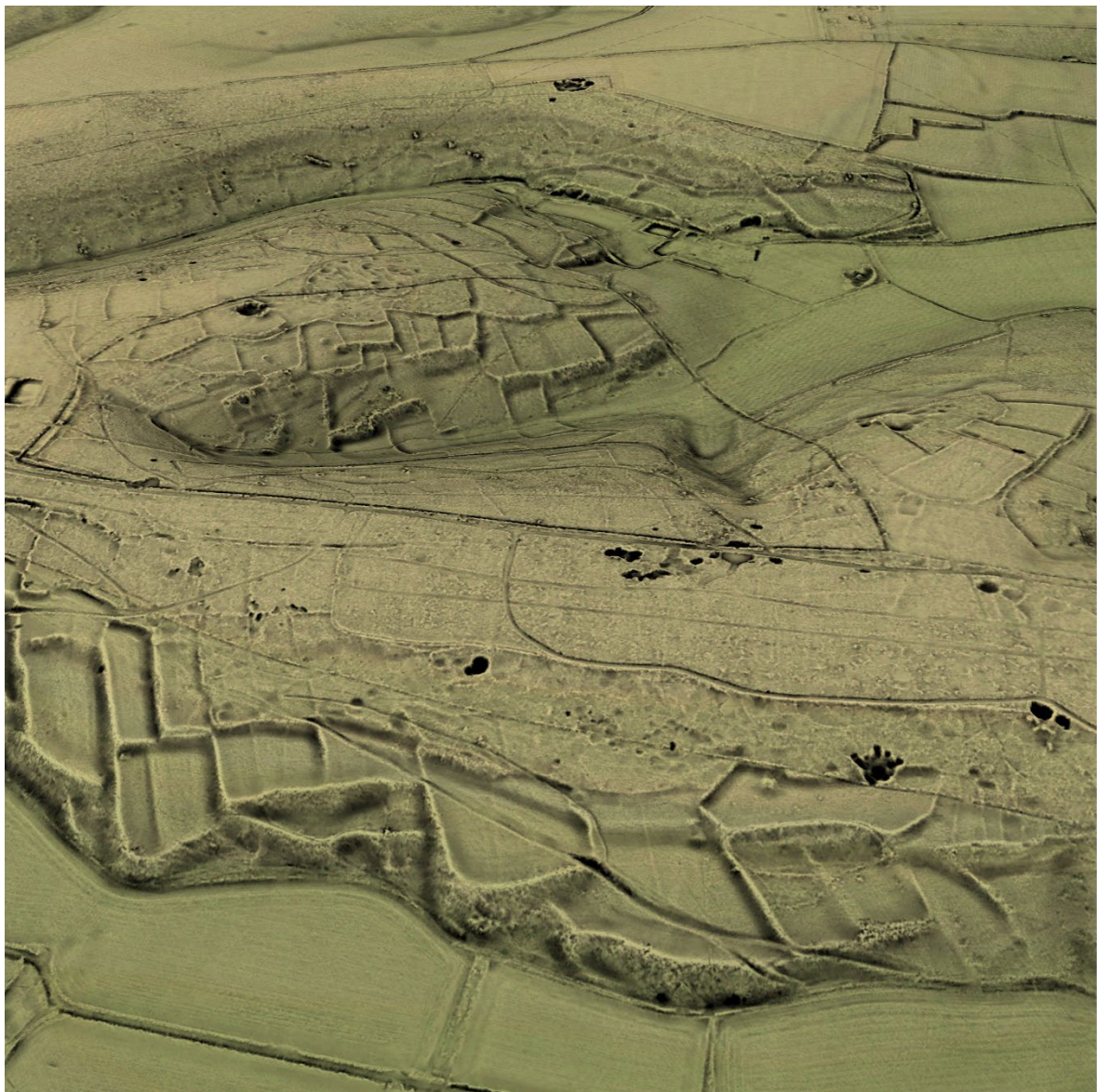


Higher Houghton, Dorset

Aerial Investigation and Mapping of Higher Houghton,
Dorset

Katy Whitaker



Higher Houghton, Dorset

Aerial Investigation and Mapping of Higher Houghton, Dorset

Katy Whitaker

Winterborne Houghton
Dorset
DT11 0PG

NGR: ST 80213 04405

Print: ISSN 2398-3841
Online: ISSN 2059-4453

The Research Report Series incorporates reports by Historic England's expert teams, their predecessors and other researchers. Many Research Reports are interim, to make available the results of specialist investigations in advance of full publication. Although subject to internal quality assurance, they are not usually refereed externally and their conclusions may sometimes have to be modified in the light of information not available at the time of the investigation. Where no final project report is available, readers should consult the author before citing these reports.

For more information email Res.reports@HistoricEngland.org.uk or write to:

Historic England, Fort Cumberland, Fort Cumberland Road, Eastney,
Portsmouth PO4 9LD

Opinions expressed in Research Reports are those of the author(s) and are not necessarily those of Historic England.

Summary

A woodland management plan is [2022–23] being developed for the Higher Houghton area in Dorset. The area includes well-preserved archaeological remains, some of which are scheduled, but which need to be better understood to provide advice on the planned landscape-scale wood-pasture creation and restoration scheme. The Higher Houghton Aerial Investigation and Mapping project was designed to provide a baseline record of the extent of the archaeological features and their significance, enabling the definition of constraint areas for wood-pasture creation and potentially to inform scheduled monument record revision. The Aerial Investigation and Mapping results, augmented with walk-over survey of selected locations within the study area, confirmed the overall excellent preservation of archaeological earthworks but also showed that these monuments are more extensive than previously thought. At least one previously unidentified Bronze Age round barrow has been mapped. Iron Age/Roman settlement sites and their field systems within the study area are likely linked by networks of trackways. Two known medieval deer parks have been fully mapped, and a previously unrecorded post-medieval rabbit warren has been identified, as well as other medieval/post-medieval features including cultivation remains and extractive pits. Elements of the Grade II*-listed Milton Abbey Park, designed by Lancelot Brown, were also recorded.

Contributors

The research was carried out by Katy Whitaker with Nicky Smith (Landscape Archaeology Team) who provided support during the project's walk-over survey.

Acknowledgements

With thanks to the landowners who facilitated site visits and discussed the landscape around Higher Houghton. A dataset for the study area from Dorset Historic Environment Record was kindly provided by Claire Pinder (Dorset Council). Sally Evans (Historic England) project-managed this project for Historic England and contributed valuable comments on this report.

Front cover image: Higher Houghton study area from the south-east (Digital Terrain Model). [© Historic England; source Environment Agency]

Archive location

Historic England Archive, The Engine House, Fire Fly Avenue, Swindon, SN2 2EH, archive@historicengland.org.uk

The project is recorded through OASIS, the online system for reporting archaeological investigations, as nmr1-512110.

Date of survey/research/investigation

Aerial Investigation and Mapping was undertaken between November 2022 and January 2023. Monument recording was completed in June 2025. An interim report was written in January 2023 and finalised in July 2025.

Contact details

Katy Whitaker, Aerial Survey Team, The Engine House, Fire Fly Avenue, Swindon, SN2 2EH, 01793 445050.

Contents

Introduction.....	2
The project.....	2
Aerial Investigation and Mapping.....	2
The project area	3
Results	6
Bronze Age.....	8
Iron Age/Roman	11
Medieval	24
Post-medieval.....	27
Post-War woodland development	32
Conclusion.....	38
Appendix 1, Methodology	39
Scope and sources	39
Methodology.....	39
Appendix 2, SSSIs.....	43
References	44

Illustrations

Front cover image: Higher Houghton study area from the south-east (Digital Terrain Model).....	ii
Figure 1: Location maps, Higher Houghton study area.....	1
Figure 2: The project study area and placenames mentioned in the text.....	3
Figure 3: Designated sites in the study area.....	5
Figure 4: Mapped features of all periods in the project study area.	6
Figure 5: Bronze Age round barrows and other mounds in the project area.....	8
Figure 6: A small mound at ST 8001 0503 (G in Figure 5).....	10
Figure 7: A large sub-circular mound at ST 7985 0404 (K in Figure 5).....	11
Figure 8: Linear earthwork Dorset HER: MDO5231/HERR: 205816.....	12
Figure 9: Meriden Wood enclosed settlement (right), trackway D (centre left) and part of the field system to the south of the settlement, viewed from the north-east.....	13
Figure 10: Meriden enclosed settlement and trackways, linked to the Green Down field system by a continuation of trackway A.	14
Figure 11: The junction of lynchets on Green Down at ST 7949 0446.....	16
Figure 12: Possible layout on Meriden Down of later prehistoric fields around an area of unenclosed settlement (S) with access points to three trackways (a, b, c).	17
Figure 13: Settlement south-east of Park Wood (NHLE: 1002466) and surrounding features.....	18
Figure 14: Earthworks on Houghton South Down (NHLE: 1002440) and surrounding features.....	20
Figure 15: Iron Age/Roman enclosure, trackways and fields on Ringmoor, Turnworth (lidar DTM visualisation).	22
Figure 16: Medieval deer parks in the project area.....	24
Figure 17: Pillow mounds of a rabbit warren amongst other archaeological features.	28
Figure 18: Pillow mounds constructed amongst Iron Age/Roman fields of the settlement south-east of Park Wood.	29
Figure 19: Post-medieval parkland features on Green Down.	30
Figure 20: View south towards Milton Abbey from Green Down, including to the left a lynchet of the Green Down Iron Age/Roman field system and to the right, a stream running south to Milton Abbey.	31
Figure 21: Areas of woodland and grazing in the Higher Houghton environs in 1947.	32
Figure 22: Areas of woodland and grazing in the Higher Houghton environs in 1986.	34
Figure 23: Areas of woodland and grazing in the Higher Houghton environs in 1995, with annotations by Ordnance Survey staff.	35
Figure 24: Areas of woodland and grazing in the Higher Houghton environs in 2000.	36

Figure 25: Areas of woodland and grazing in the Higher Houghton environs in 2017.	37
Figure 26: Location of SSSIs across the project area.	43

Tables

Table 1: Historic England Archive images.....39

Table 2: Mapping layer content and drawing conventions.....41

Table 3: Historic England AI&M attribute data fields.....42

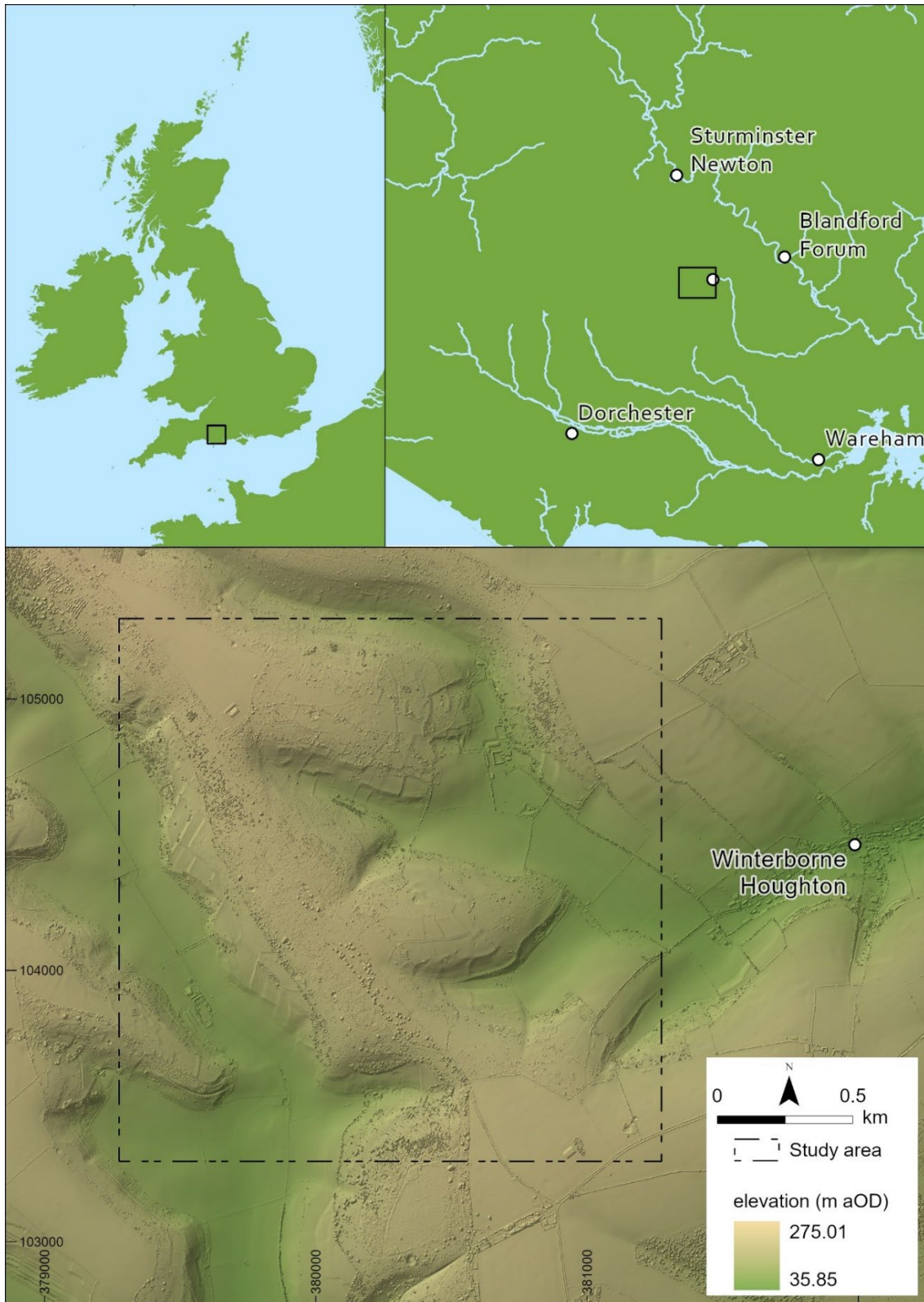


Figure 1: Location maps, Higher Houghton study area. [Includes data © Ordnance Survey Ireland, © Crown copyright and database right [2025] (Open Government Licence), © EuroGeographics and lidar data © Historic England; source Environment Agency]

Introduction

The project

A woodland management plan is [2022–23] being developed by Natural England for the Higher Houghton area in Dorset (Fig. 1). The area includes well-preserved archaeological remains, some of which are scheduled, but which need to be better understood in order for Historic England to provide advice to Natural England on the planned landscape-scale wood-pasture creation and restoration scheme. There is a need to identify constraint areas as part of the woodland management plan, particularly where scheduled settlement sites and their in-fields and trackways could be impacted by planting, access and extraction routes.

The immediate landscape includes four Scheduled Monuments and the Milton Abbey Registered Park and Garden. The scheduled sites are all in the Old County Number Series (that is, they lack full text descriptions). The archaeological earthwork survival is exceptional, particularly at the Meriden Down enclosed settlement site (National Heritage List for England: 1002439) which is understood to be Iron Age/Roman in date. The project area includes other earthworks that are undesignated but potentially of national importance, including a well-preserved deer park pale, areas of field systems and barrows.

A Royal Commission on the Historical Monuments of England (RCHME) survey of the area (RCHME 1970) was hampered by encroaching scrub and therefore missed some of the archaeological remains of potential national importance beyond the designated areas. Access to lidar datasets and other aerial sources now provides the opportunity to map archaeological remains in the project area with greater detail. These investigations will inform Historic England's advice to Natural England by providing a better understanding of the extent and significance of the archaeological remains in the Higher Houghton project area.

Aerial Investigation and Mapping

Aerial Investigation and Mapping (AI&M) was requested for the Higher Houghton study area by Dan Bashford (Historic England). The survey was carried out between November 2022 and January 2023. Sources used include Historic England's collection of aerial photographs, historic maps, Environment Agency lidar at 1m resolution, visualised using the Relief Visualisation Toolbox (Kokalj and Somrak 2019; Zakšek et al. 2011) and Aerial Photography for Great Britain (APGB) digital orthomosaics. Dorset Historic Environment Record (HER) data, Historic England Research Records (HERR), the National Heritage

List for England (NHLE) and published secondary sources have been consulted to assist the interpretation of mapped features (see Methodology). The results have been augmented by a walkover survey of selected locations within the project area.

The project area



Figure 2: The project study area and placenames mentioned in the text. [Includes lidar data © Historic England; source Environment Agency. Base map © Crown copyright and database rights 2025, OS Licence AC000081506]

The 4 sq. km project area is to the west of Winterborne Houghton village, within the Dorset National Landscape, on the chalk dip slope to the south-east of the North Dorset escarpment. The area straddles the interfluvies dividing the dry chalk valleys of Delcombe Bottom, Crincombe Bottom, Park Bottom and Heath Bottom and their steep-sided re-entrants. The main wooded areas are Meriden Wood, Park Wood, Blagdon Copse, Bully Wood and Bully Plantation and Green Hill (Fig. 2).

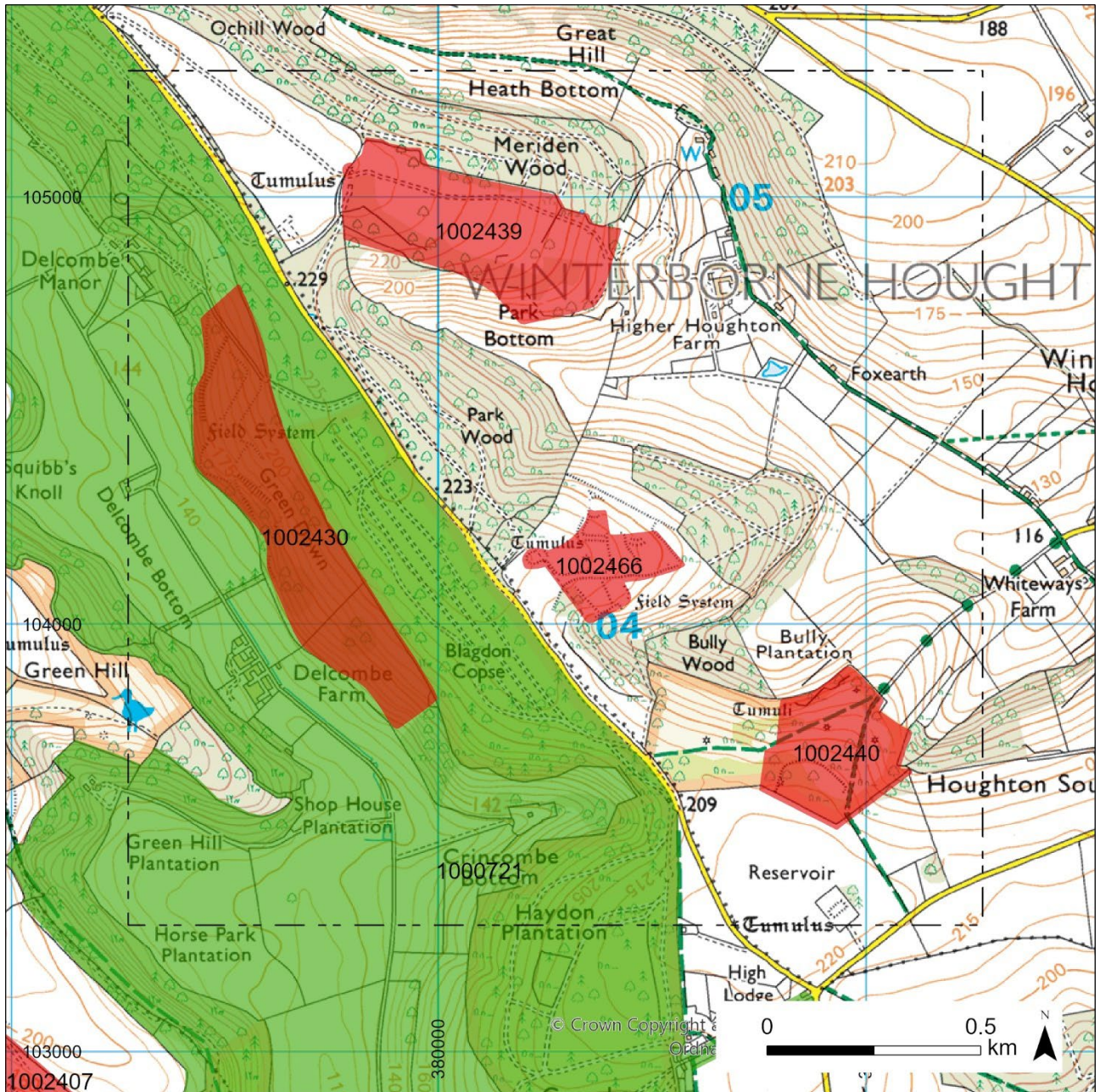
The bedrock geology of the highest ground is the Seaford Chalk Formation, with Zig Zag Chalk Formation in the valley bottoms and the Holywell Nodular Chalk, New Pit Chalk and Lewes Nodular Chalk Formations to the valley sides. Flints are found in the higher facies. The superficial geology includes a Clay-with-Flints cap mantling the chalk hills and Head in the valley bottoms (<https://mapapps.bgs.ac.uk/geologyofbritain/home.html>; British Geological Survey 2020).

The highest ground in the north-west of the project area rises to around 245m above Ordnance Datum (aOD), whilst the lowest is in the east and south-west where the valley bottoms reach 130m aOD. On the highest ground the soils on the Clay-with-Flints are slightly acid, loamy and clayey with impeded drainage. In the north-west and along Delcombe Bottom the soils are freely draining, lime-rich loams, whilst in Park Bottom the soils are shallow and lime-rich (Cranfield University 2025).

The project area encompasses four Scheduled Monuments and part of the Milton Abbey Registered Park and Garden (Fig. 3):

- NHLE: [1002439](#), Earthworks south of Meriden Wood and adjoining round barrow.
- NHLE: [1002466](#), Earthworks south-east of Park Wood including round barrow.
- NHLE: [1002440](#), Earthworks on Houghton South Down including group of three barrows.
- NHLE: [1002430](#), Field system on Green Down.
- NHLE: [1000721](#), Milton Abbey (Grade II*).

The Green Down field system, which is within the Milton Abbey Registered Park and Garden, is possibly related to the Meriden Wood and Park Wood Iron Age/Roman settlement earthworks (RCHME 1970, 337).



Study area

Designated sites

Scheduled Monuments

Parks and Gardens

Figure 3: Designated sites in the study area. [Base map © Crown copyright and database rights 2025, OS Licence AC000081506]

Results

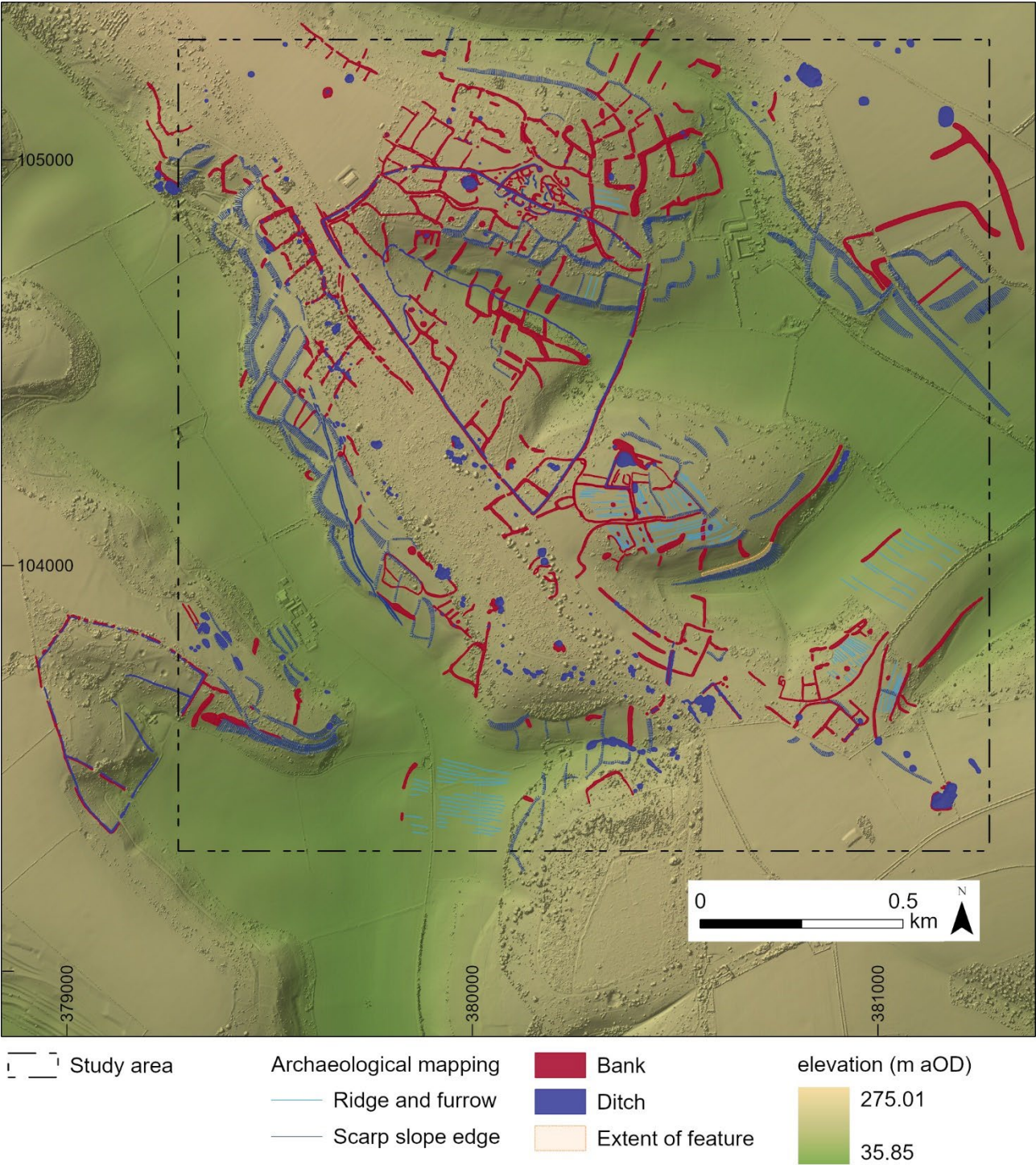


Figure 4: Mapped features of all periods in the project study area. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

This section outlines the key results of the Aerial Investigation and Mapping, organised chronologically. All archaeological features identified in aerial photographs and lidar visualisations were mapped, the earliest being a number of Bronze Age round barrows. Substantial Iron Age/Roman field systems and settlement sites form perhaps the most extensive archaeological features in the project area. Two medieval deer parks are also significant aspects of past land management here, along with some evidence for medieval cultivation practices in the form of lynchets and some parcels of ridge and furrow. Later social and economic activities are represented by aspects of a post-medieval designed landscape, a small rabbit warren and numerous extractive pits, some large enough to be described as quarries (Fig. 4).

Bronze Age

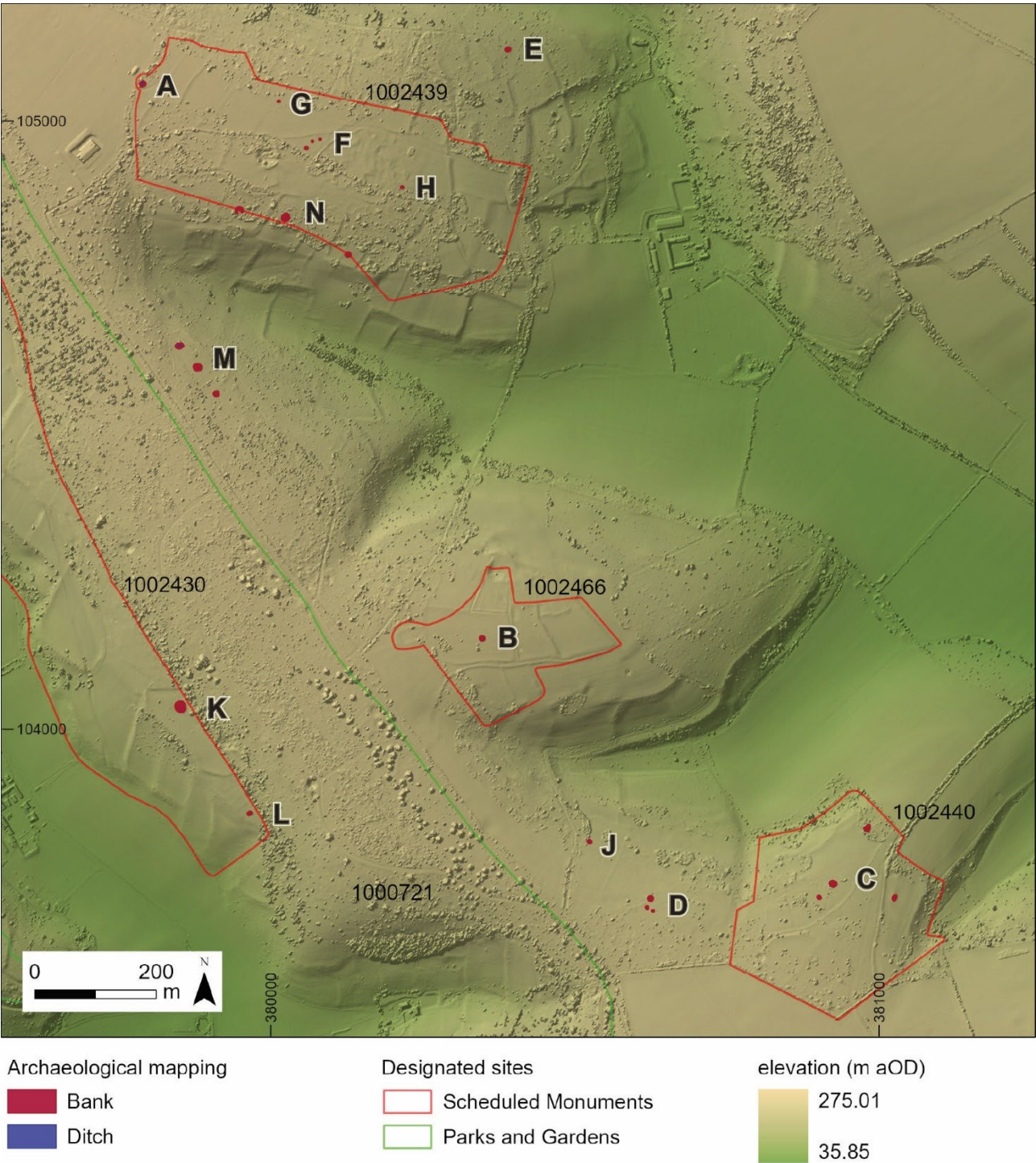


Figure 5: Bronze Age round barrows and other mounds in the project area. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

There are nine round barrows in the project area and a number of mounds, some of which may also be Bronze Age barrows (Fig. 5).

Six round barrows, one of which is previously un-recorded (HERR: 1632071), are located within scheduled areas (A, B and C in Figure 5). Three more, positioned on the saddle separating Crincombe Bottom and Bully Plantation, are undesignated (D in Figure 5). These features are positioned between 180m and 240m aOD. Most are just below the highest ground, overlooking the dry valley system leading towards Winterborne Houghton in the east. Their positions suggest that they were sited to be false-crested when viewed from lower ground. They range from 5.6m to 13.7m in diameter. None have been excavated in modern times. The hollow in the top of round barrow Dorset HER: MDO5241/HERR: 201764 (A in Figure 5) may indicate that it was subject to an antiquarian excavation. Round barrow Dorset HER: MDO5240/HERR: 205723 (B in Figure 5) is also disturbed as are the barrows described in Dorset HER: MDO5236/HERR: 205725 and MDO5238/HERR: 205724 (amongst C in Figure 5), possibly signifying similar historic investigation.

A low mound (HERR: 1632250) approximately 11.7m in diameter stands at ST 8039 0512 on the north-east facing slope of Meriden Wood (E in Figure 5). The walk-over survey showed this to be made of a flinty spread. Three of the four small mounds 'of unknown purpose' noted by RCHME (1970, 298) standing alongside the Meriden enclosed settlement could be mapped. They range from 4.5m to 6.9m in diameter (F in Figure 5) (Dorset HER: MDO5244/HERR: 1632247). They are similar in size to a further flinty mound (HERR: 1632249) positioned on the plateaux at ST 8001 0503 (G in Figure 5, and see Figure 6), and also to the barrows at D in Figure 5. All these mounds may be small Bronze Age round barrows. A mound measuring about 6.6m in diameter at ST 8022 0489, standing just outside the Meriden enclosure and amongst other slight earthworks of the settlement, may be an Iron Age/Roman feature of the settlement (Dorset HER: MDO5229/HERR: 205831) (H in Figure 5).



Figure 6: A small mound at ST 8001 0503 (G in Figure 5). [Photograph © Katy Whitaker]

To the south of Bully Plantation, a low mound (HERR: 1632201) at ST 8052 0381 stands just to the north of a linear earthwork and next to an Iron Age/Roman field boundary bank (J in Figure 5). At 9.1m in diameter it is similar in size to two of the small barrows, also on the 200m contour, about 400m to the east within scheduled monument NHLE: 1002440 (Earthworks on Houghton South Down).

A large sub-circular mound (HERR: 1631947) at ST 7985 0404 within scheduled monument NHLE: 1002430 (Field system on Green Down) was not thought to be a barrow by RCHME (1970, 337) (K in Figure 5). It is approximately 14m by 16m on plan and up to 1.5m high (Fig. 7). It is discussed below as a possible prospect mound (see Post-medieval). Also on Green Down, a low oval mound (HERR: 1631956) about 6m by 4m on plan stands at ST 7997 0386 in a south-facing Iron Age/Roman field (L in Figure 5). It is similar to the other small barrows in the project area.



Figure 7: A large sub-circular mound at ST 7985 0404 (K in Figure 5). [Photograph © Katy Whitaker]

Three mounds visible in lidar Digital Terrain Model (DTM) visualisations stand on the steep, north-facing slope above Park Bottom, within Park Wood (M in Figure 5). During the walk-over survey they were observed to be low accumulations of soil and flints collected around the complex root systems of large trees and are not archaeological features. Three similar mounds (HERR: 1631954) on the opposite slope (N in Figure 5) may also be natural features although they were not visited during the walkover survey and are discussed below (see Medieval).

Iron Age/Roman

A linear earthwork described as a cross ridge dyke or Iron Age/Roman boundary bank, noted by RCHME (1970, 298), is oriented approximately north-south across a saddle of chalk dividing Delcombe Bottom from Houghton South Down, centred on ST 8049 0374 (Dorset HER: MDO5231/HERR: 205816) (Fig. 8). It is not scheduled. It survives as an 83.8m long earthwork bank, approximately 4.8m wide, with a ditch to its east side and overlies an Iron Age/Roman field boundary bank. A more recent boundary bank runs along the top of the dyke and a narrow ditch to the west side of the dyke may also be a later

feature associated with that field boundary. A modern track cuts the dyke at its northern end whilst the southern end is cut by the Milton Abbas to Bul Barrow road. Short sections of parallel bank either side of a ditch to the south of the road are visible in lidar DTM visualisations; they curve north-east to south-west at the wooded head of Crincombe Bottom (b in Figure 8). Whilst they are possibly a continuation of the linear earthwork, they are slighter in form. The walk-over survey showed this short southern section to be more like a hollow way, cut by later woodland rides.

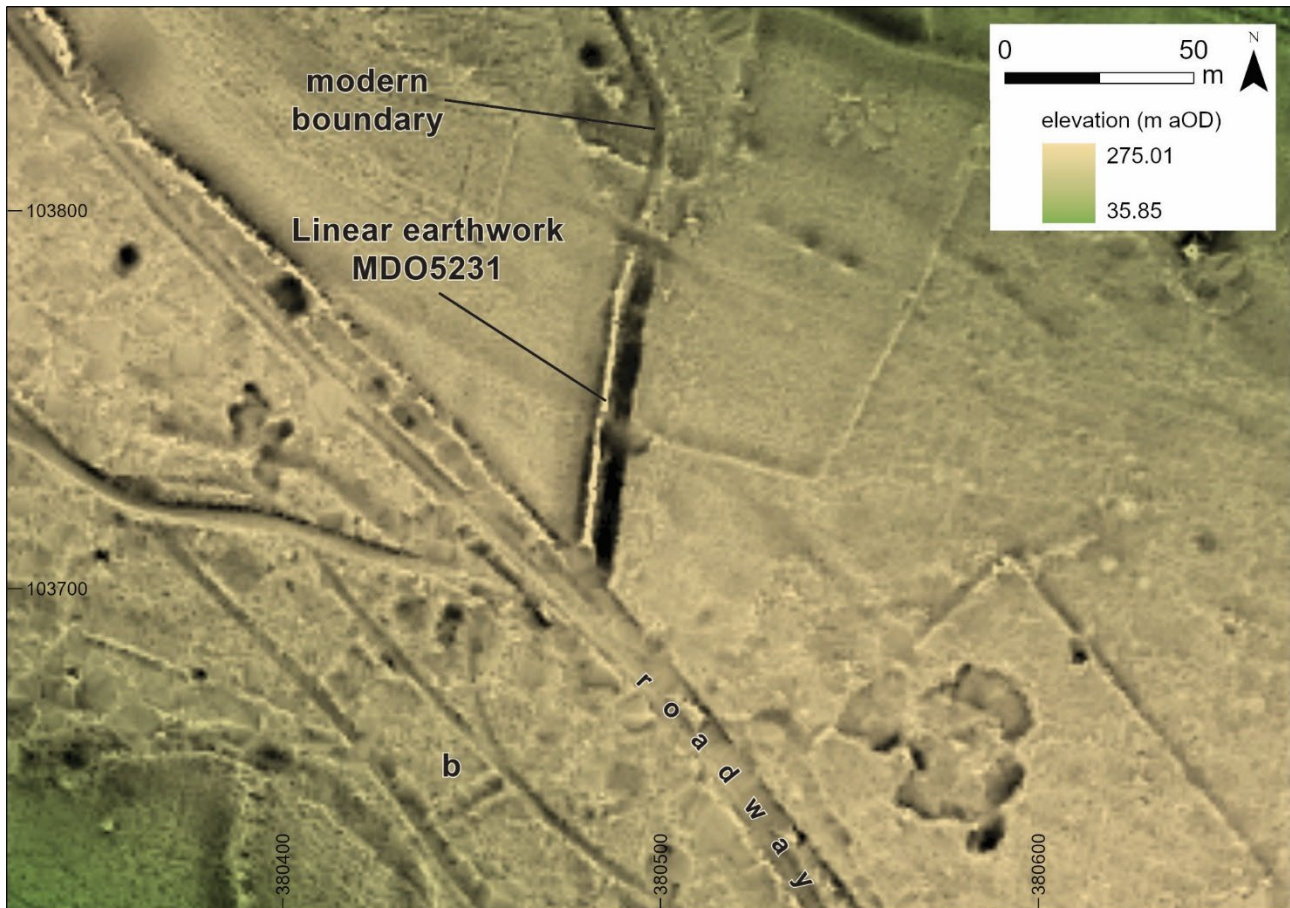


Figure 8: Linear earthwork Dorset HER: MDO5231/HERR: 205816. [Lidar data © Historic England; source Environment Agency]

Similar linear earthworks were mapped during the Upper Frome and Sydling Valleys, West Dorset, Aerial Investigation and Mapping Project (Fleming 2021, 46). Although such features are difficult to date (Historic England 2018), comparison with examples on other chalk uplands in southern England suggests that this linear earthwork is a possible Iron Age cross ridge dyke post-dating elements of the field system lying between the two settlements NHLE: 1002440 (Earthworks on Houghton South Down) and NHLE: 1002466 (Earthworks south-east of Park Wood).



Figure 9: Meriden Wood enclosed settlement (right), trackway D (centre left) and part of the field system to the south of the settlement, viewed from the north-east. [NMR 15014/12 09-MAY-1994 © Crown copyright. Historic England Archive]

The project area includes three Iron Age/Roman settlement sites with associated field systems and trackways. Each site is described below, followed by a short discussion comparing them with other local examples.

Meriden enclosed settlement

The Meriden enclosed settlement (Dorset HER: MDO5229/HERR: 205831) is within scheduled monument NHLE: 1002439 (Earthworks south of Meriden Wood) (Fig. 9). It is largely as described by RCHME (1970, 298), a roughly triangular area of just over 1ha on the chalk plateaux enclosed by a bank and external ditch with platforms, slight scarps and hut circles inside. A medieval deer park pale (Dorset HER: MDO5225/HERR: 205793, see Medieval) cuts the settlement from east to west (Fig. 10).

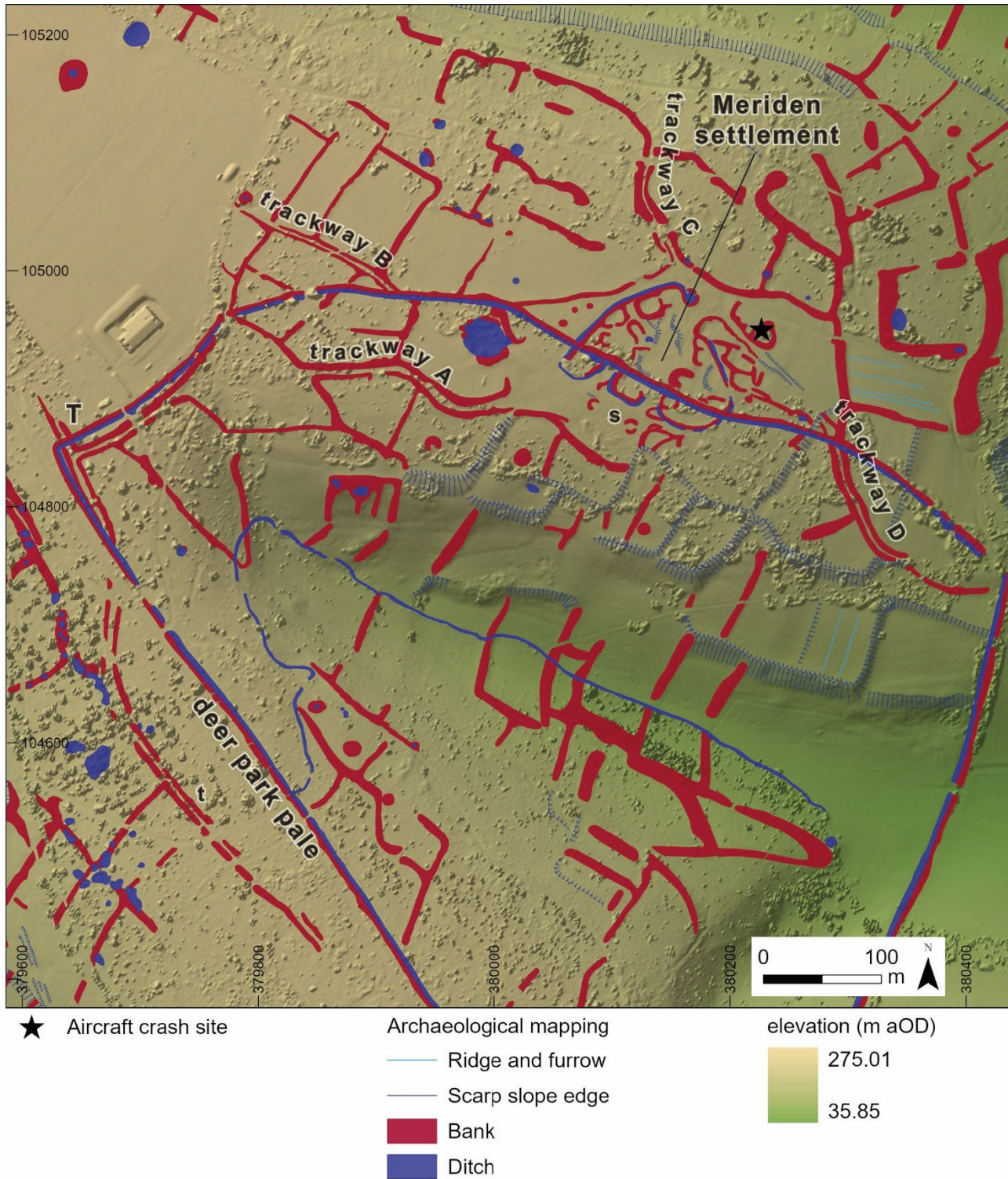


Figure 10: Meriden enclosed settlement and trackways, linked to the Green Down field system by a continuation of trackway A. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

The southern settlement boundary describes three 'loops' in plan, to the south of which are small earthwork features including fragments of two hut circles described by RCHME as 'evidence of expansion outside the nucleus' (1970, 298) (s in Figure 10). Visible in lidar visualisations, those small external features include two short lengths of bank that appear to be overlain by, and thus to pre-date, the enclosure boundary. Rather than later settlement expansion, they may indicate the presence of an earlier unenclosed settlement. Earthworks to the north-east side of the settlement enclosure may represent extra-mural settlement remains as implied by RCHME (1970, 298); it is unclear from the lidar visualisations whether or not the settlement enclosure in fact overlies earlier habitation features. Furthermore, that is the location of an aircraft crash in the 1940s (Andrew Langmead pers. comm.) and consequently the ground in the environs is significantly disturbed (Fig. 10).

Four trackways provide access to and from the enclosed settlement (HERR: 205831, HERR: 1632253). RCHME site plan lettering is followed here, see RCHME 1970, drawing opposite p. 298 (trackways A to D in Fig. 10). Trackway A on the west leads to an open area before continuing south-west where it makes a T-junction centred on ST 7964 0484 (T in Figure 10). No further evidence for the T-junction's north-west arm is visible in lidar visualisations, but its south-east arm, cut by Winterborne Houghton deer park pale and the Milton Abbas to Bul Barrow road, turns south and south-east where it forms an edge to the Green Down field system. Trackway B, from which field boundaries are laid coaxially, trends north-west, apparently passing just to the south of a round barrow, but is not visible in the currently available imagery of the large, cultivated field that it might be expected to run through. Trackway C to the north of the settlement is visible in lidar visualisations, although it was very difficult to pick it up during the walk-over survey because of thick brambles covering the ground. Trackway D, to the east of the settlement, also continues beyond the scheduled area. That routeway overlies parts of the settlement's field system.

The settlement's field system comprises both rectilinear and irregular fields that curve around the valley sides below the settlement. Substantial lynchets survive on the south-facing slope but the field boundary banks are more fragmentary in Park Bottom and Park Wood (although some survive up to about 0.75m high). Nevertheless, they appear to be arranged coaxially and are 'terrain oblivious' (Yates 2007, 15), that is, the field system is oriented perpendicularly cross-cutting the valley. There is a mix of both substantial and lower, more spread, field boundary banks to the east/north-east of the settlement. They are less closely related to the dominant south-west/north-east coaxial alignment but this is possibly because their layout is adapted to the curve of the north- and east-facing slopes (Fig. 10).

The dominant alignment is continued in the field system on Green Down to the south of the Milton Abbas to Bul Barrow road (MDO4470/HERR: 1632223) and, as suggested by RCHME (1970, 337) implies that the Meriden and Green Down field systems are associated (Front cover image). Strengthening this argument are the, more fragmentary, field banks extending south-west from the extension of trackway A visible in lidar visualisations, articulating with the area of lynchets preserved in NHLE: 1002430 (Field system on Green Down) (t in Figure 10). The Green Down field system runs along the steep south-west facing slopes of Delcombe Bottom, formed largely of extremely well-preserved lynchets and banks ranging from about 0.5m to 2.5m high (Fig. 11).



Figure 11: The junction of lynchets on Green Down at ST 7949 0446. [Photograph © Katy Whitaker]

The new aerial mapping of the field system around the Meriden settlement and on Green Down concurs with maps for Winterborne Houghton and Milton Abbas parishes made by RCHME (1970) but demonstrates that the system is more extensive. Some phasing is evident. The earthwork banks defining trackway D clearly overlie a large sub-rectangular field that is on the field system's dominant alignment, suggesting that this route to the large open area in which Meriden settlement is located post-dates the original establishment of

the fields. Possibly the earliest settlement comprised unenclosed habitation on the plateau surrounded by fields; assuming that the fields and trackways A, B and C have contemporary origins, a theoretical approximation of this arrangement is possible (Fig. 12).

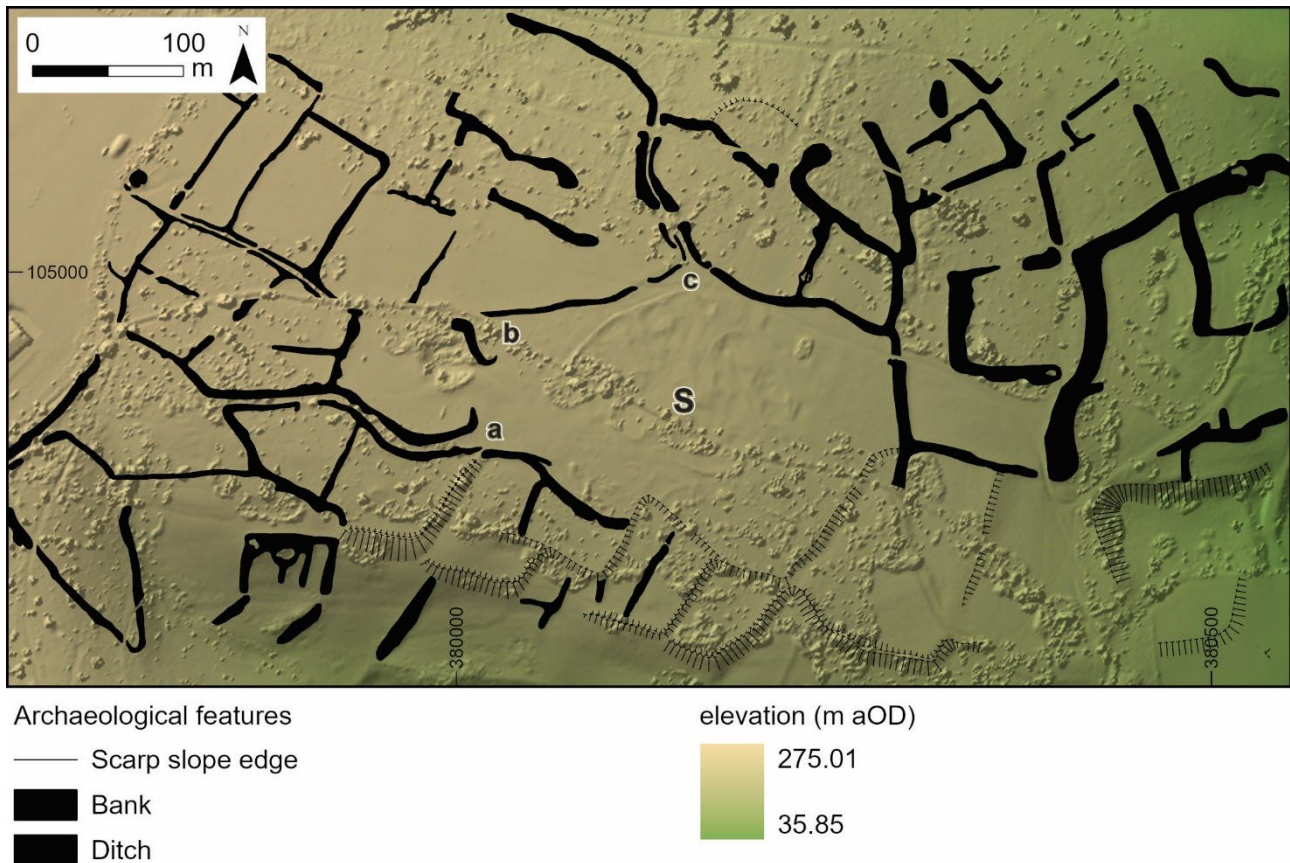


Figure 12: Possible layout on Meriden Down of later prehistoric fields around an area of unenclosed settlement (S) with access points to three trackways (a, b, c).
[Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

Settlement south-east of Park Wood

The settlement south-east of Park Wood (NHLE: 1002466, Dorset HER: MDO5230/HERR: 205826) is described by RCHME (1970, 298) as ‘probably Romano-British’ (Fig. 13).

Sited on a chalk spur overlooking the valley to the north and east, it comprises a rectilinear area partially enclosed by a sharp-angled bank and ditch to the south and west sides (S in Figure 13), accessed by a trackway to the south. The south-west side of the enclosure cuts or overlies an earlier field boundary. Evidence for the north side of the enclosure has been largely obliterated or obscured by a post-medieval quarry and its spoil heaps (HERR: 1632243), but a straight bank visible in vertical aerial photograph OS/95033 037 (13-MAR-

1995) and lidar DTM visualisations (b in Figure 13) may represent the former extent of the enclosure.

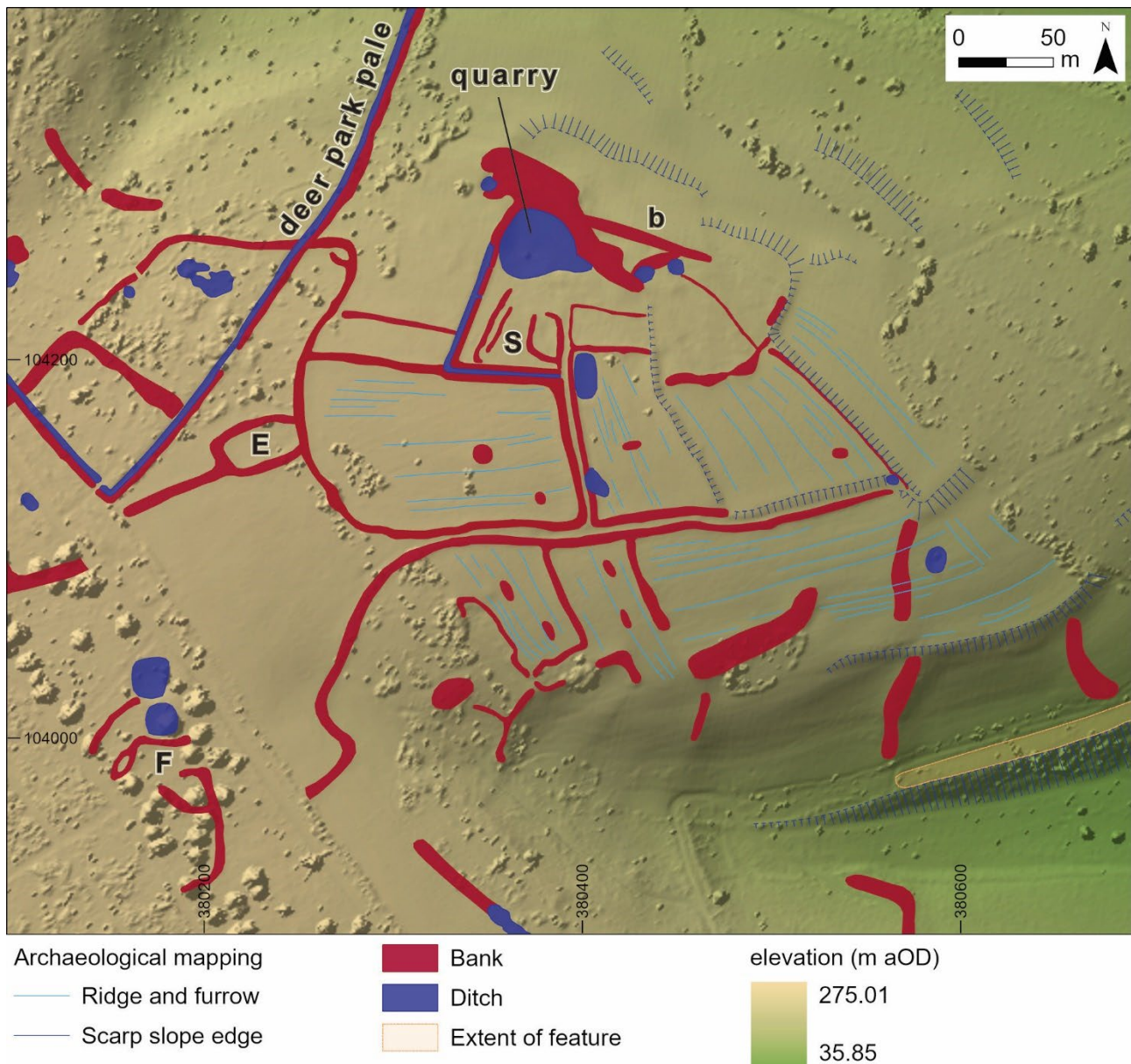


Figure 13: Settlement south-east of Park Wood (NHLE: 1002466) and surrounding features. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

If that is the case, the enclosure measured about 80m from north to south and enclosed just over 1ha. Less distinct earthwork banks inside the enclosed area may represent internal divisions; faint building platforms were noted in the interior by RCHME (1970, 298). Alternatively, those internal divisions may represent earlier settlement perhaps contemporary with the fields overlain by the rectilinear bank and ditch. On the east side,

roughly right-angled lynchets and a curving field boundary are possibly also part of the enclosure or the uppermost edges of its adjacent fields. Given that the rectilinear enclosure must post-date at least one field and the trackway, it is possible that it is a later addition to an unenclosed settlement site. Fragmentary lynchets survive on the north-facing slope of the spur (from which the Meriden Wood settlement and its fields can be seen). The settlement is linked to lynchets and field boundaries that survive better on the south side. The settlement's trackway makes a T-junction centred on ST 8040 0410. To the east it runs alongside field edges, likely linking to a field system faintly visible in lidar visualisations. To the west, the trackway opens out into a funnel-shaped open area. A sub-oval enclosure approximately 44m long and 21m wide forms part of the northern side of that open area (E in Figure 13). There are fragmentary small enclosures to the south-west centred on ST 8018 0399 (F in Figure 13). Whether or not trackway A links this settlement site to the Meriden settlement is unclear, as the trackway is visible in lidar visualisations only part of the way into Blagdon Copse (see Fig. 10).

There are irregular fields to the west and south. Fields to the west, cut by the medieval deer park pale, may relate to the fragmentary field banks in Park Wood and in Blagdon Copse. Unfortunately, the ground cover in this area of Blagdon Copse, including broad spreads of brash and fallen timber, made it difficult to see slight earthwork features in either lidar visualisations or walk-over survey undertaken in 2023. The previously mentioned possible cross ridge dyke (see above, Iron Age/Roman) stands to the south of this settlement site, perhaps dividing it from another possible settlement site to the south-east although the contemporaneity of these features remains uncertain.

Earthworks on Houghton South Down

On Houghton South Down a roughly D-shaped enclosure may represent a third settlement site within the project area (NHLE: 1002440, Dorset HER: MDO5245/HERR: 205835) (Fig. 14). Situated on the plateau to the west of the linear earthwork Dorset HER: MDO5231, the enclosure (S in Figure 14) stands in an open area of ground defined by curving banks. The open area's funnel-like plan form is reminiscent of the similar open area to the south-west of the nearby settlement south-east of Park Wood (described above, Figure 13). Both funnels have narrow ends to the north-east and open out onto higher ground to the west or south-west, implying movement, perhaps of animals, between the valley below and the chalk plateau above.

On Houghton South Down, however, the evidence for trackways is equivocal. The north-east end of the funnel narrows where it is aligned with what is today a trackway lined with hedges to either side, leading to Winterborne Houghton village (T on Figure 14). A present-day footpath from the village passes through the funnel, turning south to meet

Dunbury Lane. It may have earlier origins, a possibility strengthened by the way that the footpath is roughly parallel to the continuation of the eastern side of the funnel towards the south and east, visible as a slight earthwork in vertical aerial photograph RAF/CPE/UK/1934 1085 (17-JAN-1947) and lidar Digital Surface Model (DSM) visualisations. Alternatively, the present-day footpath simply respects the prehistoric features.

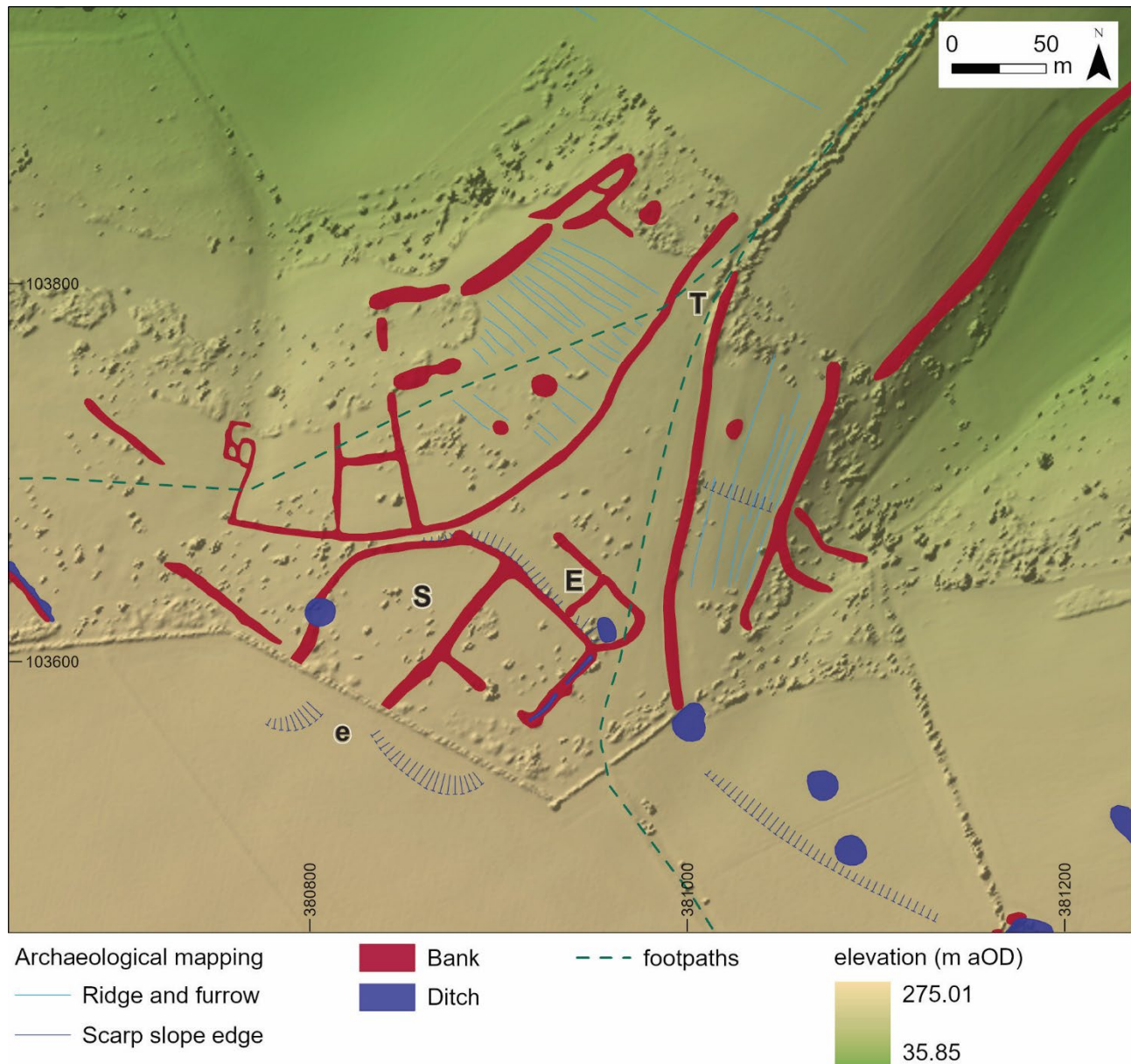


Figure 14: Earthworks on Houghton South Down (NHLE: 1002440) and surrounding features. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

At least two of the Iron Age/Roman fields in the environs respect earlier round barrows and contain medieval ridge and furrow. A further ridge and furrow parcel is visible to the north-east in vertical aerial photograph RAF/CPE/UK/1975 1026 (11-APR-1947).

Evidence visible in lidar visualisations extends the possible settlement enclosure's earthworks recorded by RCHME (1970, 338), suggesting a sub-circular enclosure with a possible entrance to the south side indicated by now slight, spread banks in the cultivated field to the south-west of the scheduled area (e in Figure 14). The eastern earthwork bank of the enclosure is disrupted by pits (RCHME 1970, 339), but visible in the same lidar visualisations there is the suggestion that a narrow bank overlies the broader, earlier, earthwork defining the enclosure's northern side. A small sub-square enclosure, now including a pond, and straight length of earthwork bank are attached to the north-east side of the main enclosure (E in Figure 14). Internal divisions within the enclosure are possibly later additions, appearing to abut the enclosure boundary.

Discussion

Settlement sites similar to those in the project area south-east of Park Wood and on Houghton South Down were recorded during both the South Dorset Ridgeway (Royall 2011) and Upper Frome and Sydling Valleys, West Dorset (Fleming 2021) AI&M projects.

A small Iron Age/Roman sub-square earthwork enclosure containing two hut circles is positioned amongst a field system on Crow Hill, Littlebredy on the South Dorset chalk Downs (SY 5929 8801) (Dorset HER: MDO24153/HERR: 1631358) (Royall 2011, 46–7; Pullen and Whitaker forthcoming). Although much smaller than the rectilinear enclosure south-east of Park Wood, the angular bank and ditch are similar. A large banked and ditched earthwork rectilinear enclosure on Grimstone Down, Stratton (about 15km to the south-west of Higher Houghton at SY 6438 9567) (Dorset HER: MDO42865, NHLE: 1003771) stands amongst trackways and fields, possibly overlying earlier boundaries to one side and abutting an additional settlement area that is adjacent to a later prehistoric trackway. The Grimstone Down enclosure is larger than the enclosure south-east of Park Wood (Fleming 2021, 43–4) but is a more similar shape on plan and at both sites the enclosures appear to overlie some field boundary banks whilst respecting earlier Bronze Age round barrows.

In contrast, the settlement on Houghton South Down has more in common in terms of its plan form with curvilinear enclosures on Ayle's Hill, Sydling St Nicholas (Dorset HER: MDO2622, ST 6143 0137), Hill Barn Enclosure, Cattistock (Dorset HER: MDO42983, SY 6077 9951), Loscombe Hill, Sydling St Nicholas (Dorset HER: MDO2603, NHLE: 1002820, ST 6216 0017) and at Toller Fratrum, Tollerford (Dorset HER: MDO42289, SY 5836 9703)

(these sites are about 20km to the south-west of Higher Houghton). On morphological grounds those enclosures could be Late Bronze Age to Iron Age in date (Fleming 2021, 42–3). The Houghton South Down enclosure measures about 130.3m by 110.6m on plan, most similar to the Toller Fratrum enclosure and smaller than the other three mentioned above. At Thorncombe Farm, Higher Bockhampton about 12.5km south-west of Higher Houghton (SY 7216 9159), a much smaller later prehistoric D-shaped enclosure seen as a cropmark measuring about 53.2m by 37.7m on plan has subdivisions reminiscent of the Houghton South Down enclosure (Dorset HER: MDO20549) (Royall 2011, 49). It should be noted that the curving southern side of the Houghton South Down enclosure with a possible entrance, newly observed in lidar visualisations, is reminiscent of the ‘looped’ southern side of the Meriden settlement with similar in-turned entrances (see Fig. 10).



Figure 15: Iron Age/Roman enclosure, trackways and fields on Ringmoor, Turnworth (lidar DTM visualisation). [lidar data © Historic England; source Environment Agency]

Those other Iron Age/Roman settlement sites in Dorset mentioned above to not appear to articulate with funnel-shaped areas linked to trackways that characterise at least two of the settlement sites in the Higher Houghton study area. RCHME (1970, 291–2) compare the settlement south-east of Park Wood to another well-preserved earthwork site about 4.7km to the north on the chalk plateau of Ringmoor, Turnworth (Dorset HER: MDO5180/HERR: 205558), where three tracks converge on a v-shaped open area (v in Figure 15), on the east side of which is an oval enclosure (E in figure 15). One track opens out into a funnel

to the south (f in Figure 15), while the western end of the trackway traversing the chalk spur leads to another open area amongst the surrounding fields (o in Figure 15).

The three settlement sites in the Higher Houghton project study area all have analogues elsewhere on Dorset's chalk landscapes. Most of these comparators survive as earthworks but which have been, or are still being, actively cultivated unlike the well-preserved Higher Houghton sites under pasture. All the sites discussed above are positioned amongst field systems on crests or slopes of chalk hills, some are linked to trackways and at some there is evidence of phasing with the likely later development of an enclosure in an already farmed area. They reflect the diversity of regional Iron Age settlement patterns and the coincidence of settlement enclosure with landscape management in the form of field systems noted by Harding (2009, 246–7). Moore (2007) places an accelerating transition from unenclosed to enclosed settlement in the Middle Iron Age, in the context of community farming in well-established field systems; although he notes that there is evidence for regional difference in practices of enclosing smaller homesteads contrasted with larger communities in 'villages', seeing settlement enclosure as a statement of social status. Specifically in the Dorset area, Papworth (2008) suggests that chalk Downland settlements were not much changed in response to Romanisation and sees sites like Meriden and Ringmoor (above) as smaller settlements in the orbit of the influential hillforts at Hod Hill and Hambledon Hill. It should be noted that the small hillfort of Rawlsbury Camp (Dorset HER: MDO4766/HERR: 201750) is situated just under 4km away to the north-west (ST 7674 0581), easily accessed from the Higher Houghton settlements along the high ground of the chalk dip slope.

The three settlement sites in the Higher Houghton project study area all enclose just over 1ha, similar to other Early to Middle Iron Age sites noted by Cunliffe (2005, 241). The Meriden settlement has well-preserved upstanding earthworks of building platforms and structures surviving in its interior and its curvilinear boundary is more similar to the Houghton South Down settlement. Both contrast with the rectilinear boundary of the settlement south-east of Park Wood that seems to have been constructed later than its associated field layout; but it is also possible that the Meriden settlement was enclosed after its surrounding fields had become established and these two later enclosure boundaries could have been statements being made by their inhabitants. Although there is as yet no comparative scientific or artefactual dating evidence for the three sites, the strong aerial evidence for trackways linking them and their similarly-oriented field systems suggests that Higher Houghton's Iron Age/Roman agricultural landscape had a contemporary origin. Perhaps the settlements developed in tandem as local communities collaborated in livestock and arable management across the hills and sheltered valleys south-east of the North Dorset chalk scarp.

Medieval

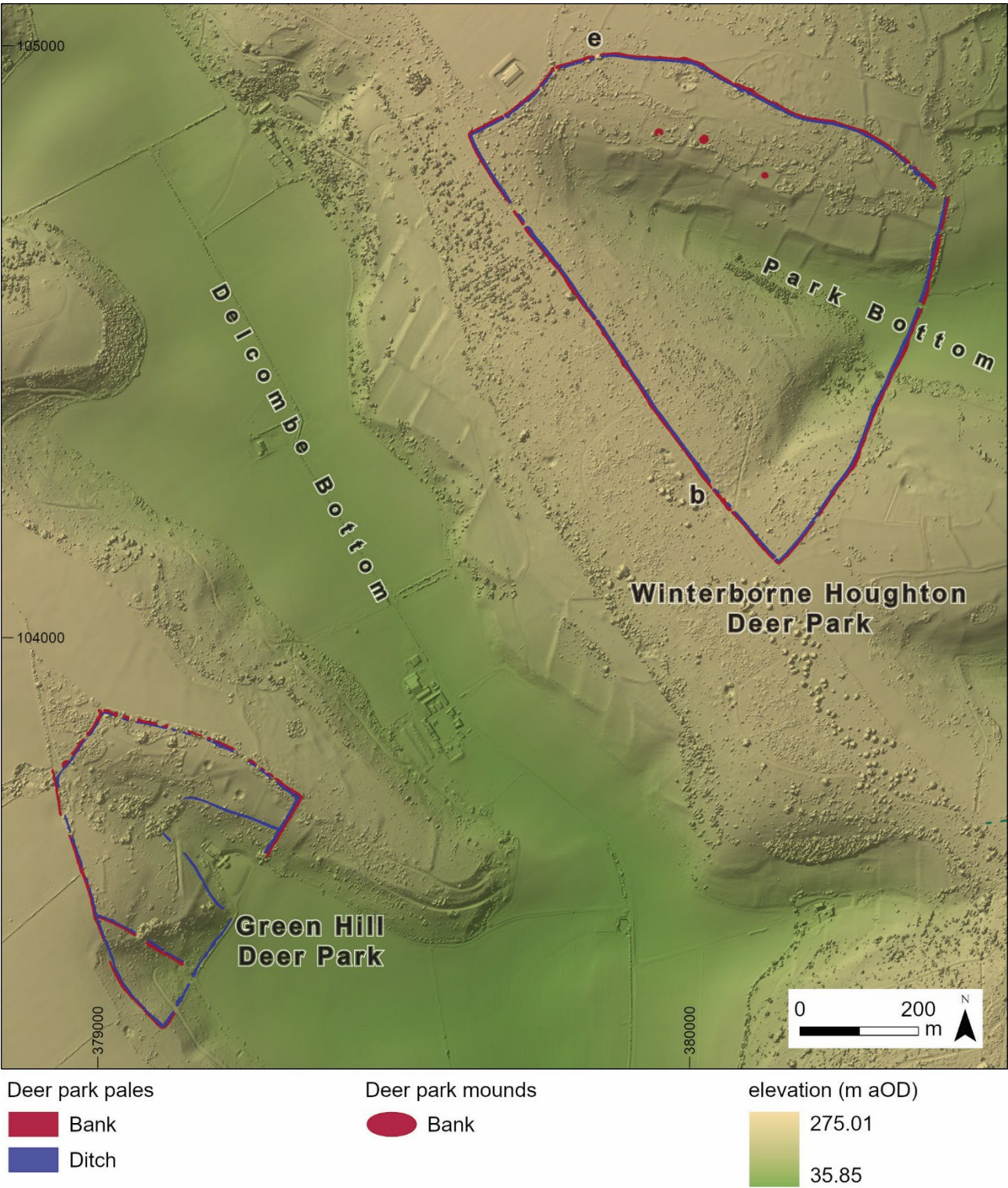


Figure 16: Medieval deer parks in the project area. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

There are two medieval deer parks in the project area (Fig. 16). That on Green Hill (Dorset HER: MDO4468/HERR: 201913) is mentioned briefly here because only a small portion of its park pale falls within the project area. The Winterborne Houghton deer park (Dorset HER: MDO5255/HERR: 205793) is fully within the project area; much of its northern boundary is scheduled as part of NHLE: 1002439 (Earthworks south of Meriden Wood).

Green Hill deer park is reputed to be the smallest in Dorset (Wilson 1973, 68). The well-preserved park pale comprises an outer bank and inner ditch enclosing approximately 10.4ha in a trapezoidal plan. The bank appears to be absent from some of the south-eastern lengths of the boundary. An internal division to the southern corner may indicate a phase of either enlargement or contraction in the area enclosed or represent an aspect of animal or grazing management (Morris 2015, 22). The park encloses the north-western end of a re-entrant to Delcombe Bottom. Such a small deer park may have been used as a 'deer farm' providing meat for table or animals to re-stock a larger park rather than for hunting (Morris 2015, 60). Part of it is included within NHLE: 1000721 (Milton Abbey).

Winterborne Houghton deer park has a similar plan form in a similar landscape position as the Green Hill park. Some 1.3km to the north-east of Green Hill, its boundary also comprises a well-preserved outer bank and inner ditch. It encloses approximately 38.6ha that includes Park Bottom and another small re-entrant of the principal valley to the west of Winterborne Houghton village. Both parks thus encompass the head of north-west to south-east oriented, steep-sided valleys, possibly originally including a mix of wooded and more open ground within each park and both enclosing earthworks of earlier field systems.

A deer park had been established at Winterborne Houghton by 1294 when it is mentioned in a writ concerning poaching (Cantor and Wilson 1968, 173). Its south-west boundary is parallel to the parish boundary and road running from Milton Abbas to Bul Barrow, passing along the chalk ridge. In the north-west corner, the park pale crosses an Iron Age/Roman trackway before sharply bearing north-east to enclose the top of Park Bottom, re-crossing the trackway and running parallel with it for about 160m. The park pale then bears approximately east, crossing the Meriden Iron Age/Roman field system and another trackway and in part making use of one of the field banks. It passes through the Meriden settlement site and a third prehistoric trackway and further fields to the prehistoric settlement's eastern side. It turns sharply to the south and then south-west, descending and cutting across the valley floor until climbing up again to reach the parish boundary, passing over Iron Age/Roman fields to the west of NHLE: 1002466 (Earthworks south-east of Park Wood).

Breaks in the park pale are numerous in the south-west section parallel with the road; the majority are probably relatively recent, associated with the network of 19th- and 20th-century trackways in Park Wood or cut through the pale bank to drain surface water from the road into the ditch. A possible original entrance 10.3m wide in the northern section at ST 7984 0498 is suggested by the absence of both bank and ditch (e in Figure 16). A second break, 8.6m wide in the eastern section and at the base of Park Bottom, has been well-used by vehicles in recent years and may simply be modern. At ST 8003 0425 a small break, 2.4m wide, is formed by tapering sections of bank and a gap in the ditch which could also be original (b in Figure 16). That opening is, however, in an area of considerable post-medieval quarrying and multiple other, less well-structured, breaks in the park pale.

Three mounds inside Winterborne Houghton deer park are positioned on the south-facing valley side between 200m and 220m aOD, overlooking Park Bottom (HERR: 1631954) (they were not visited during the walk-over survey). They range from about 11m to 14.5m in diameter. The western mound is crescentic on plan, the other two are sub-circular. They are within Iron Age/Roman fields associated with the Meriden Wood enclosed settlement and are comparable in size to nearby bowl barrow Dorset HER: MDO5241/HERR: 201764 which is 11.9m in diameter. Given their vantage point over the deer park, it is possible that one or more of these mounds were used as platforms from which to view the chase when deer hunting became popular as a spectator sport from the Early Modern period onwards (Morris 2015, 58, 101–3); although the emparked base of Park Bottom offers only about 0.5km of ground for a coursing track. Both parks are small and were possibly deer reserves rather than for hunting (Morris 2015, 46, 60). It is tempting to theorise a deer chase in the long valley of Delcombe Bottom, stocked by the two neighbouring deer parks, but clearly more research is needed better to understand Green Hill and Winterborne Houghton deer parks and whether or not they were related to the much larger Milton Abbey deer park (about 60ha) (NHLE: 1002417) roughly 2.5km to the south-east.

Evidence for medieval farming practices survives in the study area in the form of lynchets and also some examples of fields containing ridge and furrow. A very well-preserved lynchet centred on ST 8118 0477 mentioned by RCHME (1970, 298) to the east of Higher Houghton farm (Dorset HER: MDO5228/HERR:205829) and some less well-preserved scarps in the environs are part of a field system extending to the east beyond the project area. Lynchets and long, curving linear banks centred on ST 8080 0417 (Dorset HER: MDO5230/HERR: 205826) and ST 8117 0387 (HERR: 1632074) articulate with Iron Age/Roman field systems that are associated with NHLE: 1002466 (Earthworks south-east of Park Wood) and NHLE: 1002440 (Earthworks on Houghton South Down) respectively.

Occasional parcels of ridge and furrow in the central and eastern parts of the project area make use of the Iron Age/Roman fields. One field of ridge and furrow is visible as a cropmark in vertical aerial photograph RAF/CPE/UK/1934 3173 (17-JAN-1947) in Delcombe Bottom, to the west of Crincombe Bottom (HERR: 1632013). It is cut by the trackway leading to Delcombe Farm, presumably going out of use when agricultural enclosures were removed during the development of Milton Abbey's parkland from the 1760s onwards (NHLE: 1000721).

Post-medieval

Numerous extractive pits have been dug into the plateau and valley sides within the project area (for example, HERR: 1631946). These are probably medieval/post-medieval in date; some are recorded by the Ordnance Survey on 19th-century maps as either 'old pits' already out of use or identified as actively supplying a specific material. Flint pits are shown on the Dorset County Series 25-inch map sheet published in 1888 in various places on the chalk plateau in the study area. A large flint quarry with spoil heaps (Dorset HER: MDO5230/HERR: 1632243), also mapped by the Ordnance Survey, has removed and/or covered parts of the northern edge of the scheduled settlement NHLE: 1002466 (Earthworks south-east of Park Wood) (see Fig. 13). Osborne White (1923, 93–4) mentions flints being used in the area in construction and as road metal. An 'old' chalk pit (HERR: 1632033) was also mapped by the Ordnance Survey at that time and a further small flint pit (HERR: 1632063), both on Houghton South Down. Stevenson (1809, 350) describes chalk as 'a very useful manure' on various soil-types and recounts uses of chalk burnt to produce lime in his review of agriculture in Dorset (*ibid.*, 351–5), although by the time of Osborne White's (1923, 93) geological review, most chalk pits for lime had gone out of use.

Other extractive pits in the more wooded areas were not recorded by the Ordnance Survey but are nevertheless visible in lidar DTM visualisations. The majority are on the plateau where they probably cut Clay-with-Flints deposits, with the rest in the chalk valley sides. Various resources could have been exploited from these pits including chalk and marl for agricultural field dressing, flints for construction and road surfacing and possibly small pockets of brickearth. RCHME (1970, 299) notes gravel pits in the environs of Houghton South Down, where there are both shallow, broad pits on the chalk spur above Crincombe Cottages and sinuous pits following the line of a Head deposit that fills the base of Crincombe Bottom.

Hollow ways provide access between the plateau and valley bottoms, for example on Green Hill, leading from Delcombe Bottom up the chalk spur into an area of fragmentary

Iron Age/Roman field system, medieval lynchets and post-medieval quarrying (Dorset HER: MDO3964/HERR: 201809).

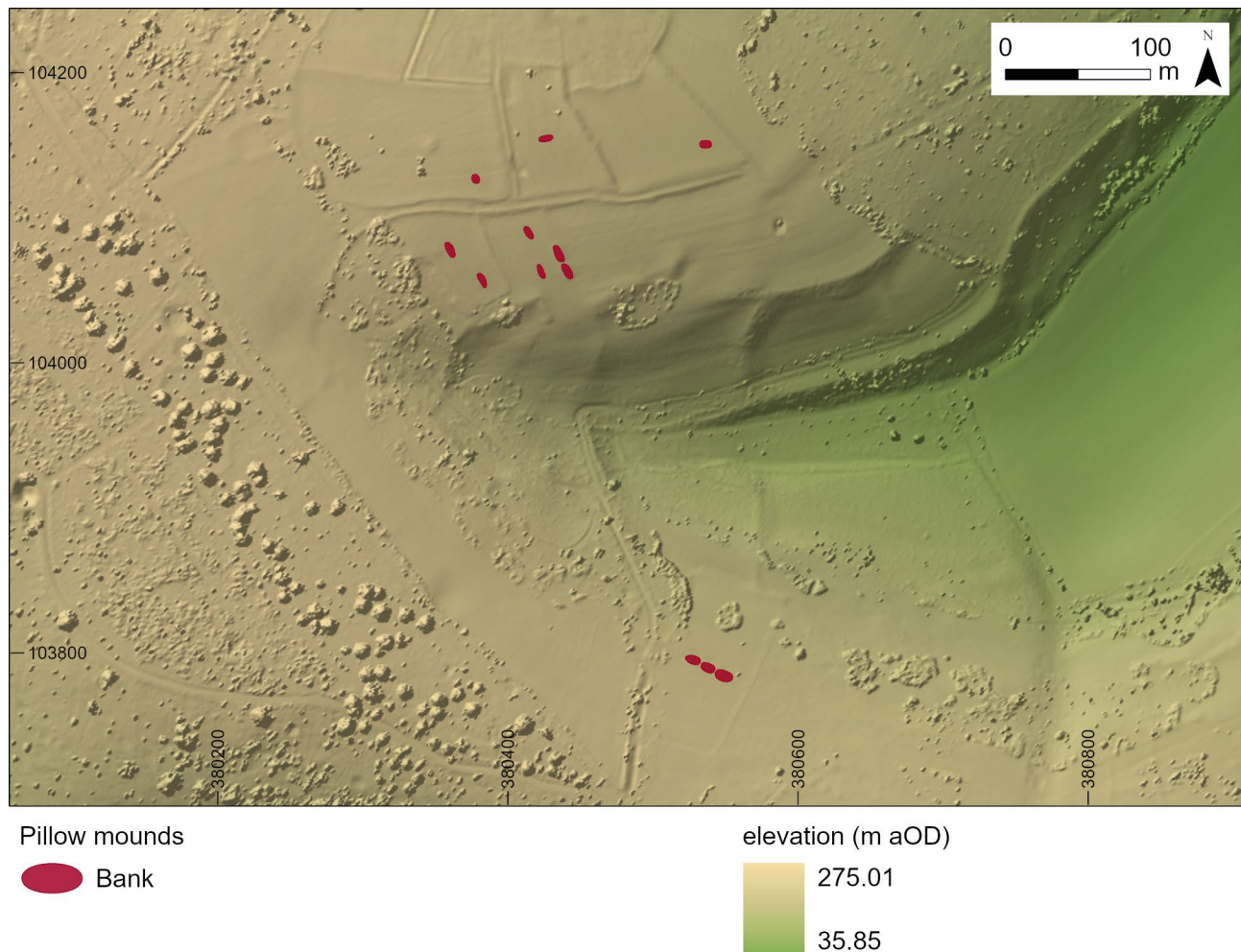


Figure 17: Pillow mounds of a rabbit warren amongst other archaeological features. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

A small rabbit warren was constructed in the environs of the earthworks south-east of Park Wood (NHLE: 1002466) (Fig. 17). It comprises up to 12 small, oval pillow mounds ranging in length from 6.5m to 12.8m, visible in lidar DSM visualisations and aerial photographs. Seven were built within Iron Age/Roman fields (HERR: 1632238). They do not have enclosing ditches but are oriented down-slope which presumably assisted drainage. Two of the pillow mounds were built in-line on the top of an Iron Age/Roman field bank (Fig. 18). Three small, low mounds visible in vertical aerial photograph RAF/CPE/UK/1934 4083 (17-JAN-1947) and lidar DSM visualisations stand within an Iron Age field immediately south of Bully Plantation, some 290m south-east of the other pillow mounds (HERR: 1632205). They are oriented in a line following the contour and on the same orientation as

lynchets on the north-east facing slope (Fig. 17). They may be pillow mounds, or perhaps one denuded pillow mound.

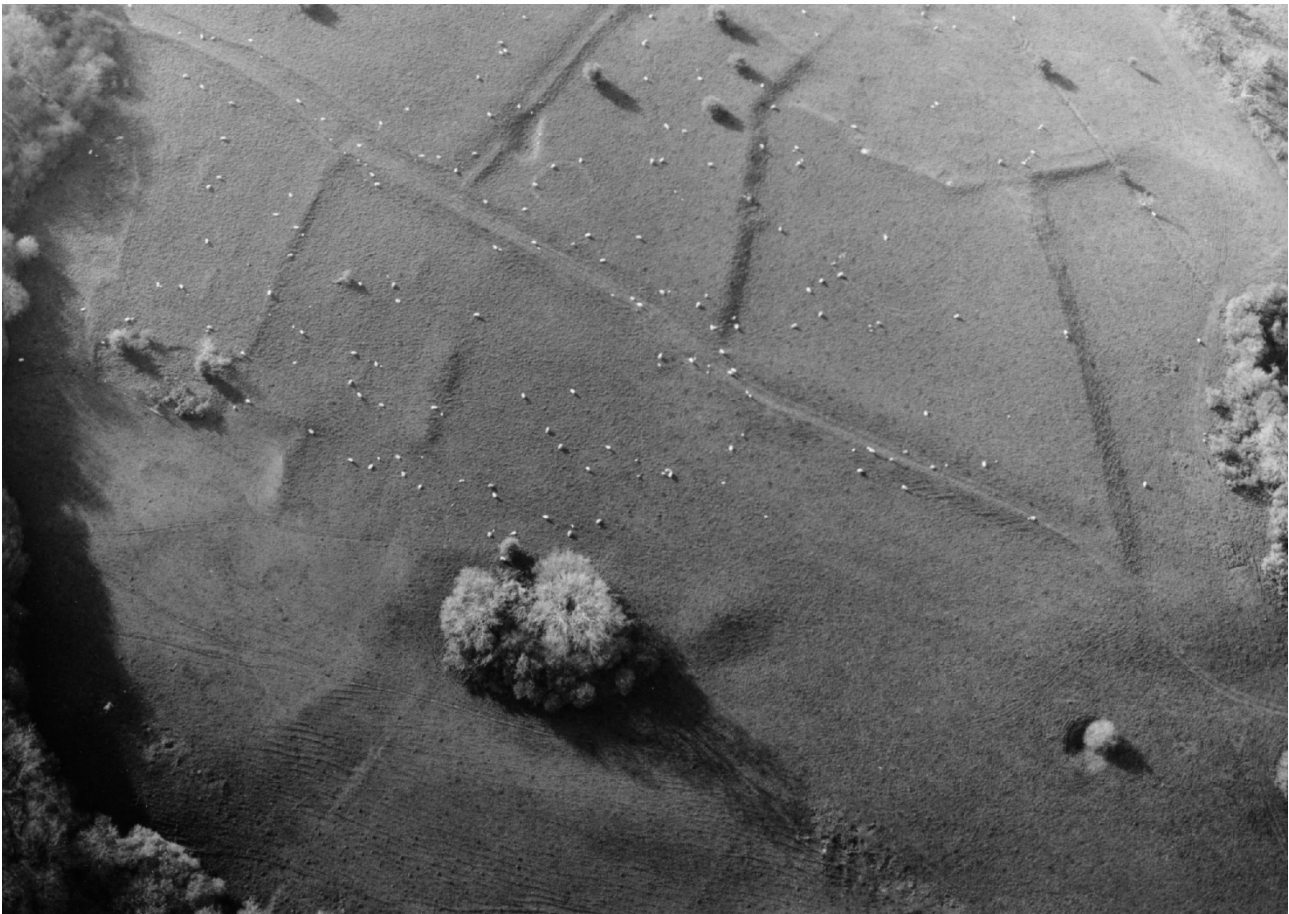


Figure 18: Pillow mounds constructed amongst Iron Age/Roman fields of the settlement south-east of Park Wood. [NMR 15029/14 09-MAY-1994 © Crown copyright. Historic England Archive]

The south-western part of the project area includes a substantial portion of the Milton Abbey Registered Park and Garden, a Grade II*-listed landscape designed by Lancelot Brown in the second half of the 18th century for Lord Milton (NHLE: 1000721). The park makes use of the secluded, curving Delcombe Bottom, its sides planted with mixed woodland belts framing views from the Abbey to the south (see Fig. 3). Delcombe Manor (formerly Delcombe Farm, Grade II*) in the north-west corner of the project area was built as an eye-catcher in the mid-18th century (Hill et al. 2018, 416). A carriageway designed by Brown traverses Green Down from south-east to north-west, providing staged views across Delcombe Bottom and towards Milton Abbey to the south (HERR: 1631944) (C in Figure 19).

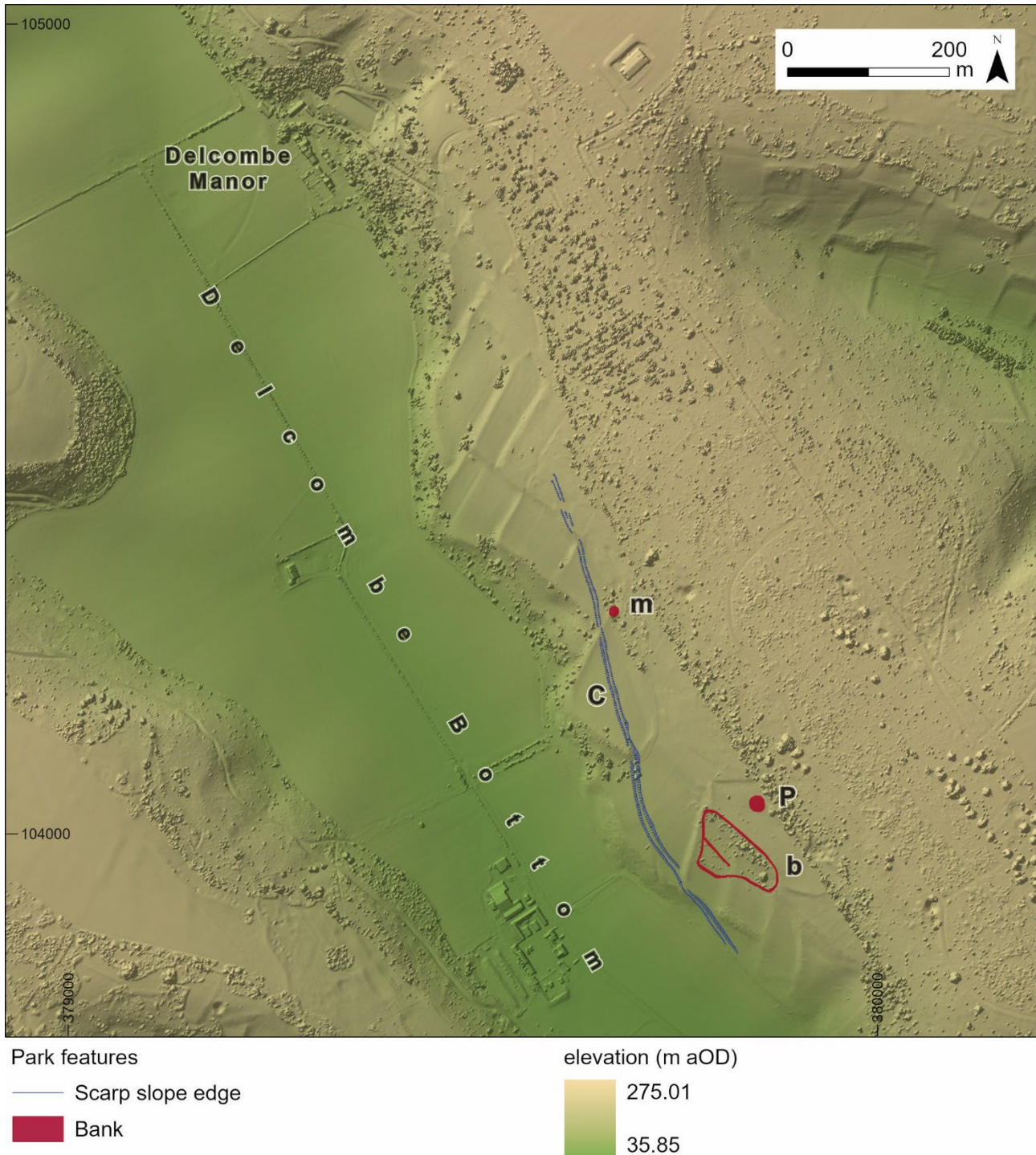


Figure 19: Post-medieval parkland features on Green Down. [Archaeological mapping © Historic England. Includes lidar data © Historic England; source Environment Agency]

A large sub-circular mound on Green Down at ST 7985 0404 described above (see Bronze Age) is perhaps a prospect mound (HERR: 1631947), part of the Brown-designed Milton Abbey parkland (P in Figure 19). Seen in association with other earthworks of the

designed landscape, this is an equivocal interpretation. Mature trees in a small copse currently interrupt the line of sight from the large mound to Milton Abbey in the south. The copse is surrounded by a plantation bank (HERR: 131950) (b in Figure 19) that was presumably part of Brown's design along with other trees edging the crest of Delcombe Bottom (Lis Bond pers. comm.). Another sub-circular mound, 12.7m in diameter located at ST 7967 0427 (HERR: 1632252), stands at the junction of lynchets forming the Iron Age/Roman field system. It is visible in lidar DTM visualisations and may be a tree mound placed on top of the junction (m in Figure 19).

Within the project area, a seasonal stream that is visible in aerial photographs taken in wetter periods runs south from a pond at ST 7989 0351, into the location of Milton Abbey's former gardens (Fig. 20).



Figure 20: View south towards Milton Abbey from Green Down, including to the left a lynchet of the Green Down Iron Age/Roman field system and to the right, a stream running south to Milton Abbey. [Photograph © Katy Whitaker]

Post-War woodland development



Figure 21: Areas of woodland and grazing in the Higher Houghton environs in 1947.
[RAF/CPE/UK/1934 1083 17-JAN-1947. Source: Historic England Archive. RAF Photography]

What was once a more open landscape in which complex systems of Iron Age/Roman fields were developed and cultivated has in part become more wooded over time. It is out of scope of this project to make a comprehensive assessment of all available historic mapping, archive material and environmental evidence to document changing land-use.

Nevertheless, images from the available sequence of later 20th-century vertical aerial photographs provide an opportunity to illustrate aspects of more recent woodland management. This section of the report offers a 'picture story' narrating some of those developments for Meriden Wood, Park Wood and Blagdon Copse, to inform future management. In each of the figures below, north is approximately at the top of each image.

The earliest vertical aerial photographs providing complete coverage of the study area date to early 1947. The slightly more open and mature tree cover in Meriden Wood and Park Wood contrasts with Blagdon Copse, where some parcels have been cleared and others are planted more closely and regularly, divided by a grid of woodland rides. A plantation to the south-east of Park Wood comprises a wooded western compartment and an open eastern part with avenues of trees. The large copse on Green Down, south of Blagdon Copse, that is enclosed by a plantation bank and presumably forms part of the Milton Abbey designed landscape is clear, as are other smaller clumps of trees and standards planted amongst the Green Down Iron Age/Roman field system. The route of the medieval deer park pale crossing the pasture between Meriden Wood and Park Wood, and field boundaries below it, are picked out by sinuous lines of trees and scrub (Fig. 21).

There is very limited vertical photography of the study area between 1947 and the next complete coverage, which was in 1986 flown by the Ordnance Survey. Taken almost forty years after the RAF photograph shown in Figure 21, June leaf cover picks out new, regimented, tree planting in Blagdon Copse in the Ordnance Survey photograph shown in Figure 22. Meriden Wood and Park Wood appear more mixed with some possibly re-planted parcels indicated by differences in the canopy. Park Wood now includes two more open, oblong areas almost at its centre. The plantation to the south-east of Park Wood is more planted-up than it was in 1947.



Figure 22: Areas of woodland and grazing in the Higher Houghton environs in 1986. [OS/86082 120 13-JUN-1986. © Crown copyright and database rights 2025. OS Licence AC000081506]



Figure 23: Areas of woodland and grazing in the Higher Houghton environs in 1995, with annotations by Ordnance Survey staff. [OS/95033 036 13-MAR-1995. © Crown copyright and database rights 2025. OS Licence AC000081506]

Nine years on from the vertical Ordnance Survey photograph in Figure 22, the regimented way that compartments of Blagdon Copse have been planted and managed are becoming more obvious as the young trees grow. The western part of the plantation east of Park Wood has been cleared (Fig. 23).



Figure 24: Areas of woodland and grazing in the Higher Houghton environs in 2000. [OS/00250 036 19-JUL-2000. © Crown copyright and database rights 2025. OS Licence AC000081506]

In Figure 24, the woodlands are seen in full leaf in July 2000. At some point in the preceding five years since the image in Figure 23 was taken, five sub-rectangular areas of Park Wood have been cleared and now have scrub growing in them. Lines of newly-planted young trees are starting to show more clearly in the western part of the plantation

south-east of Park Wood. By 2017 (Fig. 25), the small, previously cleared parts of Park Wood are still discernible from the air. The plantation compartments are maturing.



Figure 25: Areas of woodland and grazing in the Higher Houghton environs in 2017. [ST7903, ST8003, ST7904, ST8004 17-JUN-2017 RGB Aerial Photography. © Bluesky International Limited and Getmapping Limited 1999-2023]

Conclusion

The Higher Houghton project study area was visited by RCHME surveyors in the mid-20th century during production of the Dorset *Inventory* volumes and their observations of well-preserved earthworks in the environs were published in 1970. This project has reviewed available aerial sources to investigate and map features of all periods in order to improve understanding of the archaeological resource and update the baseline record within the project area. In doing so, a further Bronze Age round barrow and other mounds that may also be prehistoric funerary monuments have been recorded. The well-preserved Iron Age/Roman field systems and trackways associated with three settlement sites have been shown to extend further than previously recognised and suggest that the settlements were linked. The three settlement sites have contemporary analogues elsewhere in the region, but what sets them apart is their high level of earthwork preservation in comparison to most of the examples that it has been possible to cite here.

What was clearly a more open landscape in later prehistory, when extensive field systems were established, has become more wooded over time. The study area includes a medieval hunting landscape including Green Hill and Winterborne Houghton deer parks; their layouts and topographic positions illustrate aspects of deer park design and animal management. Newly-recorded features that contribute to an understanding of more recent economic history include a range of extractive pits and a rabbit warren. Elements of the Grade II*-listed post-medieval parkland of Milton Abbey including a carriageway, possible prospect mound and tree planting features were mapped, suggesting that other features of the overall designed landscape may be identified from aerial sources.

Appendix 1, Methodology

Scope and sources

The project study area includes 4 sq. km encompassing Heath Bottom, Park Bottom and Delcombe Bottom to the west of Winterborne Houghton village, Dorset (Fig. 2). All available vertical and oblique aerial photographs of the project study area held in the Historic England Archive were assessed.

Table 1: Historic England Archive images.

	N	Date range
Specialist oblique images	115	1950–2015
Military oblique images	0	-
Vertical images	74	1945–2000

These 189 images include recent aerial reconnaissance photographs taken by Historic England's Aerial Survey team. Ortho-rectified digital aerial photographs at 12.5cm and 25cm resolution taken in 2017 and 2020 were supplied via the Aerial Photography for Great Britain (APGB) agreement. Environment Agency lidar Digital Surface Model (DSM) and Digital Terrain Model (DTM) datasets at 1m resolution from a 2018 survey were downloaded from the DEFRA Survey Data portal (<https://environment.data.gov.uk/survey>).

Methodology

Photographic prints showing archaeological features were scanned and then rectified using the specialist Aerial 5.36 program. The rectification process involves matching features on a 1:2,500 Ordnance Survey digital map (the control) with the same features on the scanned aerial photograph to remove all height and tilt distortion. This gives an overall accuracy of plotted features of 2m or less to the true ground position (Evans 2019). A 5m interval DTM supplied as part of the APGB dataset was incorporated into the calculation to improve accuracy by compensating for undulating terrain. The lidar and many of the digital vertical photographs were already georeferenced so could be imported directly into the GIS. The lidar datasets were processed using Relief Visualisation Toolbox 2.2.1 to produce 2D GeoTIFF images (Kokalj and Somrak 2019; Zakšek et al. 2011).

In addition to the aerial photographs and lidar, other sources of information were consulted to inform interpretation and understanding of sites. They included:

- Historic Ordnance Survey maps;
- Dorset HER data;
- Historic England Research Records (Warden);
- The National Heritage List for England;
- British Geological Survey (BGS) data;
- UK Soil Observatory (UKSO) data.

All archaeological features visible as cropmarks, earthworks, soilmarks and structures were mapped in accordance with Historic England's *Standards for Aerial Investigation and Mapping Projects* and the *Aerial Investigation and Mapping Technical Specification*. This includes features with a potential date range from the Neolithic to 20th-century military remains; the project study area included features dated from the Bronze Age to the post-medieval period. Features were recorded according to morphology using Historic England mapping conventions, using ESRI ArcPro 3.2.2 GIS software. They were mapped on different layers based on the original form of the feature (bank, ditch etc) irrespective of whether these were seen as earthworks or cropmarks (Table 2) and textual attribute data was captured for every feature (Table 3). Monument recording was completed directly in Historic England's WARDEN database, cross-referenced to Dorset HER and the dataset created by this project will be transferred to Dorset HER.

Table 2: Mapping layer content and drawing conventions.

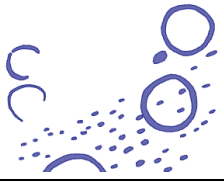
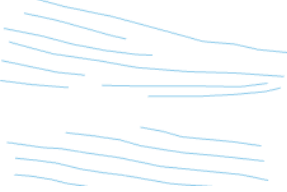
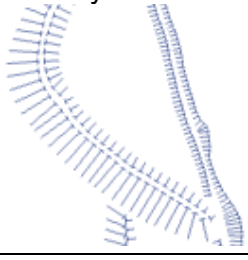
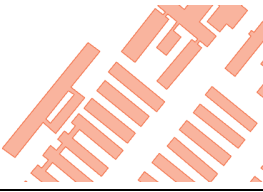
LAYER NAME	DESCRIPTION	TYPE
BANK	Polygon for features such as banks, platforms, mounds and spoil heaps	Polygon 
DITCH	Polygon for cut features such as ditches, hollows, pits or hollow ways	Polygon 
EXTENT_OF_FEATURE	Polygon outlining a large area feature or group of features such as industrial complexes or boundaries of military complexes.	Polygon 
RIDGE_AND_FURROW_ALIGNMENT	Polyline depicting the direction and form of a block of ridge and furrow	Polyline 
SCARP_SLOPE_EDGE	Polyline depicting the top, length and direction of slope. Used to depict scarps, edges of platforms and other large earthworks.	Polyline 
STRUCTURE	Polygon for built features including stone, concrete, metal and wood	Polygon 

Table 3: Historic England AI&M attribute data fields.

Attribute	Description	Sample data
HEUID	Historic England Research Record Unique Identifier (UID)	790603
HER_No	HER uid for those features concorded with existing HER records	MDO12345 (where possible)
LAYER	Original feature form	DITCH
PERIOD	Date of feature (EH Thesaurus). Single or dual indexed terms	MEDIEVAL
NARROW_TYPE	Monument Type (EH Thesaurus). Specific monument type for individual features	FISHPOND
BROAD_TYPE	Monument Type (EH Thesaurus). Broader monument type to enable grouping of individual features	CISTERCIAN MONASTERY
EVIDENCE_1	Form of remains (EH Thesaurus) as seen on PHOTO_1	EARTHWORK
SOURCE_1	Source feature was mapped from (air photograph or lidar)	RAF/3G/TUD/UK/3 PART I 5097 14-DEC-1945
EVIDENCE_2	Form of remains (EH Thesaurus) as seen on PHOTO_2	LEVELLED EARTHWORK
SOURCE_2	Latest available source (air photograph or lidar) to give indication of current state of preservation (not applicable for cropmark sites)	NMR 28225/36 19-OCT-2011

Appendix 2, SSSIs

Historic England mapping is shown against Higher Houghton area SSSIs, for reference.

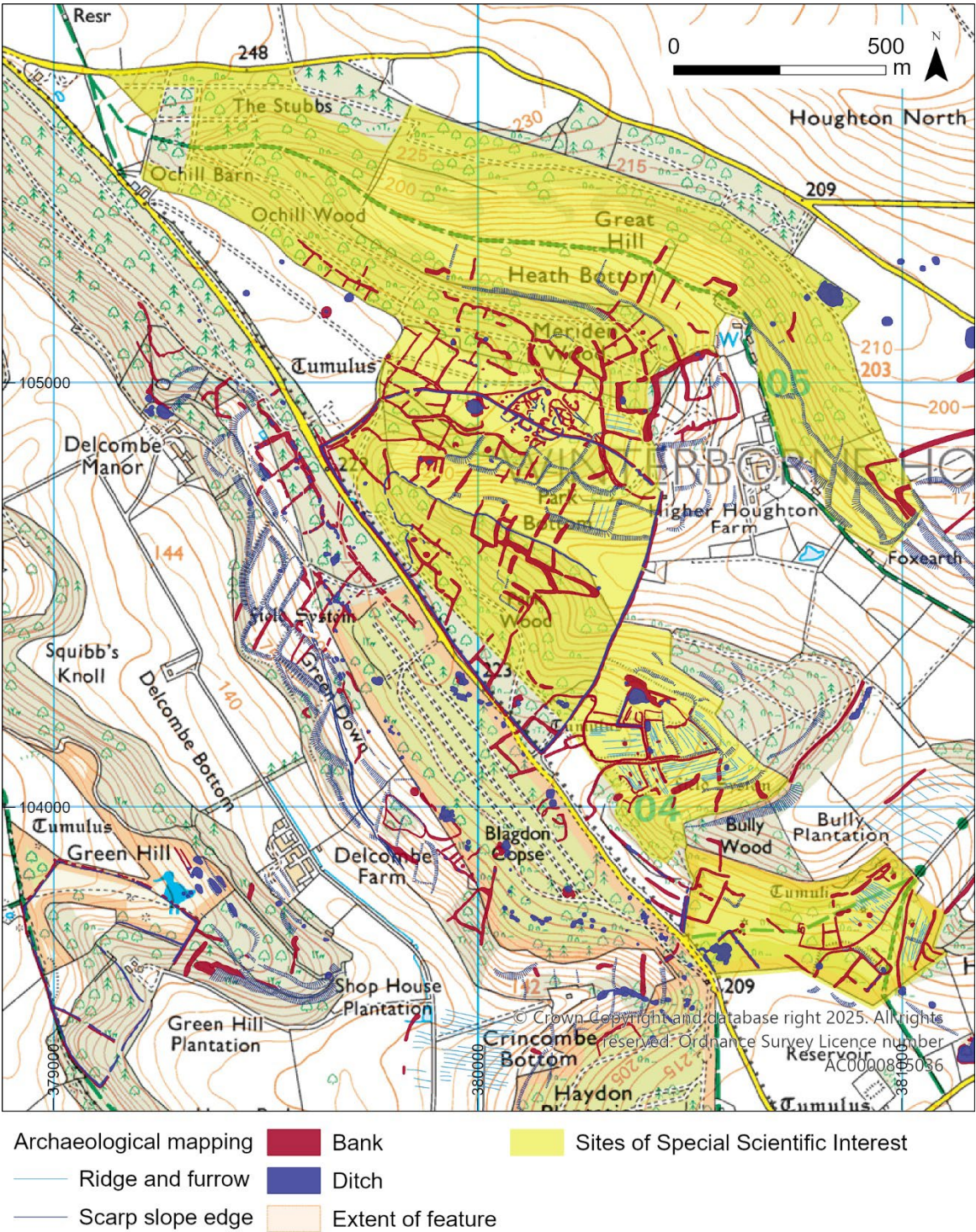


Figure 26: Location of SSSIs across the project area. [Archaeological mapping © Historic England. Base map © Crown copyright and database rights 2025. OS Licence AC000081506]

References

- British Geological Survey, 2020 The BGS Lexicon of Named Rock Units [online] <https://www.bgs.ac.uk/technologies/the-bgs-lexicon-of-named-rock-units/> [accessed 13 January 2023].
- Cantor, L. M. and Wilson, J. D. 1968 'The mediaeval deer-parks of Dorset, VII', *Dorset Natural History and Archaeological Society Proceedings*, 89, 171–80.
- Cranfield University, 2025 *The Soils Guide* [online] www.landis.org.uk Cranfield University UK [accessed 13 January 2023].
- Cunliffe, B. 2005 *Iron Age Communities in Britain*, 4th edn (Abingdon).
- Evans, S. 2019 'Historic England Aerial Investigation and Mapping (former National Mapping Programme) Standards technical Review', Historic England Research Report Series, 46-2019.
- Fleming, F. 2021 'Upper Frome and Sydling Valleys, West Dorset, Dorset, Aerial Investigation and Mapping Project', Historic England Research Report Series, 43-2021.
- Harding, D.W. 2009 *The Iron Age Round House. Later Prehistoric Building in Britain and Beyond* (Oxford).
- Hill, M., Newman, J. and Pevsner, N. 2018 *The Buildings of England. Dorset* (New Haven and London).
- Historic England. 2018 *Prehistoric Linear Boundary Earthworks*. Introductions to Heritage Assets (Swindon).
- Kokalj, Ž. and Somrak, M. 2019 'Why not a single image? Combining visualizations to facilitate fieldwork and on-screen mapping', *Remote Sensing*, 11(7), 747 <https://doi.org/10.3390/rs11070747>.
- Moore, T. 2007 'Perceiving communities: exchange, landscapes and social networks in the later Iron Age of western Britain', *Oxford Journal of Archaeology*, 26(1), 79–102.
- Morris, S. 2015 'Shropshire Deer Parks c. 1500–c. 1914. Recreation, Status and Husbandry', (PhD thesis, University of East Anglia).
- Osborne White, H.J. 1923 *The Geology of the Country South and West of Shaftesbury. Explanation of Sheet 313* (London).

Papworth, M. *Deconstructing the Durotriges. A definition of Iron Age communities within the Dorset environs*, British Archaeological Reports, British Series 462 (Oxford).

Pullen, R. and Whitaker, K. Forthcoming. 'The Valley of Stones, Dorset', Historic England Research Report Series.

RCHME 1970 *An Inventory of Historical Monuments in the County of Dorset, 3: Central* (Part 2) (London).

Royall, C. 2011 'The National Mapping Programme: South Dorset Ridgeway: Results of NMP Mapping', Historic England Research Report Series, 127-2011.

Stevenson, W. 1809 *General View of the Agriculture in the County of Dorset: with Observations on the Means of its Improvement* (London).

Wilson, J. D. 1973 'The mediaeval deer-parks of Dorset, XII', *Dorset Natural History and Archaeological Society Proceedings*, 94, 67–9.

Yates, D.T. 2007 *Land, Power and Prestige. Bronze Age Field Systems in Southern England* (Oxford).

Zakšek, K., Oštir, K., and Kokalj, Ž. 2011 'Sky-view factor as a relief visualization technique', *Remote Sensing*, 3, 398–415.

Historic England's Research Reports

We are the public body that helps people care for, enjoy and celebrate England's historic environment.

We carry out and fund applied research to support the protection and management of the historic environment. Our research programme is wide-ranging and both national and local in scope, with projects that highlight new discoveries and provide greater understanding, appreciation and enjoyment of our historic places.

More information on our research strategy and agenda is available at HistoricEngland.org.uk/research/agenda.

The Research Report Series replaces the former Centre for Archaeology Reports Series, the Archaeological Investigation Report Series, the Architectural Investigation Report Series, and the Research Department Report Series.

All reports are available at HistoricEngland.org.uk/research/results/reports. There are over 7,000 reports going back over 50 years. You can find out more about the scope of the Series here: HistoricEngland.org.uk/research/results/about-the-research-reports-database.

Keep in touch with our research through our digital magazine *Historic England Research* HistoricEngland.org.uk/whats-new/research.