landscape and associated occupation at Game Farm, Brandon, in the valley of the river Little Ouse, in the north-west of the county (Gibson 2004), and a recently published small area of rectilinear field system at Aldeburgh Road, Leiston, near the coast; proximity to two radiocarbon dated settlement enclosures on an adjacent site supports a Middle Bronze Age date (King 2023; Clarke 2023). Slight evidence from a small excavation at Easton, in the Deben Valley (Woolhouse 2020), is summarised again in this article, while the recent publication of an extensive early rectilinear field system at Flixton Park Quarry, in the river Waveney Valley, considers the possibility of Middle Bronze Age origins (Boulter 2022, 63–6, 149–51). Elements of early field systems excavated in the 1980s/early 1990s at Sutton Hoo, beside the river Deben, were claimed as Early Bronze Age (Copp 1989; Hummler 1993; 2005, 391–416; Carver 1998, 94–100) but it now seems that much of the system visible as cropmarks is Iron Age or Roman (Martin 2008, 9). While the possibility of Early Bronze Age origins remains, there must be a suspicion that the associated finds were residual from the site's Beaker period occupation, especially considering the current scarcity of good evidence for ditched land divisions that early elsewhere in the country (Evans 2009b, 252–6; Cooper 2018, 8).

This paper begins to address this gap in the known distribution of Bronze Age field systems by briefly describing the results of seven development-led excavations in south-east Suffolk where parts of such landscapes have been investigated (Fig. 1). The results of the excavations cannot be more than sketched within the confines of this article, hence readers are referred to the 'grey' report on each site (see Table 1), available at Suffolk Historic Environment Record (SHER) or downloadable from the Archaeology Data Service website <https://www.archaeologydataservice.ac.uk/>, for full details. Summaries highlighting the key relevant evidence from each site, as well as recapping the previously published results from Game Farm, Brandon, Aldeburgh Road, Leiston, and Flixton Park Quarry, are included here as supplementary material. The site archives have been deposited at the Suffolk County Council Archaeological Archive.

TABLE 1. THE SITES

Site name	*Suffolk parish code*	*Event no.*	*Central NGR: TM*	*Area excavated (ha)*	*Reports (published in italic)*
Slough Road, Brantham	BNT 102	–	1062 3449	1.9	Pullen *et al.* 2024
Thurmans Lane, Trimley St Mary	TYY 068	ESF24151	2789 3687	1.75	Jackson 2017
Felixstowe Academy	FEX 281	–	2895 3568	1.4	Woolhouse 2013; Woolhouse & Hinman 2014 (& see Carvey 2018)
Ipswich Academy	IPS 676	ESF25087	1871 4174	1.37	Stump & Hinman 2013; Stump & Woolhouse 2013
Ravenswood Area 'T'	IPS 756	ESF22985	1896 4131	0.73	Jones 2015
Main Road, Martlesham	MRM 157, MRM 162	ESF22366, 23249	2474 4633	1.5	Woolhouse 2016
The Street, Easton	ETN 023	ESF24705	2873 5841	0.45	Woolhouse 2018; *2020*
Aldeburgh Road, Leiston	LCS 175	ESF25654	4474 6182	1.15+	King 2018; *2023* (& see *Clarke 2023*)
Flixton Park Quarry	*	Various	3050 8660	56.5+	*Boulter 2022*
Game Farm, Brandon	BRD 154	ESF18816	TL 7969 8666	0.6	*Gibson 2004*

*Suffolk Parish Codes FLN 056, 057, 059, 061, 062, 063, 064, 065, 068, 069, 088, 090, and 091

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It must be stated at the outset that the dating of almost all these field systems is coarse. In the better cases evidence generally only shows the fields were in place *by* the later Bronze Age. In at least one instance all that can be said is that the field system is broadly 'later prehistoric', with stratigraphy indicating a pre-later Iron Age/Roman date and morphological similarity to the better dated examples providing grounds for suspecting Bronze Age origins. Relevant to this question is the evidence from across southern and eastern England that construction of earthwork field systems was essentially a Middle Bronze Age phenomenon, which had ceased by the Late Bronze Age or, at latest, the Bronze–Iron Age transition, and did not resume until the Late Iron Age (Pryor 1998, 142; Yates 1999, 167–8; 2001, 67–8; 2007, 111–12; McOmish *et al.* 2002, 53; Brück 2007, 36; Bradley & Yates 2007, 96; Fleming 2008, 133, 185–8; Evans 2009a, 64–6; 2009b, 256; Evans & Patten 2011, 40; English 2013, 13, 149–52; Brudenell 2018, 10, 13; Bradley 2019, 212–13, 243). It is not yet clear whether Suffolk fits this pattern, and this uncertainty is encapsulated in the broad 'Middle/later Bronze Age' nomenclature used on the accompanying plans. Summary plans are present in text with more detailed, phased plans in the Supplementary Material.

SHOTLEY PENINSULA

Slough Road, Brantham

Excavation of a 1.9 ha area revealed an Early Iron Age settlement set beside and within a rectilinear field system (Fig. 2; Fig. S1). The exposed field system was regular, comprising a set of at least three oblong north-east to south-west aligned fields of similar width (*c.* 40 m) and, where more complete, more than 80 m long, divided by single ditches, and with the outside (west, south, and east sides) of this field block seemingly demarcated by double/multi-ditched boundaries. The somewhat sinuous southern boundary likely followed a minor contour change in the very gradual southward slope; the multiple and sometimes converging ditches marking it are most likely to be traces of successive ditch recuts side by side, with plough damage accounting for some of their perforated appearance. Larger gaps at the corners of each field (and perhaps that at the south end of the divide between the western and middle fields) were probably entrances. The regular and quite wide spacing (7 m) between the parallel ditches at the west side of the field system is convincing as a trackway. Cropmarks (SHER BNT 017) suggest that this excavated western boundary feature curves away to the north-east and south/south-east beyond the site. It could be a routeway extending north-east onto the spine of the peninsula and south-east down the small valley that the site sits at the head of. It is possible that both this and the stratigraphically latest ditch at the east side of the system were not parts of the original 'strip-field' layout.

The excavated field/trackway ditches contained barely any cultural material (just 23 sherds/120 g of Post-Deverel-Rimbury type (hereafter 'PDR') pottery, found widely dispersed in the fills of various ditches) and no well-stratified organic matter that could be radiocarbon dated, partly due to the acidic sand soil.

It is striking that the Early Iron Age (*c.* 8th–5th century BC based on pottery and radiocarbon dates) round-houses, four-post structures, and pits were directly beside/interspersed with the field system ditches but that the latter contained so little occupation debris, suggesting that they were not open when the settlement was occupied. Similarly, if the field system was established after the settlement had been abandoned, the incidental incorporation of greater quantities of residual settlement debris into the field ditches would be expected, especially as there are strong indications that much of this material lay in surface deposits before ending up in the post-holes and pits from which it was recovered. Equally apparent is that there was almost no intercutting between Early Iron Age features and the ditches; in the very few instances where intercutting did occur the settlement related features were stratigraphically later (though rarely individually well dated). It therefore appears that the ditches pre-dated the settlement and had silted up by the time it was occupied. Although there was no clear evidence for it, the field boundaries might still have been visible above ground as low banks and/or hedges.

FELIXSTOWE/TRIMLEY PENINSULA

Thurmans Lane, Trimley St Mary

Excavation revealed a pair of parallel ditches forming a west-north-west to east-south-east track or droveway, 10–13 m wide, 150 m+ long, and flanked by perpendicular ditches forming at least two broadly rectilinear enclosures (Fig. 2; Fig. S2). The ditches consistently contained small sherds and 'crumbs' of handmade flint/predominantly flint and sand

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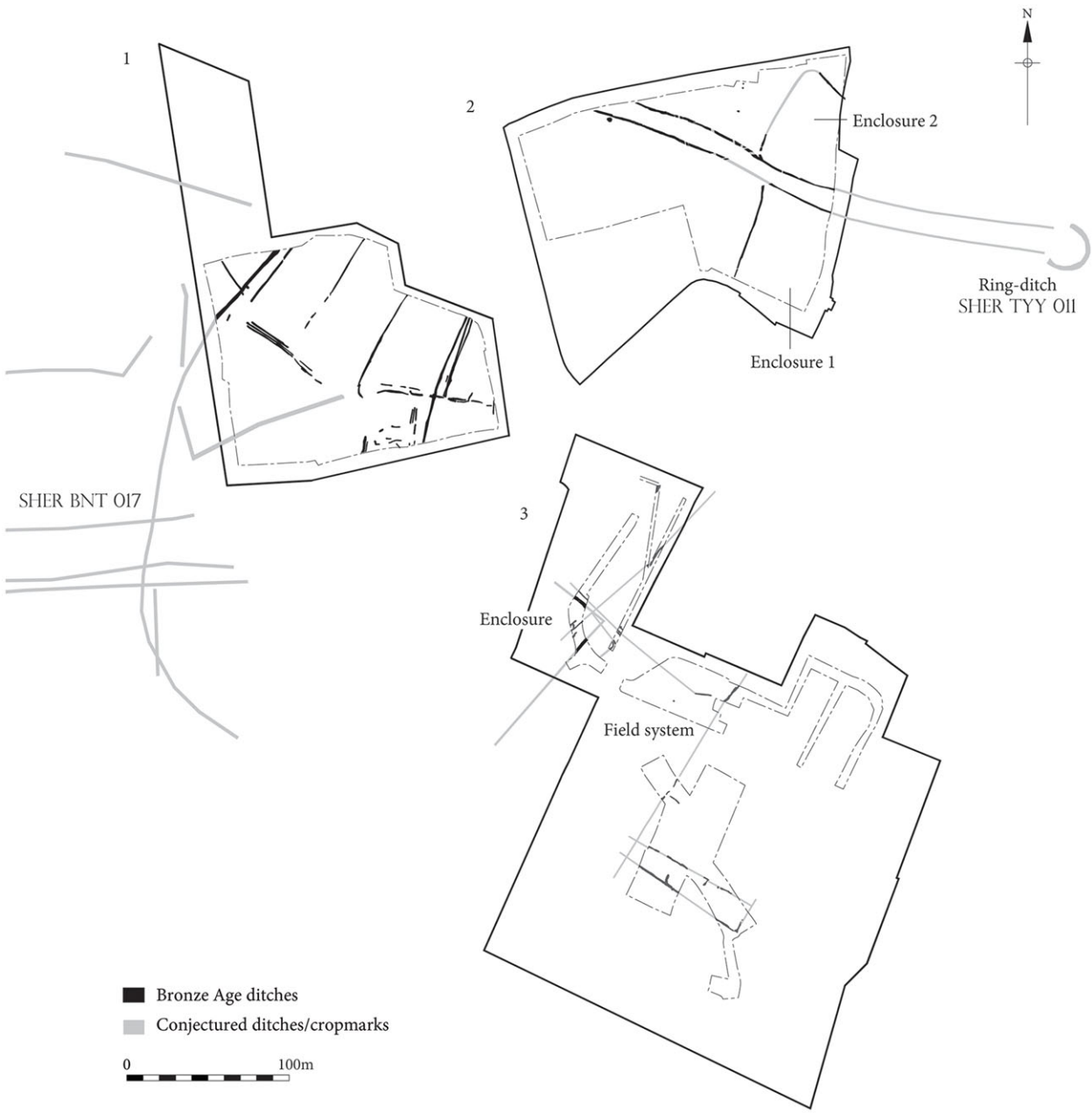

Fig. 2.
Suffolk field systems (1): Slough Road, Brantham; Thurmans Lane, Trimley St Mary; Felixstowe Academy

tempered pottery (total 60 sherds; 276 g), found well distributed throughout the excavated portions, which collectively fit Barrett's (1980) 'Undecorated' phase of the PDR ceramic tradition (*c.* 1100–800 BC), although their abraded condition and the scarcity of diagnostic pieces make identification tentative. This is more likely to indicate when the ditches were filling in than when they were constructed. Occasional burnt/struck flints were also present, the latter including some thick, crudely produced flakes in keeping with later prehistoric knapping. The scarcity of artefacts probably reflects distance from settlement; a slightly increasing

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frequency of potsherds to the north suggests occupation in that direction. This is also suggested by two post-holes, located at the northern edge of excavation, which contained slightly larger, less abraded, groups of Late Bronze Age sherds and might belong to a structure of that period lying mostly outside the site. It is clear from the plan that the enclosure system continues eastwards, where the trackway heads towards a cropmark ring-ditch (SHER TYY 011) 120 m away.

Felixstowe Academy

Middle Bronze Age enclosure (c.1600–1300 BC): Excavations targeted the main areas impacted by construction of a new school. On a marginally higher gravel spur in the north-west of the site, two perpendicular ditches (Fig. S3, Boundaries 1 and 2) appeared to form the corner of a rectilinear enclosure extending beyond the excavation (Fig. 2; Fig. S3). Both ditches, although plough-damaged, were fairly substantial (*c.* 1.8 m across and 0.5 m deep); they contained homogeneous silt fills without discernible evidence of recutting/maintenance. A complete Middle Bronze Age bucket urn was found upside down on the base of the northern ditch; it appeared deliberately placed (Figs S4 & S5). The size of the ditches and the associated finds suggest this may have been a settlement enclosure, the placed vessel possibly being a ritual deposit marking the disuse of the boundary or the enclosure (see Brück 1999b, 152; 2001b, 150–1). Radiocarbon dates for similar 'Ardleigh' style urns from Brightlingsea, including plainer vessels comparable to this, fall within the range 1600–1300 BC (Clarke & Lavender 2008, 57).

Middle/Later Bronze Age field system: In addition to the Middle Bronze Age enclosure, the excavations revealed a series of smaller field ditches (Fig. S3, Boundaries 3–8) laid out on similar broadly north-east–south-west by north-west–south-east alignments. All the ditches were narrow, shallow, slightly meandering in their orientations, and artefactually sterile. The piecemeal exposure permitted by the development groundworks obscures relationships between them (and with the Middle Bronze Age enclosure). Nevertheless, their consistent size, shared morphology, and common alignments suggest that they belonged to broadly the same system of land division. Despite excavation of regularly spaced slots amounting to at least 25% of each ditch, just 14 sherds of pottery, variously of earlier Bronze Age, Middle Bronze Age, and Early Iron Age types, were found in Boundaries 3, 4, 5, 7, and 8, alongside occasional burnt flint, struck flint that is mainly characteristic of later 2nd–early 1st millennium BC flintworking, and a sandstone sharpening stone.

The few Early Iron Age potsherds suggest that some of the ditches remained at least partially open at that time. Indeed, in the field formed by Boundaries 5 and 6 was a truncated possible cremation burial containing sherds from a fine angular bowl similar to examples from Darmsden (Cunliffe 1968, fig. 2 no. 1). Its presence shows that this landscape was still occupied in the *c.* 6th–4th centuries BC; although there was no direct evidence, the Bronze Age fields could theoretically still have been in use as hedges or banks might have remained even though the ditches were mostly infilled.

Several of the ditches continued beyond the excavated areas, demonstrating that the fieldwork provided only an irregular window on a wider Bronze Age sub-divided landscape. Importantly, trial trench evaluation and recent excavation on the opposite side of Walton High Street have identified six round barrows, an extensive series of reportedly Middle Bronze Age field boundaries (on the same sets of predominantly north-west by south-east and north-east by south-west orientations seen at Felixstowe Academy), *c.* 50 cremation burials, and a swathe of deposits relating to Late Bronze Age and Early Iron Age occupation (SHER FEX 059, House 2012, 25–6 and fig. 2; SHER FEX 299 and 451, Richard Mortimer, Cotswold Archaeology Suffolk, pers. comm. 2022,[1] Mortimer & Everett 2022; Figs 3–4). Given its distance away (*c.* 400–700 m), the field system at Felixstowe Academy could have been outlying agricultural land used by this long-lived community, though a relationship with another settlement in the vicinity – perhaps that represented by the enclosure in the north-west of the Academy site – is equally possible.

Indeed, subsequent excavation directly west and south of the Academy, at Walton Green, has revealed two phases of Middle Bronze Age ditched field system on alignments closely matching those at FEX 281, with a scatter of pits and a possible structure suggesting a focus of occupation/activity in the north of the site (SHER FEX 312; Carvey 2018). Some of the field/trackway ditches at FEX 312 appear to directly continue those at Felixstowe Academy, most notably

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Fig. 3.
Felixstowe Academy and adjacent excavations (preliminary plan of Walton High Street (FEX 451) reproduced by kind permission of Cotswold Archaeology (Suffolk); preliminary plan of Walton Green (FEX 312) after Carvey (2018, figs 9 & 10). Note: relative phasing of Bronze Age land divisions across the three sites is not yet clear and no inference should necessarily be drawn from the colouration shown here)

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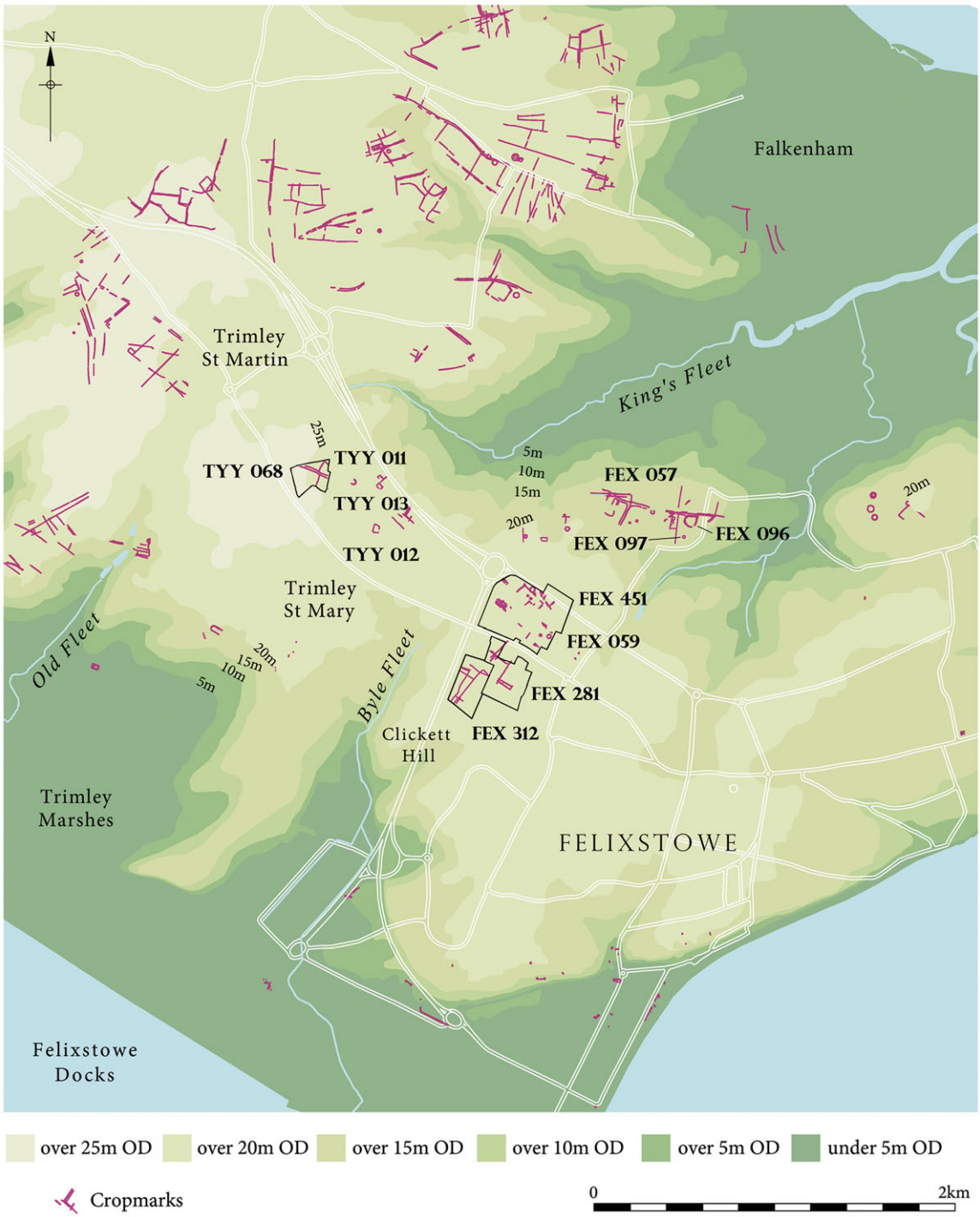

Fig. 4.
Felixstowe Peninsula: landscape and cropmarks (cropmark data kindly supplied by Suffolk Historic Environment Record and Historic England National Mapping Programme; preliminary plan of Middle Bronze Age features at Walton High Street (FEX 451) reproduced by kind permission of Cotswold Archaeology (Suffolk); preliminary plan of Middle Bronze Age features at Walton Green (FEX 312) after Carvey (2018, figs 9 & 10)

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Boundary 2 of the Middle Bronze Age enclosure. Grog-tempered Deverel-Rimbury tradition pottery was found fairly well distributed throughout the field ditches, with the assemblage from the second phase of the field system having a notably higher component of flint-tempered fabrics that are more in keeping with later Bronze Age assemblages (see Supplementary Material).

IPSWICH ENVIRONS

Ipswich Academy

Excavation on the site of another new school recorded part of a Bronze Age field system, which might have been re-organised at least once (Fig. 5; Fig. S6). The system may initially have been demarcated by a set of broadly parallel/perpendicular north-east to south-west (Ditches 2, 15, and curvilinear Ditch 13) and north-west to south-east ditches (Fig. S6, Ditches 9, 10, 11, 18, and 20), with 'kinked' Ditches 25 and 26 (the latter replacing the former), in the south-west of the site, initially orientated west–east before turning south-eastwards. One section of Ditch 18 contained 13 sherds (214 g) of flint-tempered later Bronze Age pottery. Struck flints, including three later prehistoric flakes, were found in Ditch 2. Ditch 20 truncated a charcoal-rich pit [267] that contained abraded earlier Bronze Age pottery and probable later Bronze Age flint-knapping debris. Ditch 25 contained two Late Bronze Age potsherds, while Ditch 13, which cut Ditch 25, contained four later prehistoric flint flakes. Owing to the uniformly shallow character of the ditches and general lack of differentiation within their fills, none of these ditch finds can be considered well-stratified.

At some point this system ostensibly appears to have been replaced by a set of rectilinear ditches on slightly more north-north-west to south-south-east (Fig. S6, Ditches 1, 6, and 17) and east-north-east to west-south-west (Ditch 16) alignments, most clearly indicated by the superimposition of Ditch 1 over the fills of earlier Ditches 2 and 13. The only finds were small quantities of struck flint, in forms that were used throughout the later Bronze Age and earlier Iron Age. However, a prehistoric date is reinforced by the complete absence of later cultural material in the ditches, and by the stratigraphic relationships between Ditch 1 and a group of overlying boundaries, on different alignments, that demarcated a short-lived 1st century AD field system. It is possible that the stratigraphic relationship between the two apparent phases of Bronze Age ditches just reflects the order in which they were last cleaned out. Under that scenario, all the ditches could be broadly contemporary components of a 'grid'-like system of small square/rectangular enclosures with dimensions, where visible (for example, between Ditches 1, 6, 2, 13, and 16), of just over 0.3 ha (0.75 acres), and with smaller enclosures to the south-west. The Bronze Age ditches at Game Farm probably formed an identical grid-like but sinuous field system (Gibson 2004, 11 fig. 10, 53).

There were traces of perhaps three post-built structures within/beside the fields, though it is not clear whether they were contemporary with the field ditches. Two were represented by clusters of post-holes with no clear configuration and variously associated with either earlier or later Bronze Age pottery, the former including sherds from Collared Urn type vessels. More complete Building 1, between Ditches 1, 13, and 16, consisted of a 4 m diameter ring of seven post-holes surrounding a central post-hole and hearth (Fig. S7); finds from its post-holes include daub, hearth lining fragments, and pieces of cylindrical loomweights of later Bronze Age type.

Ravenswood Area 'T'

A 0.73 ha area within the former Ipswich Airfield was excavated ahead of house building (Fig. 5). With the exception of two small ring-ditches, the earliest feature was a 5 m wide, north-east to south-west, ditch defined trackway (Trackway 1) flanked by perpendicular field/enclosure ditches (Fig. S10, Ditches 1, 7, and 8; Fig. 5). In the corner of one of these fields was a small pit [151] (Fig. S10 'Middle Bronze Age cremation burial') containing the cremated remains of an infant interred in a small, plain, grog-tempered pottery vessel with a slightly barrel-shaped profile, similar to Middle Bronze Age examples from Ardleigh and Brightlingsea. Samples of bone were submitted for radiocarbon dating but neither contained sufficient collagen (SUERC[2], GU37774).

At some point the field system was modified by the laying out of two enclosures or sub-divisions (Fig. S10, Enclosures 1 and 3) alongside the track; the former, at least, could equally have been part of the original layout. The trackway also appears to have been blocked by the digging of small Enclosure 2 over its path. The need to divert the track could perhaps explain curving Ditch 12, which might demarcate one side of a slightly re-aligned route bypassing Enclosure 2, though no sign of a second, parallel, ditch was

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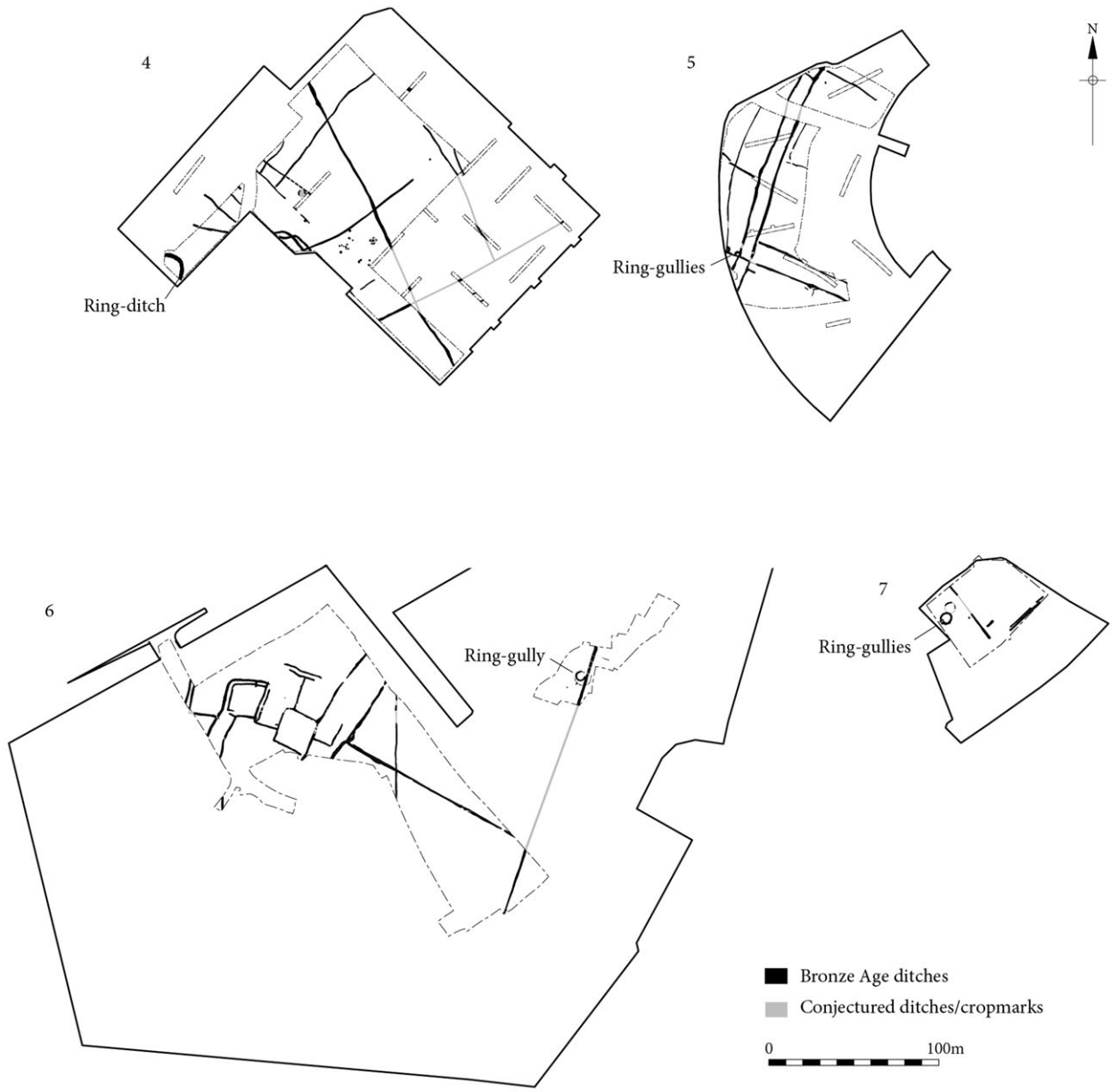

Fig. 5.
Suffolk field systems (2): Ipswich Academy; Ravenswood Area 'T'; Main Road, Martlesham; The Street, Easton

found unless the original western trackway boundary (marked by Ditch 2) was still visible. Later still, the narrow, south-east facing entrance to Enclosure 2 was blocked by Ditch 15. There was also modification to the enclosures in the southern part of the exposed system, as suggested by short Ditch 16 and by traces of an earlier ditch, possibly forming part of a field entrance, seen underneath Ditch 10. While Ditch 10 appeared to cut across what had been the main axis of the boundary system up to that point (the track/droveway), it is possible that in its initial form it did not extend across the track and instead formed a replacement of Ditch 9 as the northern limit of Enclosure 3. The space between it and short Ditch 16

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could then have formed a narrow corner entrance to the enclosure, replacing the earlier entrance between the terminals of Ditches 9 and 11.

The dating evidence for all the elements of this system of land division is very limited, comprising just 16 small sherds of handmade pottery, found widely distributed throughout the ditches, which are likely to be Bronze/earlier Iron Age date, together with a low number of struck flints, including several 'squat' flakes of later prehistoric type. There was almost no cultural material in the overburden, suggesting low intensity land use during those eras when one might expect to see more abundant material remains (that is, the Roman, medieval, and post-medieval periods), and rendering it unlikely that the pottery was incorporated into the ditches as residual material. The latest ditch in the stratigraphic sequence (Ditch 10) contained charcoal dated to 230–390 cal. AD (SUERC-61008, GU37775; 1746±30 BP), suggesting silting during the Roman period, though small pieces of charcoal (and other cultural material) can easily be intrusive on these loose sand soils. Land south-east of the emporia at Ipswich, including this site, was certainly being used for charcoal burning by the early–middle Anglo-Saxon era (eg, SHER IPS 719: Clover 2013, 21–5; IPS 725: Woolhouse 2014, 21–7).

The only pre-field system features were two stratigraphically early, narrow, shallow curvilinear ditches. Both had been severely truncated by the Bronze Age trackway ditches cutting directly through them; they might originally have formed complete rings 3.5–4.5 m across, potentially with small internal mounds. Although their surviving parts were fully excavated, there were no finds to indicate the ring-ditches' age or function, particularly whether they originally had associated burials. Based on their positions directly beneath the main Bronze Age boundaries it is possible that they served as markers when the first ditched land divisions were laid out.

Other parts of Ipswich Airfield were subject to evaluation and targeted excavation prior to its redevelopment (SHER IPS 024, 386, 390, 391, 404–6 and 420: Bales *et al.* 2006). These investigations found evidence for successive ditched fields and other land boundaries. Although rarely containing artefacts, stratigraphically early ditches/gullies at two of the sites (SHER IPS 406 and 390), at least, were tentatively assigned to the earlier Bronze Age. The funnelling arrangement of the possible Bronze Age ditches at IPS 406, *c.* 100 m south-east of Area 'T', was suggested as having an association with herding livestock (Bales *et al.* 2006, 66–71).

DEBEN VALLEY

Main Road, Martlesham

Excavation ahead of house building revealed parts of a prehistoric field system delineated by a set of regular south-west to north-east and north-west to south-east ditches (Fig. 5; Fig. S11). The system had two distinct components: in the north of the main excavation (Area 1), ditches formed a series of small (306 m^2, 340 m^2, and *c.* 305 m^2 in the cases of the substantially complete Enclosures 1, 2, and 6) adjoining roughly square enclosures, sometimes surrounded with double ditches, while to the south of a broad central trackway were much larger ditched fields (Fig. S11). The central axis of the southern field system closely followed level ground just above the 30 m contour, with the perpendicular ditches aligned up/down the gentle slope (Fig. S12). Magnetometer survey revealed that there were two more-or-less parallel trackways funnelling into the enclosures from the south-west (SHER MRM 101, Roseveare & Lewis 2010, figs 2–3). The clearer, central track heads directly towards a barrow group (SHER MRM 016; Fig. 6; Fig. S13).

Despite excavating regularly spaced slots amounting to at least 25% of each ditch and, in some cases, full excavation, artefacts were extremely sparse. Some of the ditches contained abraded sherds (mean weight only 3.2 g) of handmade, predominantly flint-tempered pottery, characteristics which, together with the generally coarse nature of the flint inclusions and lack of decoration, are most consistent with a later prehistoric (Middle Bronze Age to earlier Iron Age) date. The entire assemblage from the Area 1 ditches consists of just 14 sherds (45 g), with a few more from the topsoil; however, potsherds were consistently present in ditches across the site, without any later material. The excavation also produced a few struck flints characteristic of later prehistoric (later 2nd–1st millennium BC) flintworking; a low density scatter of Middle Bronze Age flints was also noted during fieldwalking (Brooks 2010, 6, 7 fig. 3; Pendleton 2010). Shared morphology and the overall coherence of the system allow ditches without finds to be broadly dated by association.

This rectilinear field system was cut by a set of curving boundary ditches that followed entirely different alignments and show a complete re-organisation of

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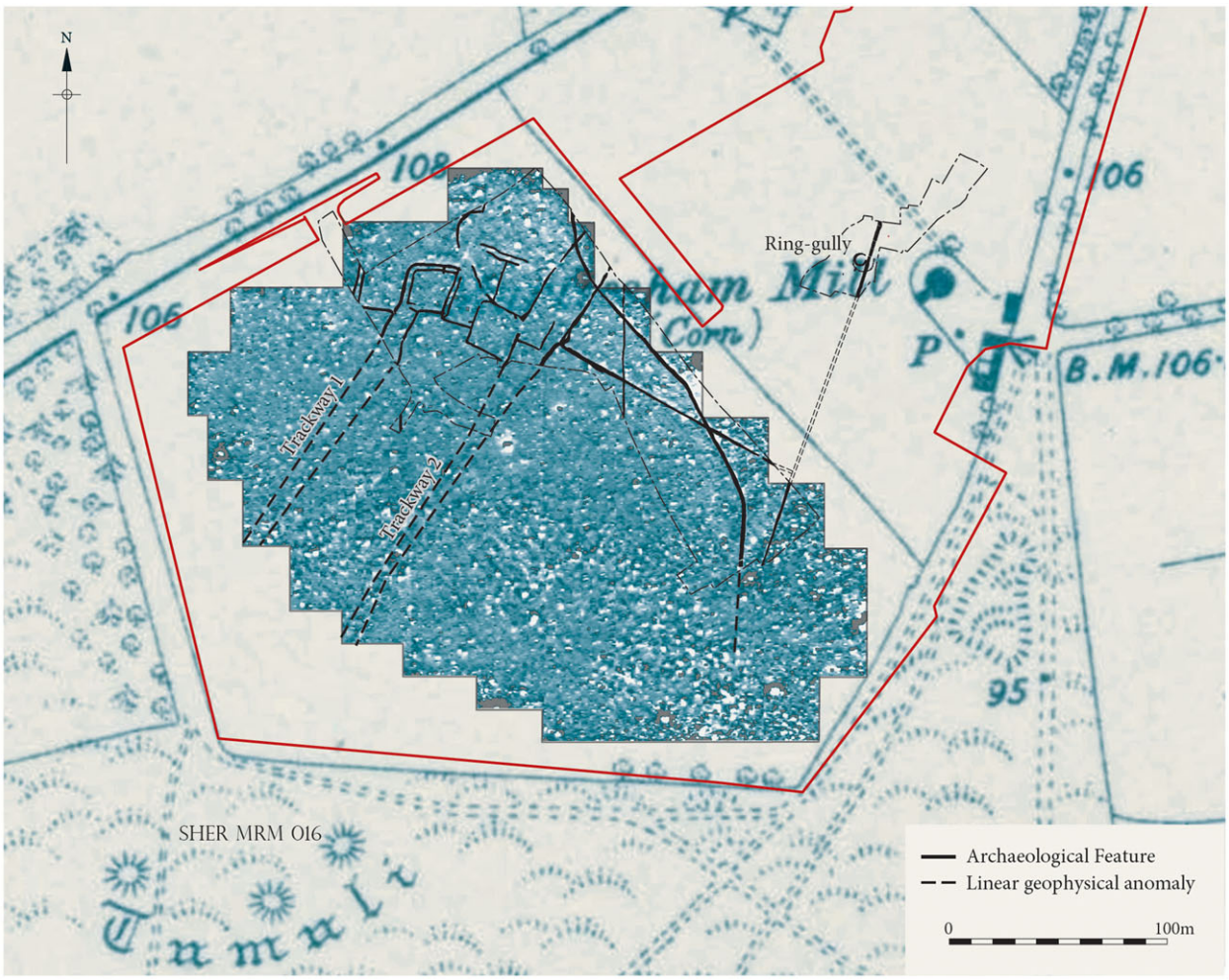

Fig. 6.
Martlesham field system and barrows (magnetometer survey and interpretation by Archaeophysica Ltd: Roseveare & Lewis 2010; 1881 Ordnance Survey 25 inch:1 mile Suffolk Sheet LXXVI.7)

the earlier agricultural landscape. The principal ditch contained a moderate sized group of sherds from a handmade, slack-profiled, Middle Iron Age type vessel (*c.* 3rd–1st century BC), similar to those from West Stow and Barnham (West 1990, 63 fig. 46; Martin 1993, 1–22). However, these sinuous boundaries might have originated at an earlier date as they are similar in form to the Late Bronze Age/Early Iron Age 'linear/ranch boundaries' that superseded Middle Bronze Age co-axial field systems on the Wessex chalk downlands (McOmish *et al.* 2002, 56–67). Thus, a date in the Middle Bronze Age is most likely for construction of the rectilinear field system, with some elements, at least in its southern part, possibly remaining partially open up to the Late Bronze Age–Early Iron Age transition, as indicated by two sherds that have lightly incised decoration most redolent of that found in the 9th–8th century BC assemblage from nearby Little Bealings (Martin 1993, 56, fig. 37). Of course, finds from the ditches reflect when they were silting up rather than their date of construction. The presence of a narrow ditch line (Fig. S11, Ditches 27, 28, and 29), with a very leached fill, on a slightly different (north–south) alignment from the main Bronze Age boundary system and cut by one of its principal axes (Ditch 31), suggests some time depth to this sub-divided landscape.

Further corroborating evidence for an approximate later Bronze Age date came from excavation of small

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Area 2, which was irregular in shape due to its location in a wooded area with trees that were to be retained within the new housing estate (Figs S14–S15). Here, a shallow penannular gully 5.4 m across (4.4 m internally) is thought to be the remains of some kind of structure or monument with an east facing entrance, positioned beside (but not intercutting with) a ditch that appears to directly continue a field ditch seen in Area 1. The ring-gully fill contained an artefact assemblage comprising 31 sherds (164 g) of pottery, knapping waste characteristic of Bronze–Iron Age flintworking (including several 'squat' flakes), burnt flints, a few charred barley (*Hordeum* sp.) grains, and a sharpening/polishing stone. The pottery is in a range of handmade fabrics containing flint, quartz sand, and sometimes no visible temper.

Additional pottery and 'fresh' flintworking waste were found in the adjacent field ditch: 19 struck flints including several cores and flakes and 49 sherds (243 g) of predominantly flint-tempered pottery, from at least three vessels, the fabric/lack of decoration on which best fit a later Bronze Age–Early Iron Age date. Artefacts were found concentrated in a fully excavated *c*. 10 m stretch of ditch adjacent to the 'structure' and were overwhelmingly present in the upper ditch fill (spits 1 and, particularly, 2), the lower levels being mostly sterile. This evidence demonstrates that the field boundary had already been in place for a time before this possibly later Bronze Age occupation material was deposited.

Seven metres to the south-west of the ring-gully was a small pit [2] containing the truncated lower portion of a large, flat-bottomed, flint-and-sand-tempered Bronze Age urn. The small dimensions of the pit imply that it was dug specifically to contain the pot. The feature was fully excavated, and the fill sieved, but no cremated bone was present. Nevertheless, there is a strong possibility that this was either a disturbed cremation burial or some other kind of placed/ritual deposit, as it contained approximately half a cast copper-alloy miniature wheel (Fig. S16), broadly datable on typological grounds to the Late Bronze Age/Early Iron Age (*c*. 1000–500 BC). Although incomplete, the fabric and apparent form of the pot would fit the Collared Urn or Deverel-Rimbury ceramic traditions of the Middle and later Bronze Age (Barrett 1980; Gibson 2002, fig. 51, 106). The proximity of this possible truncated cremation deposit to the ring-gully could point to it being an associated funerary/mortuary monument. However 'Structure 1' is interpreted, the Late Bronze Age/Early Iron Age date of the associated artefacts at least provides a *terminus ante quem* for the establishment of the field system.

The Street, Easton

The site occupies a south-facing hillside in the middle/upper reaches of the Deben Valley. At the foot of the slope is a tributary stream of the Deben; the site has views southwards over the main river valley, 250 m to the west. Excavation ahead of house building revealed multi-period remains, which have previously been described elsewhere (Woolhouse 2020).

In summary, excavation revealed part of a ditched rectilinear field/enclosure that appears to pre-date the Iron Age, although based on limited finds and stratigraphic evidence (Fig. 5; Fig. S17). One of the apparent field ditches was cut by a pit [641] and containing part of a quartz-sand-flint-tempered Early Iron Age jar, alongside hearth waste, burnt flint, and later Bronze Age–Iron Age struck flints. This pit was part of an area of Early Iron Age (*c*. 8th–6th century BC) settlement, the exposed part of which consisted of scattered pits, a large 'dump' of pottery (157 sherds; 2.8 kg) found in a buried soil layer, and one or possibly two poorly dated ring-ditches that might have been associated structures, though – contrary to the published account – at least the better preserved of them is more likely to have been an earlier funerary monument. The field/enclosure ditches themselves contained just a few Bronze–Iron Age struck flints and three sherds of prehistoric pottery, one flint-tempered. Given their proximity to the settlement features, the almost complete absence of cultural material in the ditches suggests they had filled in by the Early Iron Age. Nevertheless, there was some circumstantial evidence for associated hedges – notably the close spacing of parallel Ditches 5/6 and 7, which is too small to be a trackway – which could theoretically have continued to demarcate the field(s) after the ditches had filled in.

This early field/enclosure was overlain by the boundary ditches of a Roman farmstead, laid out *c*. AD 70, which had markedly darker fills. Earlier Bronze Age activity at the site comprised part of a burial area, including a pit containing a Beaker vessel, probably accompanying a 'lost' crouched inhumation, and a cremation burial containing faience beads.

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OTHER SUFFOLK FIELD SYSTEMS

Previously published Bronze Age/possible Bronze Age field systems excavated at Aldeburgh Road, Leiston, Flixton Park Quarry, and Game Farm, Brandon, are summarised in the Supplementary Material (Appendix S1) and shown on Figure 7 and Figs S18–20.

DISCUSSION

Physical appearance

The Bronze Age field ditches at these south-east Suffolk sites were morphologically similar. They were generally narrow and shallow, ranging from 0.3–1.9 m wide and *c.* 0.1–0.7 m deep but, much more typically, about 0.5–1.0 m wide by no more than 0.2–0.3 m in depth. Profiles were usually moderately sloping and rounded (Fig. 8), though the (also more substantial) main trackway/enclosure ditches at Walton Green were more 'v'-shaped. Notwithstanding their overall rectilinear layout, individual ditches often exhibited a slightly sinuous/meandering appearance.

Upper portions of some ditches at Brantham had probably been lost to plough damage, accounting for much of the intermittent appearance of the shallower boundaries, particularly along the field block's south side. Discontinuous ditches at Felixstowe and Trimley are most likely a result of their being cut though the loess-derived subsoil at those sites but not always seen at that level during machining. However, it is worth noting that at some Thames Valley and Cambridgeshire sites there are indications that boundaries were originally constructed from a series of short, interrupted ditches, like these, that were only later made continuous (Yates 1999, 165; Leivers 2010, 209; Phillips & Mortimer 2012, 20). It is also worth bearing in mind that if, as seems likely, it was a bank/hedge that was important in demarcating the plot of agricultural land (see below), then it would not matter if ditches were discontinuous – their function was primarily as quarries to make the bank (Pryor 1998, 145; Lambrick 2009, 60). On the other hand, some other gaps in ditches were certainly 'real' entrances: Enclosure 1 at Martlesham had a 2 m wide entrance opening onto a trackway (Fig. 8.3), the corner entrances to the Brantham fields, including the 12.3 m opening onto the western trackway, appear genuine, there were entrances 6–7 m wide into a couple of the fields/enclosures at Walton Green (FEX 312, Carvey 2018, 17–18) and there was a *c.* 6 m entrance between the Leiston trackway and fields on its west side.

Across all the sites it was rare for there to be much discernible variation in ditch fills, most exhibiting gradual infilling through natural silting and weathering, leaving visually homogeneous deposits, a process no doubt exacerbated by subsequent mixing from rooting and other soil processes to which the generally shallow (and not deeply buried) features were exposed. In landscapes where holes in the ground fill with slumped/windblown sand and silt in a matter of weeks, it is difficult to see how systems of shallow field ditches could have remained visible/functional unless they were regularly cleaned out or recut, or if they were accompanied by banks or hedges that were longer lasting landscape features and which might have helped counteract soil erosion.

There was some direct evidence for recutting and redefinition of ditches at Martlesham, where an earlier demarcation of the field boundary survived in places beneath/alongside the northern part of Ditch 31 (Ditch 34). A later ditch (Ditch 30) on the same alignment as Ditches 31, 32, and 33 in turn cut Ditch 31. At the south-western terminus of a very slight ditch (Ditch 20) were traces of two equally slight, earlier ditches on the same orientation (Ditches 17 and 19), the continuations of which had been entirely removed (Fig. 8.4). There is also some circumstantial evidence for hedges, for instance, the double sets of ditches surrounding some of the enclosures at Martlesham (particularly Enclosure 1 but also 5 and 6), which are too closely spaced (*c.* 1.5–2 m) – especially when loss of the contemporary topsoil and upper parts of the ditches is factored in – to have formed trackways and are therefore more likely to be ditches either side of embanked hedgerows (see Evans 2009a, 45; 2009b, 245; Lambrick 2009, 58). Alternatively, banks could be topped with fences/stockades to keep livestock in and predators out (Evans 2009b, 249). Similar narrow-spaced double-ditch arrangements surrounded some of the (larger) rectangular enclosures in the Bronze Age field system at Fengate (*ibid.*); Francis Pryor interpreted these as 'internal droves' (1980, 23) and later – with some supporting phosphate evidence – as sheep drafting races (1996; 1998, 100–5; 2001, 409–10, 420) but this generally seems unlikely in view of their narrow widths and positions surrounding three or more sides of a given enclosure (Evans 2009b, 245).

Martlesham field Ditch 30 had a pronounced and otherwise inexplicable kink at its north-east terminus, perhaps where it avoided a tree, as at Bradley Fen,

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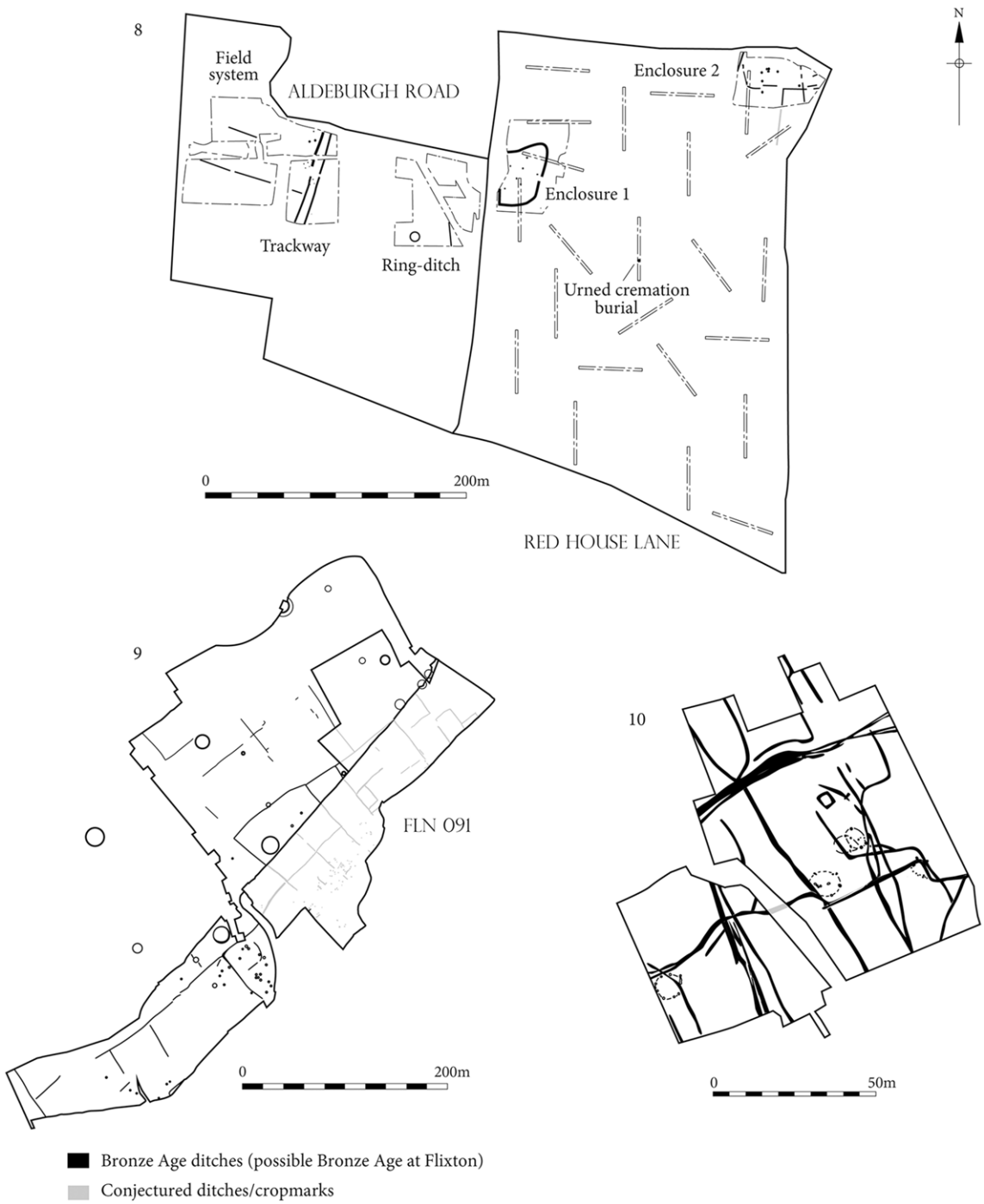

Fig. 7.
Suffolk field systems (3): Aldeburgh Road, Leiston; Flixton Park Quarry; Game Farm, Brandon (Aldeburgh Road, Leiston after King (2023, 377 fig. 111) & Clarke (2023, 399 fig. 117); Flixton Park Quarry after Boulter (2022, 64 fig. 3.45, 30 fig. 3.14, 4 fig. 1.3; 2017, 40 fig. 11); Game Farm, Brandon after Gibson (2004, 11 fig. 10)

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Fig. 8.
Example field system/trackway ditches: 1. Trimley trackway ditch fully excavated for finds retrieval, view south-east (photo: Clare Jackson); 2. Martlesham Ditch 27, view north (photo: Tom Woolhouse); 3. Martlesham Enclosure 1 double-ditched boundary with entrance to right of photo, view north-east (2 m scale) (photo: Tom Woolhouse); 4. Martlesham Ditches (from left to right) 20, 17, and 19, view north-east (1 m scale) (photo: Jonathan House)

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Whittlesey, Cambridgeshire, where the wetland edge boundary ditch avoided a tree whose stump was preserved in the adjacent bank (Knight & Brudenell 2020, 151–2, fig. 4.10); trackways at Heathrow Terminal 5 similarly zigzagged around trees (Leivers 2010, 142). A natural-looking linear feature [1052]/[1054] that extended intermittently alongside Martlesham Ditch 46 could be a remnant of a hedge (Figs S14–S15). The close spacing (*c.* 1 m) of Ditches 5/6 and 7 at Easton (Fig. S17) might also indicate an embanked hedgerow.

Indeed if (parts of) these field systems were intended to contain livestock (see below) then hedges must surely have been integral components: even allowing for a missing depth of Bronze Age topsoil, the generally ephemeral ditches and small banks that the arisings from them could have formed would not present a significant barrier to animals. In many cases the principal purpose of the ditch may have been to generate a low bank of loose soil into which cuttings for a hedge could be planted, either for stock control, as a clear demarcation of land allotment/tenure, or both (Pryor 1998, 85–7; Yates 2007, 121; Lambrick 2009, 58; Leivers 2010, 142). If the main boundary feature was the hedge sitting atop low upcast bank, this could help to explain the generally limited evidence for ditch maintenance/recutting – the ditch's job was done. This interpretation of the ditches as components of barriers, whether practical, visual, perceptual, or all three, can be weighed against the alternative: seeing the ditches primarily as field drains. That is, overall, difficult to square with the context of the ditch systems on mainly free-draining sandy geologies, the general lack of slope at most of the sites (based on both surveyed levels and available LiDAR imagery; DEFRA 2019), and the aforementioned tendency for shallow features on these soils to rapidly infill, especially if/when field surfaces are bare. Cutting through the more water retentive loess subsoils of the Felixstowe peninsula to reach the underlying sands and gravels may have been of some help to drainage (see Yates 2007, 138) but this need not have been the ditches' sole or primary purpose.

In the main, sizes of individual fields cannot be reconstructed owing to piecemeal exposure. Whole fields/enclosures were only seen at Martlesham and, perhaps, Ipswich Academy. Minimum sizes for the larger land units can be roughly calculated from what was revealed within the excavation areas at Brantham (Fig. 2: west field: 2500–2800 m^2; central: 3500 m^2; east field: 2300 m^2), Trimley St Mary (Fig. 2: Enclosure 1: 3200 m^2; Enclosure 2: 3400 m^2), Felixstowe Academy (Fig. 2 & S3: 7200 m^2 between Boundaries 5 and 6), Martlesham (Fig. 5: 9400 m^2 between Ditches 30, 31/35/36, and 37), Easton (Fig. 5 & S11: 2500 m^2), and Leiston (Fig. 7: 2375–just over 3000 m^2). If the two opposing sets of ditch alignments at Ipswich Academy are interpreted as contemporary, then square/rectangular fields of *c.* 3250 m^2 (Fig. S6: between Ditches 1, 2, 6, and 13) and approximately the same area for the block between Ditches 1, 6, 13, and 16, can be identified, with more closely spaced ditches demarcating smaller enclosures near to the identified structures. Fields in these systems therefore varied from under an acre (<0.4 ha) to upwards of 2 acres (>0.8 ha). Several of the more complete prehistoric fields at Flixton appear larger: in excess of 5 acres/2 ha for the plots between Ditches 4, 6–8, and 11, and 14–16, though evidence from adjoining unpublished area FLN 091 suggests that ditches sub-dividing the latter field, at least, may have been lost (compare Boulter 2022, 4 fig. 1.3 and 64 fig. 3.45 with Boulter 2017, 40 fig. 11; Fig. 7). Nevertheless, the overall impression is of quite small fields, which may have important implications for the scale and social context of agrarian production (see below).

These small plots compare closely with the 'Celtic fields' of the southern chalklands: on Salisbury Plain some fields are only a few tens or hundreds of square metres and rarely exceed 0.5 ha (McOmish *et al.* 2002, 56). At Bradley Fen, those Middle Bronze Age field plots that could be completely reconstructed ranged between 0.12 ha and 1.04 ha, though some incomplete plots measured at least 1.33 ha. Strip-like arrangements of fields, like those seen at Brantham (*c.* 40 m wide by 80 m+ long) and Leiston (just under 30 m wide by 100 m+), are also a common component of many Bronze Age sub-divided landscapes. Regular field strips at Bradley Fen were 30–60 m wide and the largest field was up to 160 m long (Knight & Brudenell 2020, 147–8, table 4.1, figs 4.5–7). Strip-fields were also part of the systems at Barleycroft Farm/Over (there, *c.* 50–80 m wide: Evans 2009a, 53–5, figs 2.19–20) and Clay Farm, Trumpington (60–100 m: Phillips & Mortimer 2012, 19, fig. 6), both in Cambridgeshire, South Hornchurch, Essex (45–50 m: Guttman & Last 2000, 326 fig. 7), and on Salisbury Plain, where elongated fields up to 200 × 50 m seem to have been made by removing earlier cross-divisions (McOmish *et al.* 2002, 56). While patterns of elongated fields between reave-like boundaries might reflect patterns of

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land allotment, for example, the need to equitably share out different resources available on a high(er) ground–low(er) ground axis, field morphology could also reflect their use (see below).

Chronology

Another aspect common to most of these field systems is the critical problem of dating them. As the ditches were mostly 'outfield' boundaries, seemingly located away from contemporary settlement or other focal points of activity, few artefacts found their way into them. In any case, the generally acidic sand soils hinder preservation of organic materials that could be radiocarbon dated. Moreover, where cultural material is present in ditch fills, it is more likely to reflect them ceasing to be maintained and going out of use than indicating when they were constructed. Stratigraphic relationships between ditches were frequently indistinct owing to the homogeneity of fills, which also impacts on the visibility of recuts and other evidence for ditch maintenance.

At most of the sites discussed here, initial excavation of spaced slots was followed – with selected ditches – by manual turning over and sifting of the fills along the intervening stretches, in some cases for lengths of 10–20 m or more (Fig. 8.1), specifically to search for artefacts. Despite this, quantities of finds remained low, and dating relies heavily on those instances where, by design or chance, excavation identified focal points in the field systems: structures, occupation areas, burials, or placed deposits within ditches. In this light, the sort of supervised machine excavation of prehistoric field ditches advocated by the East of England Research Framework has much to recommend it as a way of achieving large samples and maximising recovery of artefactual/environmental evidence (ALGAO 2019).

Paradoxically though, the absence of artefacts in ditches to some extent helps reinforce a prehistoric date: field ditches from later, materially richer, ages (for example, the Roman or medieval periods) usually contain at least some abraded pottery, ceramic building material, or other settlement debris, originally deposited via the common practice of indirect manuring of fields with midden waste (Yates 2007, 81). Of course, later prehistoric farmers did this too (Bradley 1978, 41; Bell 1983; Parker Pearson 1996, 125–7; Rudling 2002, 203–38, 249–51; Guttman *et al.* 2005, 68, 73–4; Bradley & Yates 2007, 97; Yates 2007, 138; Nowakowski 2009, 120) but the friable, bonfire fired pottery of the period survives poorly, particularly if originally deposited on the ground surface. Indeed, this is a plausible origin for the uniformly small, abraded later Bronze Age–Early Iron Age-type potsherds found at a low density (and without any later material) throughout many of the excavated field ditches.

The alternative, based on its limited quantity and poor condition, is to view this cultural material as residually deposited in later ditches that happened to cut through Late Bronze Age–earlier Iron Age features or surface deposits. However, unlike some areas that were excavated for the East Anglia One windfarm (discussed below), at most of the sites described here (excepting Brantham) there was little sign of settlement that could be the source of the ditch material. Furthermore, truncation of individual settlement features would likely result in localised concentrations of residual finds in sections of ditches rather than the uniform, low density distribution throughout the ditch systems seen at sites like Trimley, Felixstowe Academy, Ravenswood Area 'T', and Martlesham.

If this interpretation of the origin of the ditch associated cultural material is correct then it would raise important possibilities regarding the longevity of the field systems: they may still have been actively manured into the Late Bronze Age and potentially beyond, though the low diagnostic value of the pottery precludes chronological precision. Of course, this says more about the later use of relict (Middle?) Bronze Age fields than their original function, and there is a possibility that, although the land was still being cultivated (or grazed), the remnant boundaries no longer meaningfully defined the limits of agricultural plots. In this sense, there could have been a reversion to something like the pre-field system landscape of the earlier Bronze Age, in which land was farmed – and tenure understood – without entrenched boundaries physically defining plots (Knight & Brudenell 2020, 206–8, 226, 237): the short-lived 2nd millennium BC '*experiment in (hu)man/land relations*' (Evans 2009b, 256) may have been over.

This naturally leads on to questions of overall chronology. While the evidence from the west of the eastern region, particularly Cambridgeshire, overwhelmingly places large scale field system construction in the Middle Bronze Age (Evans 2009a, 55; 2009b, 252–3), there are Late-attributed field systems in the south, notably South Hornchurch, which apparently saw three

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phases of development during the *c*. 10th–8th centuries BC, associated with both plainware and decorated PDR pottery (Guttman & Last 2000). The early 1st millennium BC (phase I.2–3) ditched land divisions at North Shoebury may be another Thames Estuary example (Wymer & Brown 1995, 11, 20–33). Depending on the overall organisation and scale of these Suffolk sub-divided landscapes (see below), the evidence from Wessex, the North and South Downs and, perhaps, some Fenland sites such as Welland Bank, that co-axial reave-type strips (Middle Bronze Age) pre-date aggregate patchworks (Late Bronze Age?) (Field 2001, 59; McOmish *et al*. 2002, 56; Evans 2009a, 65; English 2013, 3, 134) may be relevant, though this sequence was ostensibly reversed at Heathrow Terminal 5 (Leivers 2010, 136), and at Clay Farm the sequence of strip-fields superseded by rectilinear fields/enclosures, and then by settlement within those enclosures, all took place within the Middle Bronze Age (Mortimer & Phillips 2012, 19–23).

As highlighted at the outset, the dating of almost all the south-east Suffolk field systems described here is very coarse and in the better cases (eg, Martlesham) generally only provides a later Bronze Age *terminus ante quem*. It certainly seems likely that the abraded PDR pottery, where present, relates to later rather than primary use of the fields. A picture of Late Bronze Age activity taking place within field systems that had – in all probability – been established in the Middle Bronze Age, but without much, if any, evidence for maintenance/alteration of the early field ditches, would be in keeping with a pattern seen widely elsewhere. The preliminary, but clearly better, dating evidence from Walton Green, combined with the complete Middle Bronze Age urn deposited in a related boundary at Felixstowe Academy, appears to present a more 'typical' sequence of a Middle Bronze Age sub-divided landscape that may have remained open/in use, to some extent, into the later Bronze Age.

What, though, should be made of the evidence from Game Farm, Brandon (Fig. S20)? Confronted by the discrepancy between the Middle Bronze Age radiocarbon dates and large *c*. 9th–8th century BC pottery assemblage from the structures, something has to give. Given the potential age/stratigraphic insecurity of oak charcoal from surface deposits, the radiocarbon dates seem questionable. By contrast, the stratigraphy of the field ditches cutting through the surface deposits of several of the Late Bronze Age structures appears unequivocal – the ditches must have been dug, or at least recut, in the Late Bronze Age or after. There may be a hint here that some of Suffolk's Bronze Age field systems have similarities with those of Essex as much as Cambridgeshire.

Orientation and scale

The most striking characteristic of the field systems described here is their consistently broadly rectilinear layout, with the principal axes always aligned north-west to south-east by north-east to south-west or slight variations thereof. On sites with any degree of slope, principally Easton and to some extent Martlesham, these orientations respect the contours. However, where relief is not pronounced and the immediate topography does not predispose any particular alignments – as with the field systems to the south of Ipswich and on the Felixstowe peninsula – the widespread establishment of land divisions on north-west to south-east by north-east to south-west orientations may have referenced the main features in the wider physical landscape: the north-west to south-east landform of the peninsula itself, and the positions of the rivers Orwell and Deben. Unsurprisingly, where the field systems are directly adjacent to rivers/streams, their axes respect the positions of the watercourses, as at Game Farm, beside the Little Ouse. The impression is of fields laid out sympathetically with their landscapes rather than in the 'terrain oblivious' fashion of some Bronze Age land divisions (Yates 2007, 134–5; Fleming 2008, 196; Green & Gosden 2021, 235).

The broad trackway at Trimley (Fig. 2) may head down towards the King's Fleet and marshland (summer grazing?) along the south side of the Deben, possibly reflecting practical concerns and the need to link field systems to other landscape resources required by people or livestock. The possible trackway bounding the west side of the field block at Brantham (Fig. 2) might similarly lead downslope towards marshes/grazing along the north bank of the Stour, while that at Leiston (Fig. 7) is aligned down a shallow valley leading to the Hundred River. The orientation of the Leiston trackway dissects the east–west coastal promontory, between the Hundred River to the south and marshland to the north, that Leiston occupies, with the identified field system and associated farmstead enclosures on the higher ground approximately midway between the two; this is similar to the (low) ridge edge/top positions of Brantham, Trimley, and Felixstowe Academy, from where the main axial

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trackway of Walton Green Field System 2 also headed downhill towards marshes beside the river Orwell.

But at both Trimley and Martlesham (and possibly several of the other sites described here) spatial relationships between trackway/boundary alignments and ring-ditches/barrows in their immediate landscapes highlight how ostensibly less practical considerations, such as the positions of earlier monuments, might also influence the layout of land divisions and routeways. Conceivably, earlier burial grounds and favoured habitation locales (such as Martlesham Area 2; Fig. 5; Fig. S14) might have formed nodal points around which the transition from an open landscape and possibly partly mobile way of life to a bounded and increasingly sedentary agricultural existence was framed. Relationships between later Bronze Age boundaries and earlier monuments have been widely noted elsewhere, and there are many ways of interpreting the phenomenon (Cooper 2016). Deliberate positioning of boundaries in relation to earlier barrows or settlement areas might, for example, have been intended to solicit the assistance of forebears in guarding and controlling the land and its productivity (see Wiseman *et al.* 2021, 729–31), to harness the 'symbolic capital' (Cooper & Edmonds 2007, 76, 133) of monuments and the ancestors, real or imagined, with whom they were associated in order to legitimise claims to land (Johnston 2005, 18; Yates 2007, 134; Knight & Brudenell 2020, 208), or to connect in some other way with the perceived ancestral/supernatural forces therein – Fleming's 'monumental directionality' (2008, 198).

However, if the earth-fast land divisions of the later Bronze Age simply gave physical form to patterns of land use and tenure that already existed, and which were expressed on the ground in the positioning of houses, barrows, and other monuments, then the coincidence of ditched boundaries with these earlier foci just reflects those pre-existing patterns – the 'operational grain' of the landscape – being 'entrenched' (Knight & Brudenell 2020, 206–10; *cf.* Johnston 2005, 11–13, 17). This might explain the stratigraphically early (and not necessarily burial related) ring-gullies underlying the trackway ditches at Ravenswood Area 'T' and the similar ring-gully beside Ditch 46 at Martlesham: they could have been markers of tenure/land allotment within the pre-field system landscape. One of the main axial alignments of the field system at Martlesham is neatly framed between the barrow group to the south-west and small ring to the north-east. A small ring-gully, without accompanying interment, at Colne Fen, Earith, Cambridgeshire, was similarly suggested as a possible landscape marker (Evans *et al.* 2013, 95 fig. 4.2, 100–1, 128).

Relationships of some Suffolk field systems with earlier monuments might therefore reflect similar processes of entrenchment. But at some other sites, notably Flixton (Fig. S19), the influence of earlier monuments is less clear. While one of the later prehistoric field ditches there (Ditch 9) cut directly across an earlier Bronze Age barrow that was still upstanding, and another (Ditch 15) cut Early Bronze Age Ring-ditch 069 but kinked markedly to avoid its still-extant mound, many of the other, numerous, barrows and monuments in this landscape seem not to have had any particular impact on field layout (Boulter 2022, 64–6, fig. 3.45). Although the date of the Flixton field system is uncertain, the arrangements there bear comparison with Barleycroft Farm/Over, where, on the west side of the river Great Ouse, earlier ring-ditches occupied nodal points in the Middle Bronze Age field system and the ditch boundaries 'spun' on them, but on the east bank of the river the relationship appears less sympathetic and more a matter of 'accommodation', with the field axes 'boxing' the barrows in (as described by Evans 2009a, 53–5, figs 2.19–20). Similarly, Bronze Age field systems on the Wessex chalk downland often show only limited respect for existing barrows (Bradley 1984, 107; 1998, 149). Therefore, while some earlier monuments were respected/referenced, in other instances deliberately slighting, enclosing (and thereby controlling?), or overtly ignoring monuments that had marked and expressed earlier people/land relations may have been just as much parts of the process by which existing patterns of land tenure were (variously) re-organised or entrenched. Laying out field systems involved a process of compromise and accommodation with the past (Bradley 2002, 78–9), which gave rise to 'A specific set of grammars . . . in terms of how Middle Bronze Age land boundaries intersect . . . with round barrows' (Cooper 2016, 674, 679 fig. 7).

Leaving aside the impact of the particular natural and human geography of this landscape, it can also be noted that the same (north-west to south-east by north-east to south-west) axial alignments are widely found across Bronze Age field systems elsewhere in the country, often at odds with topography (Fowler 2000, 25; McOmish *et al.* 2002, 54–5, fig. 3.4; Yates 2007,

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136; English 2013, 134; Evans *et al.* 2013, 148; Bradley 2019, 219). This preferential alignment might have held cosmological significance, perhaps relating to sunrise/sunset at the solstices or the position of the sunrise more generally (Yates 2007, 136; Green & Gosden 2021, 248–51). A preference for south/south-east facing orientations, possibly reflecting similar concerns, is apparent in other aspects of later prehistoric life, for example, the architecture of barrows and positioning of round-house entrances (Bradley 1998, 149–50; 2002, 77; English 2013, 144; Green & Gosden 2021, 255).

Their regular, broadly 'grid'-like, appearance raises the important question of whether these field systems were parts of a large scale, perhaps planned, co-axial landscape extending over tracts of the south-east Suffolk coast. Alternatively, they might have been self-contained ('aggregate': Bradley 1978, 268–9; Yates 2007, 15; Evans 2009a, 46, 64–5) patchworks of fields and enclosures laid out in more *ad hoc* fashion by individual farmsteads/small communities, albeit linked by track-ways to neighbouring settlements and resources available in other parts of the landscape (for example, areas of communal grazing or woodland). Cropmarks in the area have previously been interpreted as tending towards the latter interpretation (Hegarty & Newsome 2005, 37) but the regular appearance of some of the extensive cropmarks in and around Martlesham (Fig. 9) could perhaps indicate the presence of wider areas of planned landscape, as may be true of parts of the Norfolk coast (Albone *et al.* 2007, 43).

Extensive excavation of Bronze Age sub-divided landscapes elsewhere, for example, the west Cambridgeshire Fen edge, have found major differences between them, notably in the presence/absence of droveways but also in field shape, size, and alignment (Yates 2007, 84–97; Evans 2009b, 241–2; Knight & Brudenell 2020, 146, 390). Mark Knight and Matthew Brudenell (2020, 390) note that 'consistency only occurred in blocks … open-up a big enough space and the configuration of a particular fieldsystem is liable to change … On current form, there would look to be as many types of fieldsystems as there are sites'. This underlines the huge variation across and between Bronze Age field systems, the frequent impossibility (or usefulness) of straightforward categorisation, and the need to investigate large areas: the exposures of Suffolk field systems to date are too small to properly understand their scale and structure.

The nature of agriculture and landscape context

As noted, despite extensive bulk sampling, the presence/survival of plant macrofossils and animal bone was almost non-existent across these field systems. In consequence it is impossible to know how they were used except indirectly, by inference from their topographical locations, soils and layouts – an approach not without pitfalls (Cooper 2018, 8). Slightly more information comes from those focal points where structures were identified, although there are frequently questions over their contemporaneity with the fields they were set in.

All but two of the sites share light sand and gravel geology: either Lowestoft Formation or Kesgrave Subgroup glacial deposits, overlying coarse, shelly sands and gravels of the Red Crag Formation (Table 2; Williamson 2005, 3–4; British Geological Survey 2024). Easton's setting is more complex, being on a slope with head deposits at its foot and glacial boulder clay, the edge of the High Suffolk clay plateau, to the north and east. Leiston sits on fairly light glacial clay/silt overlying the Crag sand. Soils are typically free-draining, acid and sandy (Ipswich environs and Martlesham), loamy (Felixstowe, Trimley, and Brantham), or base-rich (Leiston) in composition (Cranfield University 2024). From at least the Anglo-Saxon period until the early 20th century the sandy area east of Ipswich and Woodbridge was predominantly lowland heath, supporting acid grass-land, ling, gorse, and broom, and suitable primarily for grazing sheep (and later rabbits) due to its low fertility, excessive drainage, and shallow rooting zone (Armstrong 1971). This propensity towards sandy soils, also apparent in the Breckland location of Game Farm, Brandon, might reflect the limited technology available to Bronze Age farmers; that is, their reliance on breaking ploughs or ards, without coulters or mouldboards to slice and turn over heavy soils and thereby help them dry out (Payne 1957, 74–9; Williamson 2005, 9). In a period of relatively low population density, communities may also have lacked the workforce with which to attempt to alleviate the poor drainage of East Anglia's clays.

However, the extent to which this was marginal land can be overstated. Part of the reason for the impoverished state of the Sandlings and Breckland soils is past human activity: tree clearance followed by over-grazing or cultivation by prehistoric farmers is thought to have led to leaching of nutrients and

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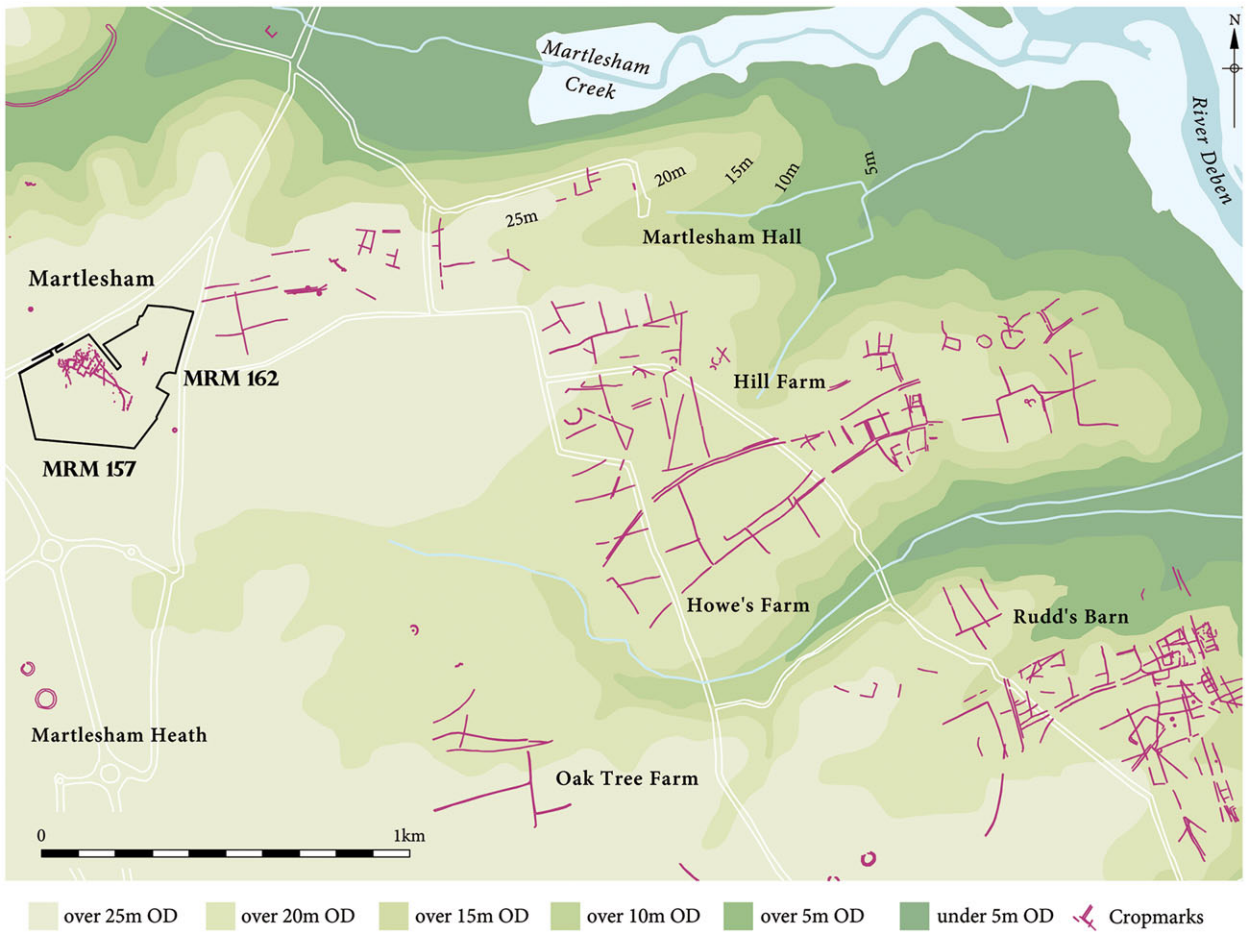

Fig. 9.
Cropmarks around Martlesham (cropmark data kindly supplied by Suffolk Historic Environment Record and Historic England National Mapping Programme)

formation of podzols (Dimbleby 1962; Armstrong 1971, 17–18; Rackham 1986, 286–91; Williamson 2005, 50; see also English 2013, 10). The agricultural value of these soils in the Bronze Age, presumably soon after land was first cleared, might have been rather better than it was by the medieval period, perhaps particularly under a low intensity, shifting cultivation regime (eg, a short-fallow system; Barrett 1994a, 143) or if they were used primarily for grazing animals whose dung could help to replenish soil nutrients (Williamson 2005, 56–7; Serjeantson 2007, 83).

Furthermore, the Felixstowe and Shotley peninsulas are blanketed with aeolian loess deposited under periglacial conditions during the Late Devensian and subject to varying degrees of subsequent weathering and reworking (Catt 1977; 1978; Eden 1980; Ballantyne & Harris 1994, 160; Scheib & Lee 2010, 1). The fine silt subsoil, 0.4–0.5 m thick, encountered at Felixstowe Academy and Trimley derives from these loess deposits. In places the Bronze Age ditches could be seen cutting the subsoil; in others their silt fills were indistinguishable from it. Loess soils are among the most fertile in the world, providing good water retention and aeration, extensive penetration by roots, easy cultivation, and a high mineral and nitrogen content, though they are also at high risk of structural breakdown from overworking and erosion (Catt 1978, 17; 2001). Chemical analyses suggest that prior to weathering and human activity the distribution of loess soils across East Anglia was

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Table 2. Topographical contexts of the bronze age field systems

Site	*Geology*	*Elevation (m AOD)*	*Slope/aspect*	*Water*	*Alignments*
Slough Road, Brantham	Sand & gravel	34–32	Slight fall N–S	Springs 70 m S at Pattles Fen; major river (Stour) 1.5 km S	SW–NE/NW–SE
Thurmans Lane, Trimley St Mary	Loess over sand & gravel	24.8–23	Level; slight fall NW–SE	Close to sources of King's Fleet to N & E; major river (Orwell) 2.5 km SW	NW–SE/SW–NE
Felixstowe Academy	Loess over sand & gravel	23–22	Level; slight fall NW–SE	Stream 400 m W; major river (Orwell) 2 km SW	NW–SE/SW–NE
Ipswich Academy	Sand & gravel	37–35	Level	Springs 350 m SW; major river (Orwell) 1 km SW	NW–SE/SW–NE & NNW–SSE/ENE–WSW
Alnesbourn Crescent, Ipswich	Sand & gravel	35	Level	Springs 650 m S; major river (Orwell) 1.3 km S	ENE–WSW/NW–SE, turning W–E
Ravenswood Area 'T', Ipswich	Sand & gravel	36.9–35.7	Level; slight fall N–S	Springs 400 m W; major river (Orwell) 1 km SW	NE–SW/NW–SE
Main Road, Martlesham	Sand & gravel	31.8–29.2	Gradual fall NNE–SSW	Springs 600 m N & 800 m SE; R. Fynn 1.1 km N & major river (Deben) 3 km E	NE–SW/NW–SE
The Street, Easton	Sand & gravel	24.6–19	Fall N–S	Stream 40 m SE; major river (Deben) 250 m W	NW–SE/SW–NE
Aldeburgh Road, Leiston	Clay & silt over sand	18.6–15	Gradual fall NE–SW	Stream (Hundred River) 1 km SW; coast *c.* 3 km E	NNE–SSW/WNW–ESE
Flixton Park Quarry	Sand & gravel	21–13.5	Overall gradual fall SW–NE along shallow valley	Major river (Waveney) 100 m N (at its closest)	NE–SW/NW–SE
Game Farm, Brandon	Sand	10–5	Gradual fall S–N	River (Little Ouse) 250 m N	NW–SE/SW–NE

more extensive (Scheib & Lee 2010, 5–6). It may be that some of the other sites discussed here still had, in the Bronze Age and perhaps earlier Iron Age, at least a thin covering of loess, and that the Bronze Age field systems were preferentially sited on these high grade soils (see Yates 2007, 137–8).

At many of the sites there was a reduction in archaeologically visible activity over time. Land that had been sub-divided into fields, sometimes with suggestions of long use, during the latter part of the Bronze Age appears to have been abandoned or at least less intensively used by the Early/Middle Iron Age. This could be a consequence of soil degradation, in which case the evidence for Late Bronze Age manuring with midden material might represent an attempt to fertilise and bulk-up depleted soils. However, wider social and economic factors may well have been involved as apparent cessation of field system construction/maintenance by the end of the Bronze Age is a near-universal phenomenon.

This brief review shows that the field systems were sited on light land that was in some cases very fertile and in others not necessarily as impoverished as it was by later periods. Turning to the evidence from the sites themselves, there is a clear difference in morphology between two components of the sub-divided landscape at Martlesham. The set of squarish enclosures in the north-west are too small to have been used for any duration as pasture for livestock; nor does their size fit well with arable cultivation. Moreover, aspects of their layout, particularly the trackways funnelling into some of them, presumed hedged boundaries surrounding them, and, where evidence survived, their narrow corner entrances (see Pryor 2001, 417), all suggest a connection with temporarily corralling livestock, perhaps for sorting, inspection, milking, shearing, branding, or slaughter. This bringing in of animals logically suggests an 'infield' location close to settlement. The larger ditched fields in the south-east may have been the outfield where some of these livestock normally grazed. These might have been sheep rather than cattle given the dry soil and sort of heathland vegetation it typically supports (Williamson 2005, 56), though the above points regarding the Sandlings' 'original' soil quality should be borne in mind.

Small amounts of barley were found in the ring-gully at Martlesham and two contexts at Felixstowe Academy, but these grains were neither well-dated nor securely stratified and, in the absence of larger cereal/chaff assemblages, could have come from elsewhere. Barley found in Middle Bronze Age features at Red House Lane, Leiston, is more contextually secure, as are barley and both hulled and unhulled wheat from Walton Green, where chaff from cereal processing was also present (Adams 2018; Clarke 2023, 409). Possible loomweights in two of the structures at Ipswich Academy imply some sheep farming. The sub-divided landscape at Game Farm was interpreted as primarily associated with stock, based (in the absence of surviving faunal remains) on the layout of the enclosures and possible droves; loomweights and spindle-whorls also suggest the presence of sheep there, while a very few emmer/spelt grains from the round-houses could show that those crops were grown (Gibson 2004, 53, 56–7; Scaife 2004, 47). Clay loomweights and a possible spindle-whorl were also recovered from the Late Bronze Age settlement beside the field system at Flixton, where small quantities of cereal grains and the presence of numerous four-/six-post raised(?) structures also attest to stored crops (Boulter 2022, 149).

The considerable width (*c.* 16 m) of the corner entrance to the field at Easton also makes best sense in relation to livestock; cattle could have grazed in wet meadow beside the Deben, 250 m downslope. There was no direct evidence for the nature of Bronze Age agriculture at Easton but the Early Iron Age inhabitants, who may still have used the field(s), certainly kept sheep, cattle, and pigs, with a possible loomweight suggesting the former were exploited partly for wool; burnt but unidentifiable cereal grains and a single pea (Fabaceae sp.) suggest mixed farming. Similar mixed farming, including livestock grazing in the relict fields, and cultivation of emmer, naked wheat, and oats, took place at Early Iron Age Brantham, although this again says nothing about the primary use of the field system. Trackways at Brantham (where the fields also had wide corner entrances suitable for cattle), Trimley, Walton Green, Ravenswood Area 'T', Martlesham, and Leiston might be droves for moving livestock, but access to and from arable fields, and longer distance transport through sub-divided landscapes for communities living either side, would also be important (Evans 2009b, 246). The considerable width of the track at Trimley (10–13 m) and, to an even greater extent, central Trackway 2 at Martlesham, which widened as it approached the excavation area (18–22 m), are in the same order of magnitude as the 'great' droveways at Colne Fen, Earith, which were interpreted as

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components of a cattle handling and paddock system, though possibly primarily for use by through-traffic (Evans *et al.* 2013, 96–7, 103, 111–12, 128–31, 148–50). Whether they were intended mainly for local or longer distance movement, construction of trackways implies a need to keep livestock/carts off land on either side – either it was under crops or was grazed by animals that had to be kept separate.

The few cereal grains at sites like Game Farm and Red House Lane and the larger assemblages from Walton Green and excavations of Bronze Age settlements in Suffolk (see below), show that cereal crops were grown, while the presence of probably manure derived potsherds suggests that some of the sub-divided land parcels described here were (at least in later times) cropped. However, lack of clear evidence for field sizes makes it difficult to reconstruct how they might have functioned in an arable context. Theoretically (and despite the presence of potential pastoral indicators, such as trackways and wide/corner entrances) the strip fields at Leiston and Brantham, with their relatively long, narrow shapes, could lend themselves to strip ploughing. Although their exposed portions (max. 99.8 m at Leiston) fall some distance short of the typical *c.* 200 m (220 yd) furlong that a team would plough before resting/turning in medieval open fields (Rackham 1986, 168), smaller prehistoric draft oxen and plough-teams might have reduced this distance. It is interesting, then, that the more complete Bronze Age strip-type fields seen elsewhere have lengths about 160–200 m. However, this similarity is probably coincidental: medieval selions were a product of the mechanics of working with a heavy, mouldboard plough and large team required to pull it, which needed considerable turning space and made it logical to plough for as long as possible in one direction before turning (Banham & Faith 2014, 50–4, 70–2). Use of ards on these light soils would not necessarily give rise to this sort of ploughing pattern or predispose this field shape.

Indeed, early cultivation in Britain, as across north-west Europe, seems mainly to have involved cross-ploughing, a technique that was appropriate for light soils and relatively warm, dry climatic conditions, and which served to stir/aerate the soil while minimising evaporation (Payne 1957, 77; Fowler & Evans 1967, 293–5; Rees 1979, 38–9, 79–91; Fowler 1983, fig. 51; Fleming 2008, 190). Cross-ploughing can be carried out more easily in fields of approximately equal length and breadth and, while the probable small (sub-1acre/0.4 ha) square fields at Ipswich Academy (where a couple of isolated examples of possible plough/ard marks aligned with the Bronze Age field boundaries were recorded; Fig. S6) ostensibly appear less than ideal for efficient use and turning of an oxen-pulled ard, the larger land units partially exposed at Felixstowe Academy or perhaps Flixton could have been more practical. British evidence for Neolithic and Bronze Age cross-ploughing survives where conditions permit, for example, under sand dunes at Gwithian, Cornwall (Megaw 1976, fig. 4.1; Nowakowski 2009, 119–20), and beneath the long barrow at South Street, Avebury, Wiltshire (Ashbee *et al.* 1979, 282–3, fig. 36). But it is not entirely clear whether these are representative of normal cultivation: plough marks beneath barrows might be ritualised preparation of the ground to receive the dead (Rowley-Conwy 1987; Pryor 1998, 148) or connected with initial clearance and preparation of land for farming rather than the regular process of tillage (Ashbee *et al.* 1979, 296). Furthermore, the scale of cereal cultivation in the British Bronze Age is still far from clear, and it may be that Francis Pryor and Andrew Fleming were right to see it primarily taking place at a horticultural level close to houses (Pryor 1998, 82, 118; Fleming 2008, 135). If so, preparing soil may normally have involved manual tillage with spades and hand tools (Rees 1979, 6), in very small plots like those near the structures at Ipswich Academy, or those in the suggested field grid at Game Farm.

No doubt there was variation in the use of the different field systems described here but, taken as a whole, the limited combined evidence suggests that the sub-divided landscapes were used for mixed farming involving both livestock, perhaps predominantly sheep on the sandiest soils like those around Martlesham, and cultivation of barley and other cereal crops. Use for mixed farming would fit the evidence from excavated Bronze Age settlements in Suffolk. Middle Bronze Age midden deposits preserved in the top of a mine shaft at Grimes Graves, for example, showed that cereal crops (6-row barley and emmer) were being grown, possibly on soil made less acidic by upcast chalk from the mining, alongside a combination of cattle dairying and sheep farming, the latter mainly for meat (Legge 1981; 1992). At Middle Bronze Age Fordham Road, Newmarket, charred barley and hulled wheat (spelt/emmer) grains were found, and quernstones provide evidence for cereal processing; the faunal assemblage predominantly

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consisted of butchery waste from adult cattle (Faine 2017; Fosberry 2017; Shaffrey 2017). The earlier Bronze Age (*c.* 1700–1500 BC) occupants of West Row Fen kept cattle as well as sheep and pigs; emmer was the main crop, followed by spelt, hulled barley, and flax (Martin & Murphy 1988, 355–6). The Early Bronze Age inhabitants of Sutton Hoo grew barley, oats and wheat, with a mix of arable and pastoral land use inferred from the layout of ditches and fences, though the contemporaneity of those is uncertain (Carver 1998, 97–8; Hummler 2005, 446). At most of these sites there was also evidence for some hunting and gathering of wild resources. Of course, chronology is important here, as some of these sites pre-date the beginnings of formal field system construction, a development that may have been linked to other changes in agriculture.

David Yates interpreted the Bronze Age field systems of lowland England as primarily associated with livestock farming (Yates 1999, 163–7; 2001, 65–6, 73–4, 78; 2007, 120). In East Anglia, Francis Pryor identified Fengate's Bronze Age fields as hosting a sheep-centred agricultural economy (Pryor 1996; 1998, 89–108; 2001, 420) – and further argued that cereal cultivation was not an important part of agriculture in Britain until the *c.* Middle Iron Age (Pryor 1998, 82, 118, 148). More recently, these pastoral- and specifically sheep-centric views have been challenged by Christopher Evans on grounds of morphology (eg, many Bronze Age field systems, such as Bradley Fen, entirely lack droves) and the makeup of the associated faunal assemblages (which invariably have higher frequencies of cattle). Moreover, Evans reminds us that pastoral economies do not necessarily require formal field systems, which are perhaps more likely to reflect investment in the *land* itself, through enclosure, tree and stone clearance, and enrichment via manuring/middening – all processes just as likely to relate to growing crops (Evans 2009a, 63; 2009b, 243–52). Evidence from the large scale excavations at Heathrow Terminal 5 also provides a corrective to the pastoral-centric view of Thames Valley Bronze Age field systems: environmental evidence confirms that all stages of cereal production and use occurred on site and that cereal production was at least as important there as livestock (Leivers 2010, 142–3, 209).

Furthermore, it is far from clear whether specialised pastoral economies existed in this time and place on any great scale: reliable stock rearing required stores of cultivated fodder to keep some animals through winter and maintaining productive cropland relied, in turn, on manure from livestock; the two were heavily inter-dependent. Pryor (1998, 149) plausibly argued that there could have been specialisation on individual farms and trade/exchange between them providing what they did not produce for themselves but this would still require a landscape in which a sizeable proportion of farmers were primarily cultivators. Hence, the region's Bronze Age field systems are likely to have hosted mixed farming regimes, and their pastoral component may have been over-emphasised (Evans 2009b, 248; Bradley 2019, 225).

But just like pastoral farming, arable cultivation can be carried out, even on a large scale, on land without physical boundaries (as in medieval open fields), providing that fallows/harvest aftermath are grazed communally. Thus, the sub-divided agricultural landscapes – and generally small fields – seen here are most likely to imply different things taking place in close proximity at the same time, perhaps on land parcels owned or controlled by different people. This all tends towards a rather small scale and individualistic system, somewhat contra the communal stockyards of Fengate (Pryor 1996; 1998, 89–108; 2001, 415–20; 2002, 27; critiqued by Evans 2009b, 243–52 and Knight & Brudenell 2020, 208–10) and perhaps also some of David Yates's ideas about field systems being bound up in a prestige economy of conspicuous production and consumption (Yates 2007, 113, 120–32, 135–6; Bradley & Yates 2007, 97).

These south-east Suffolk field systems are similar in many respects to those mapped and investigated along the Thames Valley and west Cambridgeshire Fen edge but one 'typical' feature that is missing is the waterholes, probably because the free-draining geology made them impractical. This absence was compensated for by the location of all the field systems within a few hundred metres of springs/streams (Table 2). While a connection is usually assumed between waterholes and livestock (eg, Brown 1988, 295; Yates 2001, 65; 2007, 120, 136), water is obviously essential for both animal and plant life, and the free-draining Sandlings soils would have posed some difficulties for crops. Barley, as found in *very small* quantities here, and generally the main Middle Bronze Age crop (Bradley 2019, 224), is resilient and versatile, able to grow in quite poor soils, and relatively drought tolerant, although it yields poorly on sand (Bradley 1978, 32). A consequence of the absence of waterholes and other 'wet' features is a lack

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of opportunities for palaeo-environmental investigation and the better understanding of field use and landscape context it could bring.

Distribution and landscape/land use model

These excavations provide only small windows on landscapes that, in all cases, extend beyond the investigated areas. In effect they constitute a landscape characterisation exercise carried out via a series of random 'keyhole' samples rather than a designed research strategy. As such there is no reason to suspect the sites are atypical and it is possible that similar features might be uncovered if any comparable sized area on the light soils of the south-east of the county was subject to intrusive investigation. This area has extensive cropmarks of fields, enclosures, and trackways identified and plotted through projects such as the Historic England National Mapping Programme (NMP), Rapid Coastal Zone Assessment Survey (RCZAS), and Aggregates Levy Sustainability Fund (ALSF) (Hegarty & Newsome 2005, 30–2, 37–41; Hegarty 2006, 1, 9, 16–18, 20–9, 47–8; Good *et al.* 2007, 81, 83–4, 88–9, 105). Few of these have been sampled through excavation and securely dated. In the absence of 'ground truthing', dating remains reliant on apparent spatial relationships with landscape features of known age and on morphological comparison with other sites. In practice the latter can result in a tendency to assign Late Iron Age or Roman dates to field systems with rectilinear layouts, probably because the creation of planned-looking landscapes is often still widely assumed to have been impossible without large scale mobilisation of labour and resources under elite or state control, and that this could only have been achieved during those periods. A further factor underlying the apparent scarcity of Bronze Age sub-divided landscapes in northern East Anglia was the relatively low number of large scale archaeological excavations that had taken place – at least until recently – compared with neighbouring counties, particularly Cambridgeshire and Essex. Therefore, rather than a genuine absence, the previous lack of evidence for Bronze Age field systems in Suffolk (and Norfolk) resulted from not looking for them and not always recognising them when found.

In view of the results discussed here, at least *parts* of the extensive cropmark field systems on the Shotley peninsula, Trimley peninsula (Fig. 4), and further north along the coast, for example, in Martlesham, Waldringfield, Newbourne, and Hemley (Fig. 9), are likely to have Bronze Age origins. In addition to the recent excavations at Walton High Street (SHER FEX 299 and 451) mentioned above, areas of these cropmarks were investigated during construction of the cable route for the East Anglia One (EA1) offshore windfarm. Excavations exposed extensive ditch systems corresponding with parts of the cropmark complexes, as well as identifying Bronze Age burials, ring-ditches, and structures (SHER MRM 172b, Nicholson & Lotherington 2019; SHER MRM 173c, Thomas 2019; SHER WLD 069, Lloyd-Smith *et al.* 2019a; SHER HMY 043, Lloyd-Smith *et al.* 2019b; SHER HMY 044, Nicholson 2019). Ongoing analysis suggests that many of the cropmark and other ditches that were 'tested' within the EA1 cable easement, which were phased in the initial assessment reports (above) as Bronze Age, actually contain mainly residual finds deriving from later Bronze Age 'open' settlement in their vicinities; they can therefore only be broadly dated as 'later prehistoric to Roman' (Jonathan Tabor, pers. comm.). Nevertheless, there is reportedly good evidence of Middle Bronze Age land division in some of the investigated areas, hence publication by the Cambridge Archaeological Unit and Museum of London Archaeology is eagerly anticipated. The evidence for Bronze Age field systems complements the high concentration of barrows and cropmark ring-ditches across this area (Martin 1981, fig. 25, 75–7; Williamson 2005, 10). Similar evidence has been recovered from the Norfolk coast, where excavations for the Bacton to Great Yarmouth gas pipeline found that at least some of the extensive co-axial field systems mapped by the NMP have Bronze Age origins (Albone *et al.* 2007, 40–9; 2008, 33–4; NHER 12828, Bates & Crowson 2004).

The widespread presence of Bronze Age field systems in south-east Suffolk having been established, what of the rest of the county? As discussed previously, some of the largest excavations carried out in Suffolk to date, in advance of gravel extraction at Flixton, in the Waveney Valley (Fig. 10), revealed a multi-period landscape including an extensive early rectilinear field system. Its ditches post-date the Early Bronze Age and pre-date the Roman period but are otherwise undated; it may well have Middle Bronze Age origins – certainly it exhibits strong morphological similarities to some of the other Suffolk field systems discussed here (Stuart Boulter, pers. comm.; Boulter 2022, 63–6, 149–51). Hints of ditched enclosure(s), albeit undated, were present

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Fig. 10.
Sites discussed in the text

further east along the Waveney catchment, adjacent to the Late Bronze Age farmstead at Bloodmoor Hill, Carlton Colville (SHER CAC 042, Heard 2013, 24 fig. 9, 47, 77).

To judge from Game Farm, Brandon, beside the Little Ouse, at least some of the river valleys in the west of the county also had Bronze Age field systems. Excavation certainly demonstrates their presence along the River Snail. At Fordham Road, Newmarket, early boundary features, both ditches and a line of Early Bronze Age 'tree-pits', were associated with a substantial and long lived enclosed settlement that saw a major phase of occupation during the Middle Bronze Age (SHER NKT 047, Rees 2017). A few hundred metres south, at Windmill Hill, Exning, a large Middle Bronze Age boundary ditch has been excavated on the east facing slope extending down to the river (SHER EXG 099, Woolhouse 2012; SHER EXG 105, Cass 2014); there are indications of another substantial Bronze Age enclosed settlement on the hilltop (SHER EXG 082, Caruth 2006; Craven & Brudenell 2011). Later Bronze Age settlements and associated field systems have been recorded further downstream, in and around Fordham and neighbouring Soham, both into Cambridgeshire (Yates 2007, 98–9; Connor & Mortimer forthcoming). The Kennett Valley, east of Newmarket, has a similar chalk landscape with signs of Bronze and earlier Iron Age occupation, including a large cropmark hilltop enclosure overlooking the ford over the river (SHER MUN 039, MUN 040, MUN 047) – this may be another prime location to look for evidence of Bronze Age fields.

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This leads on to the Suffolk Fen edge, with its concentrations of Bronze Age metalwork (Martin 1999a, 38–9; Malim 2001, 17–19), the logical context for which might arguably be an area of high population density and associated closely managed agricultural resources (see Pryor 1998, 140). Similar coincidences of high volumes of bronze deposition with intensive settlement activity and field construction are found on the Southend peninsula, Essex, and elsewhere along the Thames gravel terraces (Yates 2001, 78; 2007, 114). However, Colin Pendleton argued (1999, 89) that the apparent frequency of bronze finds on the Suffolk Fen edge relates primarily to recovery/survival biases arising from modern land use rather than particularly high population or intensive activity during the Bronze Age. The temporal disjunct between the Middle Bronze Age field system and Late Bronze Age metalwork deposition at Bradley Fen (Knight & Brudenell 2020, 221, 390, 395) also calls into question whether concentrations of bronzes necessarily equate with areas of intensive settlement and agriculture. Nevertheless, the contrast between the west Cambridgeshire Fen edge, with its extensive Bronze Age field systems, and the eastern Fen edge, with its early settlement spreads, burnt mounds and metalwork, but lack of sub-divided landscapes, is striking.

Given intrusive fieldwork on a similar scale, would the Suffolk/Norfolk Fen edge and river embayments be revealed to have Bronze Age field systems comparable to those found on the west side of the Fen basin? Interestingly, the large excavations on the fen edge at RAF Lakenheath did find traces of stratigraphically early field ditches beneath the far more extensive Iron Age and Roman boundary systems, though these were difficult to track confidently and remain undated (Jo Caruth, pers. comm.). Furthermore, just a few kilometres north of Lakenheath and a little way upriver from where the Little Ouse emerges into the fen, the Middle–Late Bronze Age ditched field/enclosure system at Game Farm is more likely to be a fortuitous, localised survival, protected there by colluvium/windblown sand deposits, than an anomaly. It is precisely *preservation* rather than genuine difference in landscape organisation which explains the extreme scarcity of Bronze Age sub-divided landscapes on the Suffolk (and Norfolk) Fen edge. The prehistoric archaeology of the eastern Fen edge is generally much closer to the surface and exposed to damage from modern land use: drainage, intensive farming, and peat wastage (Silvester 1991, 136; Healy 1996, 177–8). These processes 'have progressively reduced the south-eastern fen-edge to the extent that very little survives of post-Early Bronze Age occupation'; 'Prior to erosion, the dry eastern margins once contained traces of other later second millennium BC features including Middle Bronze Age fieldsystems and later Bronze Age settlement.' (Knight & Brudenell 2020, 393–5, fig. 7.9).

In the hinterland of the fen edge, the landscape rises to a (relatively) high, dry plateau away from the bisecting river valleys. Excavation of a 15 km tract through these 'high Brecks' during dualling of the A11 between Barton Mills and Thetford found no clear evidence of Bronze Age land divisions to complement the density of barrows in the area (Martin 1981, fig. 25, 75–7; 1999a, 38–9). While more investigation is needed before drawing firm conclusions, a likely reason for the apparent absence of Bronze Age fields – in an area of light soils similar to the Sandlings – is the scarcity of water. The practical and symbolic significance of water in this dry landscape may be reflected by a cluster of Late Bronze Age un-urned cremation burials surrounding a small, seasonally wet, waterhole at Chalk Hall Farm, Elveden, sited in one of a few locales where a clay capping over the free-draining chalk enables groundwater to collect (SHER ELV 085, Lees *et al.* 2013, Woolhouse in prep.). Bronze Age land use on the Breckland plateau would appear from this largely negative evidence to have been non-intensive and geared around peripatetic grazing of livestock, utilising scattered features like this one to water animals, and with burials perhaps re-inforcing communities' claims to use them. Settlements – and perhaps more intensively used, bounded, and managed agricultural land – may have been focused along the low ground of the fen edge, several kilometres to the west, and the river valleys a similar distance to the north and south, with livestock grazing in the fen during the drier, summer months. Just such a pattern of seasonal transhumance was suggested for the Early Bronze Age inhabitants of West Row Fen (Martin & Murphy 1988, 357).

East of the high Brecks, but still some distance from the Black Bourn Valley, further to the east, recent geophysics and trial trenching has identified a series of large (*c.* 0.5–0.8 ha), predominantly curvilinear compounds/enclosures surrounded by ditches up to several metres wide and over a metre deep, constructed during the Middle Bronze Age (SHER EUN 075, EUN 076 and FKM 085, Billington & Cox

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2021). Part of a probable Late Bronze Age sword blade was found in the upper fill of one of the ditches, while pottery, worked/burnt flint, and charred grain suggest some level of domestic and other activities. There are indications that the surrounding land has a broadly contemporary rectilinear field system demarcated by less substantial ditches. The complex's interfluvial location might be explained by its proximity to the groundwater fed meres at Rymer Point, which historically provided a valuable source of water for livestock grazing the heath and which may have allowed Bronze Age activity to extend some distance away from the river valley (Dymond 1968, 23–4; Martin 1999a, 38).

Similar primarily pastoral Bronze Age land use may be suggested by the evidence from some other excavated sites further 'inland', including Marham Park, Fornham All Saints (SHER FAS 056, Green 2018[3]), located on a slope and ridge overlooking the river Lark, and Green Lane, Haughley (SHER HGH 058, Woolhouse & Pullen 2020; forthcoming), on the edge of the Gipping Valley/mid-Suffolk clay plateau. At both sites wells/waterholes and associated burnt flint mounds appear most likely to have been connected with livestock farming, perhaps including butchery and processing of animal carcasses and skins. A Bronze Age double-ditch boundary or droveway at Haughley and a similar ditched and banked 'ranch'-type boundary or sheep walk at Marham Park could have helped to move and corral animals through what appear – based on pollen – to have been largely open landscapes on the valley sides, though there were some fragments of rectilinear ditched fields/enclosures at Marham Park that might be remnants of a wider-scale field system (Green 2018, 85 fig. 22; Abby Antrobus pers. comm.). There are chronological differences between these landscapes: the burnt mounds and wells at Marham Park primarily date to the Beaker period/Early Bronze Age, the field remnants are Middle Bronze Age, while the long ditch and bank boundary appears to be Late Bronze Age/Early Iron Age. Material from both the waterhole and droveway at Haughley returned Middle Bronze Age radiocarbon dates, though the lower fills of the waterhole were undated and it could have been constructed earlier.

There may have been more concerted enclosure/sub-division of land further down the valley sides, as suggested by excavations 600 m south of Green Lane, at Fishponds Way, Haughley. Here, on a sandy slope adjacent to a minor tributary of the river Gipping, were traces of ephemeral and sterile-looking rectilinear ditches, which, though essentially undated, certainly had the appearance of a fragmentary Bronze Age field system like those seen in the south-east of the county (SHER HGH 060, Mlynarska & Woolhouse 2020, 34–9, 99–100, figs 7–8). There was abundant evidence for Neolithic and Early Bronze Age activity at the site and the ditched trackway at Green Lane heads directly towards the stream close to this site in the valley bottom. Use of a droveway to control movement implies a need to keep livestock from straying over the apparently open grassland/pasture to either side, suggesting either different ownership or the intention to separate the animals being driven from those grazing the hillside. The extensive cropmark complex on the floor of the Lark Valley, just east of Marham Park, might perhaps hold similar evidence for Bronze Age land allotment along the river margins but has, to date, seen very limited archaeological investigation.

As at Haughley, there are other hints of Bronze Age land divisions extending onto the fringes of Suffolk's clay soils. Notable in this regard is Hales Farm Barn, Withersfield, where excavation in advance of house building identified part of a sub-rectangular enclosure surrounded by a large ditch and either enclosing or adjacent to an earlier findspot of a Late Bronze Age hoard (SHER WTH 011, Bales & Topham-Smith 2002); the evaluation trenches contained evidence of a possible associated field system, comprising shallow gullies with contemporary pottery (Sommers 1998; Colin Pendleton, pers. comm.). The site is in the upper reaches of the Stour Brook Valley, on the margin of the south Suffolk clay. What appears to be part of another small settlement, dating to the Late Bronze Age/Early Iron Age, has been found on the boulder clay above the valley of the river Brett, at Red Hill Road, Hadleigh, associated with a possible droveway and ditched field boundaries on the same alignments (SHER HAD 061, Meredith 2004).

Perhaps unsurprisingly, until recently there was no evidence for Bronze Age sub-divided agricultural land on the poorly draining High Suffolk clay plateau itself. This mirrored the sparse distribution of other visible indicators of Bronze Age occupation, such as round barrows and ring-ditches, in the area (Martin 1981, fig. 25, 75–7; 1999a; Williamson 2005, 9), though it should be noted that Colin Pendleton believed this pattern to be largely illusory, caused by destruction of sites through a long history of arable cultivation

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(1999, 89–90). A few years ago, Early–Middle Bronze Age features, including a burnt mound, pond, waterhole, and light scatter of associated pits and postholes, were identified on the clay interfluve at Yaxley, associated with clear evidence for woodland clearance by the early 2nd millennium BC (Brudenell & Kwiatkowska 2022). More recently, and since this article was drafted, another burnt mound complex has been investigated on the clay plateau at Laxfield, there associated with a small exposed area of rectilinear enclosures/fields bounded by ditches that contain Middle Bronze Age pottery (SHER LXD 135, Fern 2022; Richard Mortimer pers. comm.). There is evidence for Bronze Age activity in similar topographical/geological contexts elsewhere in the region, for example, on the north-west Essex boulder clay plateau (Guttman 2000), but evidence for Bronze Age land division in these sorts of locales – here on flat and poorly draining clay several kilometres inland from the nearest significant river valleys (the Blyth and Alde) – is unusual in the region and a first for Suffolk. Parts, at least, of the heavy clayland were therefore being utilised by the Early Bronze Age, perhaps primarily as pasture/browse for livestock and exploitation of other 'woodland' resources, and there may have been some associated settlement (Pendleton 1999, 89–90; Martin 1999b, 52). In some areas, Middle Bronze Age land division extended even onto these higher, interfluvial clays.

These hints of Bronze Age pastoral land use in the claylands find a parallel in medieval and early post-medieval farming in this landscape. Before the introduction of field drains from the 18th century onwards, 'High' Suffolk – particularly its flatter, northern parts – were a noted dairying region on account of their poor drainage and limited suitability for arable cultivation, but reliably lush grass cover (Martin 2012, 227). Evidence from some clayland sites in neighbouring counties, for example, the Middle Bronze Age 'Ormesby-type' enclosure at Swan's Nest, Swaffham, located on the edge of the central Norfolk boulder clay, also suggests a main emphasis on livestock farming rather than arable cultivation (White 2022, 105–8). However, it would be premature to ascribe Bronze Age use of the Suffolk claylands an exclusively pastoral basis given the clear evidence from 'heavy land' sites in Cambridgeshire, such as Striplands Farm, Longstanton, that Late Bronze Age settlements there were engaged in mixed farming (Evans & Patten 2011, 41).

This is obviously a rapid survey, heavily biased towards sites with which the author is familiar. No doubt there are numerous further examples and archaeologists working in other professional organisations operating in Suffolk will be aware of important sites currently undergoing post-excavation analysis. Caution must clearly be exercised in drawing too much from unpublished work that has not always progressed beyond preliminary analysis. Nevertheless, a provisional picture begins to emerge of quite widespread Bronze Age sub-divided agricultural land on the light soils of Suffolk's coast and river estuaries, continuing inland up those rivers and their tributaries, and also occurring, where water was available, on the chalk and sands in the west of the county. It is also becoming increasingly clear – as in areas such as Kent (Yates 2007, 110) – that landscape sub-division, probably with a pastoral focus, was pushing onto the central clay, in some places even the poorly draining interfluves.

CONCLUSIONS

Far from being a blank in their distribution, Suffolk has widespread evidence for Bronze Age field and enclosure systems that are similar in character to those found elsewhere across southern and eastern England. They are extensive on the Sandlings and coastal peninsulas in the south and east of the county. Although this no doubt partly reflects a prehistoric proclivity to settle and farm light, well-drained soils, it may also be a product of preferential survival in this area of historically uncultivated heaths (Williamson 2005, 9–10). Preservation bias aside, the distribution of Bronze Age fields appears to encompass not only the Suffolk coast and estuaries but extends along the light-soil river valleys, including some quite minor watercourses. They can also be found on the fringes of the High Suffolk clay, and on the chalkland and heaths in the west of the county, at least where water sources were available. Given their prevalence on the western edge of the Cambridgeshire Fen basin, the scarcity of evidence for Bronze Age subdivided landscapes on the Suffolk Fen edge is striking, but – in view of rare, localised survivals along the feeder rivers – this is undoubtedly due to extremely erosive recent land use rather than real absence.

This debunking of supposed Suffolk or 'northern East Anglian' particularism should come as no surprise: Bronze Age sub-divided landscapes have

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long been recognised as widespread in neighbouring Essex and Cambridgeshire, and there is no reason to think that either the Fenland or River Stour was a significant cultural boundary during later prehistory. The apparent absence – until quite recently – of such landscapes in Suffolk and Norfolk was simply a product of the relatively smaller scale of fieldwork compared with adjacent counties and the different fieldwork traditions and expectations of archaeological units working in the area.

The *fact* of their presence having been established, the work now begins of identifying those sites where preservation conditions, potential for palaeo-environmental sampling, or contextual associations (between land boundaries and settlement areas, burials, or other foci) can provide finer grained data about the date, development, and agricultural function of Bronze Age fields in Suffolk, as well as understanding how they related to other elements of the natural and human landscape – settlements, monuments, metalwork deposits, and routeways.

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SUPPLEMENTARY MATERIAL

For supplementary material accompanying this paper visit https://doi.org/10.1017/ppr.2024.11

NOTES

[1]Post-excavation analysis by Cotswold Archaeology (Suffolk) is underway at the time of writing.

[2]Scottish Universities Environmental Research Centre Radiocarbon Laboratory.

[3]Post-excavation analysis by Cotswold Archaeology (Suffolk) is underway at the time of writing.

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RÉSUMÉ

Les champs de l'âge du Bronze dans le Suffolk: un premier bilan, par Tom Woolhouse

L'agriculture s'est développée en Grande-Bretagne durant le Néolithique, toutefois, dans la plus grande partie de l'Angleterre, les premières véritables traces de champs et enclos ayant servi pour la culture et la garde du bétail ne datent que de l'âge du Bronze moyen, *c.* 1600/1500 BC. Alors que ces paysages subdivisés de l'âge du Bronze sont répandus dans le sud et l'est de l'Angleterre, le Suffolk et le Norfolk représentaient de fait, et jusqu'à récemment, un 'vide' dans leur répartition. Au cours des 15 dernières années, un nombre croissant de tels systèmes de champs a été fouillé, en particulier dans le Norfolk, dont certains ont déjà été publiés. Cet article contribue à l'émergence de ces connaissances en faisant la brève description de certains aspects de sept systèmes de champs supplémentaires, datés de l'âge du Bronze (ou probablement de cette période), et découverts dans le cadre de fouilles préventives dans le sud-est du Suffolk. Des données publiées et actuellement inédites seront également convoquées afin d'établir la répartition de ces divisions agraires, et un bilan des connaissances concernant l'emplacement, la date, le développement, la disposition et la fonction agricole de ces champs de l'âge du Bronze dans le comté. Certaines implications présentent un intérêt plus général pour la compréhension de l'organisation du paysage et l'utilisation des terres durant l'âge du Bronze dans les plaines d'Angleterre.

ZUSAMMENFASSUNG

Bronzezeitliche Felder in Suffolk: ein vorläufiger Überblick, von Tom Woolhouse

Die Landwirtschaft breitete sich in Großbritannien während des Neolithikums aus, aber in weiten Teilen Englands stammen die frühesten guten archäologischen Belege für Felder und Einfriedungen, in denen Getreide angebaut und Vieh gehalten wurde, aus der Mittelbronzezeit, etwa 1600/1500 v. Chr. Während diese bronzezeitlichen unterteilten Agrarlandschaften in Süd- und Ostengland weit verbreitet sind, waren Suffolk und Norfolk bis vor kurzem im Wesentlichen ein „unbeschriebenes Blatt", was ihre Verbreitung angeht. In den letzten 15 Jahren wurde eine wachsende Zahl solcher Feldsysteme ausgegraben, vor allem in Norfolk, und einige von ihnen werden derzeit bereits publiziert. Dieser Artikel trägt zu diesem sich entwickelnden Bild bei, indem er kurz Teile von sieben weiteren bronzezeitlichen – und wahrscheinlich bronzezeitlichen – Feldsystemen beschreibt, die im Rahmen von jüngeren baubedingten Ausgrabungen im Südosten von Suffolk untersucht worden sind. Es werden auch jüngst veröffentlichte und unpublizierte Nachweise aus anderen Teilen der Grafschaft berücksichtigt, um zu ergründen, wie weit verbreitet solche Feldeinteilungen waren, und um den gegenwärtigen Kenntnisstand über Lage, Datierung, Entwicklung, Struktur und landwirtschaftliche Funktion der bronzezeitlichen Felder in der Grafschaft zu ermitteln. Einige der Schlussfolgerungen sind von allgemeinem Interesse für das Verständnis der bronzezeitlichen Landschaftsorganisation und Landnutzung im englischen Tiefland.

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RESUMEN

Los campos durante la Edad del Bronce en Suffolk, por Tom Woolhouse

La agricultura se desarrolló en Gran Bretaña durante el período Neolítico, pero en la mayor parte de Inglaterra la evidencia arqueológica más sólida de campos y recintos en los que se realizaban estos cultivos y la cría de la cabaña ganadera datan de mediados de la Edad del Bronce, *c.* 1600/1500 BC. Estas divisiones agrícolas en el paisaje se extienden durante la Edad del Bronce en el sur y este de Inglaterra, mientras que Suffolk y Norfolk han sido, hasta recientemente, un "vacío" en su distribución. En los últimos 15 años se ha excavado un número creciente de estos sistemas de campos, especialmente en Norfolk, y algunos han empezado a publicarse. Este artículo contribuye a este panorama en desarrollo con una breve descripción de siete sistemas agrícolas de la Edad del Bronce -o probablemente de la Edad del Bronce- que han sido investigados a raíz de recientes excavaciones motivadas por el desarrollo urbano en el sureste de Suffolk. También se considera la evidencia publicada e inédita de otras partes del condado con el objetivo de identificar cómo se expanden estas divisiones territoriales y establecer el estado actual del conocimiento en cuanto a la ubicación, datación, desarrollo, disposición y función agrícola de los campos durante la Edad del Bronce en el condado. Algunas de las implicaciones son de especial interés para la comprensión de la organización del paisaje y el uso del suelo durante la Edad del Bronce en las tierras bajas de Inglaterra.

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