

ALHG Cropmark and Finds Site
Public Geophysical Survey Report
Produced for Abbotsbury Heritage Research Project

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Mapping Our Heritage



Non-Technical Summary

The geophysical survey was undertaken early in April 2006 for the Abbotsbury Local Heritage Group to provide non-invasive information about potential archaeological remains on the site. Scatters of prehistoric pottery shards had been found on the hilltop, part of a relict sand dune close to Chesil Beach at the foot of the South Downs. Cropmarks indicate faint signs of a small enclosure as well as several larger enclosures on the north face of the hill.

A caesium magnetometer survey was carried out over approximately a hectare on top of the hill, both sides of a ridgeway track.

The principal findings were the discovery of up to three probable Roman-era cremation cemeteries either side of a ridgeway track that could be clearly associated with them and demonstrate the age of the route.

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1 Introduction

The project

1.1 The Abbotsbury Heritage Research Project (AHRP) commissioned ArchaeoPhysica to undertake a magnetic survey in April 2006 to explore the context of surface finds and cropmarks within a particular field in the project area. They and the Ilchester estate are thanked here for their support throughout.

1.2 The site is located on the top of a low ridge at the foot of the South Downs in south Dorset at about 60m OD. A substantial bridleway passes along the ridge and the survey has demonstrated this to be an ancient ridgeway route. A deserted medieval settlement is known nearby at the foot of the ridge and cropmarks exist that show the remains of older field systems and perhaps settlement.

1.3 The land is free-draining (although possible land drains were noted during survey) with a sandy soil over Middle Oolite Series Limestone at depth although it has been suggested that the ridge is a relict sand dune.

1.4 Prehistoric pottery sherds have been found during fieldwalking in dense clusters along the ridgeway in the field but much less so in adjacent fields. A couple of types could be identified – one of which may be Black Burnished Ware; the other also a black ware but not burnished. Both types seem likely to be Iron Age or Roman era and may be associated with funerary activity. Much of this has been brought to the surface by recent ploughing which has also eroded the edges of the bridleway and disturbed masonry features on the hilltop.

Methodology

1.5 The area where the pottery was noted was covered with caesium vapour magnetic survey which extended over both sides of the bridleway. The instrument used was a Geometrics Magmapper G858 caesium vapour magnetometer in dual channel configuration. North of the bridleway it was mounted on a wheeled cart but to the south the ground proved too rough as had been recently ploughed and the instrument was carried instead. Survey lines were 1.0m apart and samples collected at 0.15m intervals. A survey grid was set out using a total station and the grid located with DGPS.



2 Catalogue

2.1 This catalogue lists all numbered anomalies present on the interpretation plot DWG 04 with numbers in green in the table below and the following text.

ManID	Area m ²	Type	Plot Label	Description
79311	0.4	Magnetic (Burnt)	1	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79312	0.6	Magnetic (Burnt)	2	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.8m in diameter
79313	0.4	Magnetic (Burnt)	3	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79314	0.4	Magnetic (Burnt)	4	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79315	0.4	Magnetic (Burnt)	5	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79316	0.7	Magnetic (Burnt)	6	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79317	0.7	Magnetic (Burnt)	7	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79318	0.4	Magnetic (Burnt)	8	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79319	0.3	Magnetic (Burnt)	9	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79321	0.2	Magnetic (Burnt)	10	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79322	0.2	Magnetic (Burnt)	11	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79323	0.2	Magnetic (Burnt)	12	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79324	0.2	Magnetic (Burnt)	13	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79325	0.2	Magnetic (Burnt)	14	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79327	0.9	Magnetic (Burnt)	15	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter
79328	0.4	Magnetic (Burnt)	16	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79329	0.4	Magnetic (Burnt)	17	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79330	0.4	Magnetic (Burnt)	18	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79336	0.6	Magnetic (Burnt)	19	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.8m in diameter
79345	0.3	Magnetic (Burnt)	20	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79346	0.4	Magnetic (Burnt)	21	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79347	0.4	Magnetic (Burnt)	22	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79348	0.2	Magnetic (Burnt)	23	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79349	0.2	Magnetic (Burnt)	24	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79350	0.2	Magnetic (Burnt)	25	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79353	0.2	Magnetic (Burnt)	26	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79354	0.2	Magnetic (Burnt)	27	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79554	0.4	Magnetic (Burnt)	28	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79555	0.4	Magnetic (Burnt)	29	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery



79556	0.4	Magnetic (Burnt)	30	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79557	0.4	Magnetic (Burnt)	31	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79558	0.4	Magnetic (Burnt)	32	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79559	0.4	Magnetic (Burnt)	33	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79560	0.4	Magnetic (Burnt)	34	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79561	0.4	Magnetic (Burnt)	35	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79562	0.4	Magnetic (Burnt)	36	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79563	0.4	Magnetic (Burnt)	37	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79564	0.4	Magnetic (Burnt)	38	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79565	0.4	Magnetic (Burnt)	39	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79566	0.4	Magnetic (Burnt)	40	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79567	0.4	Magnetic (Burnt)	41	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79568	0.4	Magnetic (Burnt)	42	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79569	0.7	Magnetic (Burnt)	43	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79570	0.7	Magnetic (Burnt)	44	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79571	0.6	Magnetic (Burnt)	45	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.8m in diameter
79572	0.6	Magnetic (Burnt)	46	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.8m in diameter
79573	0.6	Magnetic (Burnt)	47	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.8m in diameter
79574	0.7	Magnetic (Burnt)	48	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79575	0.7	Magnetic (Burnt)	49	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79576	0.9	Magnetic (Burnt)	50	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter
79577	0.9	Magnetic (Burnt)	51	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter
79578	0.9	Magnetic (Burnt)	52	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter
79579	0.9	Magnetic (Burnt)	53	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter
79580	0.7	Magnetic (Burnt)	54	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79581	0.9	Magnetic (Burnt)	55	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter
79582	0.9	Magnetic (Burnt)	56	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.0m in diameter



79588	0.4	Magnetic (Burnt)	57	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79589	0.4	Magnetic (Burnt)	58	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79590	0.7	Magnetic (Burnt)	59	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79681	0.4	Magnetic (Burnt)	60	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79779	0.4	Magnetic (Burnt)	61	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79780	0.6	Magnetic (Burnt)	62	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.8m in diameter
79781	0.4	Magnetic (Burnt)	63	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79782	0.4	Magnetic (Burnt)	64	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79783	0.4	Magnetic (Burnt)	65	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79785	1.5	Magnetic (Burnt)	66	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.3m in diameter
79786	0.4	Magnetic (Burnt)	67	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79787	0.4	Magnetic (Burnt)	68	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79788	0.4	Magnetic (Burnt)	69	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79789	1.1	Magnetic (Burnt)	70	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.1m in diameter
79801	1.1	Magnetic (Burnt)	71	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.1m in diameter
79877	1.1	Magnetic (Burnt)	72	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.1m in diameter
79878	1.1	Magnetic (Burnt)	73	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.1m in diameter
79880	0.4	Magnetic (Burnt)	74	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79881	0.4	Magnetic (Burnt)	75	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79882	0.4	Magnetic (Burnt)	76	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79883	0.4	Magnetic (Burnt)	77	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79884	1.1	Magnetic (Burnt)	78	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 1.1m in diameter
79885	0.7	Magnetic (Burnt)	79	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79904	0.4	Magnetic (Burnt)	80	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79905	0.3	Magnetic (Burnt)	81	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79906	0.3	Magnetic (Burnt)	82	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79907	0.2	Magnetic (Burnt)	83	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
79970	0.7	Magnetic (Burnt)	84	Strongly magnetic material, probably originally a pit fill containing burnt soil and possibly containing pottery. The magnetic element is approximately 0.9m in diameter
79971	0.2	Magnetic (Burnt)	85	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
80005	0.4	Magnetic (Burnt)	86	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery
80006	0.4	Magnetic (Burnt)	87	Small diameter (single line) strong magnetic anomaly, most likely to be caused by ceramic material, e.g., pottery



79766	9.9	Magnetic Ground	88	A sinuous strip of highly magnetic ground, perhaps a burnt soil within the fill of a ditch? The south-eastern continuation of this anomaly seems to continue the earlier line of the 4m wide track as indicated by the ditch fills slightly further west
79777	1.8	Magnetic Ground	89	A sinuous strip of highly magnetic ground, perhaps a burnt soil within the fill of a ditch? The south-eastern continuation of this anomaly seems to continue the earlier line of the 4m wide track as indicated by the ditch fills slightly further west
79825	28.5	Magnetic Ground	90	The largest part of extensive area of magnetic ground over 70m long parallel to the ridgeway. The magnetic element is perhaps burnt soil and pottery
79826	7.1	Magnetic Ground	91	Another area of burnt ground
79830	0.6	Magnetic Ground	92	A fragment of possible ditch fill, perhaps that defining the northern edge of the former track?
79873	7.8	Magnetic Ground	93	Area of burnt ground or a series of conjoined pits containing burnt soil
79874	2.5	Magnetic Ground	94	Large pit containing burnt soil or a small area of burnt ground
79875	2.1	Magnetic Ground	95	Area of burnt ground or a large pit 1.5m x 2m or more
79876	2.8	Magnetic Ground	96	Area of burnt ground or a large pit 1.5m x 2m or more
80116	5.6	Magnetic Ground	97	A strip of burnt ground around 1m wide or ditch containing a section of strongly magnetic (burnt) soil
80125	0.9	Magnetic Ground	98	Strong amorphous anomaly, probably an area of burnt ground
80126	1.5	Magnetic Ground	99	A strip of burnt ground around 1m wide or ditch containing a section of strongly magnetic (burnt) soil
80133	9.4	Magnetic Ground	100	Large amorphous strong anomaly typical of burnt ground or a burnt soil filling a hollow in a former land surface. Length exceeds 7m and extends beyond edge of survey towards track
80149	1.5	Magnetic Ground	101	Magnetic (burnt) ground or a possible pit fill containing burnt soil
79202	18.0	Non-magnetic Ground	102	An area of reduced magnetic field intensity characteristic of buried stone. The presence of this strip alongside and partly under the existing track suggests a paved former surface exists
79669	0.5	Non-magnetic Ground	103	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79670	6.5	Non-magnetic Ground	104	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79671	1.8	Non-magnetic Ground	105	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79672	3.5	Non-magnetic Ground	106	A band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79673	2.3	Non-magnetic Ground	107	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79674	2.3	Non-magnetic Ground	108	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79675	1.7	Non-magnetic Ground	109	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79680	0.7	Non-magnetic Ground	110	Part of a band of material, almost certainly stony, that relates to adjacent lines of discrete highly magnetic features typical of cremations or hearths. This feature could be a truncated upcast bank or some element of a funerary structure. A further two have been conclusively identified
79728	28.4	Non-magnetic Ground	111	An area of reduced magnetic field intensity characteristic of buried stone. The presence of this strip alongside and partly under the existing track suggests a paved former surface exists
79750	1.2	Non-magnetic Ground	112	Possible stony bank beneath present track



79755	1.2	Non-magnetic Ground	113	Possible stony bank, part of structure beneath present track?
80047	3.0	Non-magnetic Ground	114	A discrete area of low magnetic intensity that may be stony material next to a possible cremation or pit fill
80048	2.9	Non-magnetic Ground	115	A discrete area of low magnetic intensity that may be stony material next to a possible cremation or pit fill
80049	3.0	Non-magnetic Ground	116	A discrete area of low magnetic intensity that may be stony material
80050	6.4	Non-magnetic Ground	117	A small strip of low magnetic intensity might relate to buried stonework. There are several similar features nearby which suggest that ploughing has disturbed a major feature although exactly what is unclear
80080	3.8	Non-magnetic Ground	118	An area of low magnetic field intensity of unknown origin. It is possible that it relates magnetically and perhaps not in structural terms, to the highly magnetic features immediately to the south
79704	N/A	Cultivation Furrows	119	In this area, relict cultivation furrows exist both parallel and orthogonal to the line of the track. They seem to be around 2.5m apart but are overlaid with a third set aligned east to west at about half this spacing.
80205	N/A	Land Drains	120	Land drain or remnant of mediaeval strip cultivation
80206	N/A	Land Drains	121	Land drain or remnant of mediaeval strip cultivation
80207	N/A	Land Drains	122	Land drain or remnant of mediaeval strip cultivation
80208	N/A	Land Drains	123	Land drain or remnant of mediaeval strip cultivation
79192	9.2	Fill (Linear)	124	Plough-spread magnetic ditch fill. Ditch probably no more than 1m wide and typical of a drain bounding a track. A parallel example exists 4m to the southwest and between them they probably define the line of a previous ridgeway track, potentially contemporary with the burnt areas as burnt soil seems to be in their fill.
79196	4.5	Fill (Linear)	125	Narrow (less than 0.5m magnetic component) gully, perhaps a drain or boundary mark
79986	3.5	Fill (Linear)	126	Plough-spread magnetic ditch fill. Ditch probably no more than 1m wide and typical of a drain bounding a track some 4m wide as their is a parallel example to the north-east
79991	2.0	Fill (Linear)	127	Plough-spread magnetic ditch fill. Ditch probably no more than 1m wide and typical of a drain bounding a track. This was probably the northern edge, the southern being within or coincident with the existing track at this point
79908	0.4	Fill (Pit)	128	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79909	0.4	Fill (Pit)	129	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79910	0.4	Fill (Pit)	130	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79911	0.4	Fill (Pit)	131	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79912	0.4	Fill (Pit)	132	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79913	0.4	Fill (Pit)	133	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79914	0.4	Fill (Pit)	134	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79915	0.4	Fill (Pit)	135	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object



79916	0.4	Fill (Pit)	136	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79917	0.4	Fill (Pit)	137	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79918	0.4	Fill (Pit)	138	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79919	0.4	Fill (Pit)	139	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79920	0.4	Fill (Pit)	140	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79921	0.7	Fill (Pit)	141	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.9m in diameter. These can be of archaeological interest
79922	0.4	Fill (Pit)	142	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79923	0.4	Fill (Pit)	143	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79925	0.7	Fill (Pit)	144	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.9m in diameter. These can be of archaeological interest
79926	0.4	Fill (Pit)	145	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79927	0.4	Fill (Pit)	146	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79928	0.4	Fill (Pit)	147	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79929	0.4	Fill (Pit)	148	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79930	0.4	Fill (Pit)	149	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79931	0.4	Fill (Pit)	150	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79932	0.4	Fill (Pit)	151	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79933	0.4	Fill (Pit)	152	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79934	0.2	Fill (Pit)	153	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79935	0.2	Fill (Pit)	154	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79936	0.2	Fill (Pit)	155	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79938	0.7	Fill (Pit)	156	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.9m in diameter. These can be of archaeological interest
79952	0.7	Fill (Pit)	157	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.9m in diameter. These can be of archaeological interest
79953	0.7	Fill (Pit)	158	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.9m in diameter. These can be of archaeological interest



79954	0.3	Fill (Pit)	159	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79955	0.3	Fill (Pit)	160	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79956	0.3	Fill (Pit)	161	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79957	0.7	Fill (Pit)	162	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.9m in diameter. These can be of archaeological interest
79958	0.6	Fill (Pit)	163	A discrete area of fill in a pit-type structure with the magnetic element approximately 0.8m in diameter. These can be of archaeological interest
79959	0.4	Fill (Pit)	164	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79960	0.4	Fill (Pit)	165	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79961	0.4	Fill (Pit)	166	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79962	0.4	Fill (Pit)	167	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79963	0.4	Fill (Pit)	168	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79964	0.4	Fill (Pit)	169	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79965	0.4	Fill (Pit)	170	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79966	0.4	Fill (Pit)	171	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79967	0.2	Fill (Pit)	172	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79968	0.2	Fill (Pit)	173	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79969	0.4	Fill (Pit)	174	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
80174	0.4	Fill (Pit)	175	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
80175	0.2	Fill (Pit)	176	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
80176	0.2	Fill (Pit)	177	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
80177	0.2	Fill (Pit)	178	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
80178	0.2	Fill (Pit)	179	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
80179	0.2	Fill (Pit)	180	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object



80180	0.2	Fill (Pit)	181	A discrete magnetic source present on one survey line only. It could be a small diameter pit-type structure, a small ceramic or a deeply-buried steel object
79203	N/A	Track	182	Edge of possible track running uphill from the vicinity of East Elworth. Possibly a well-trod route from the medieval settlement onto the downs, connecting with the ridgeway. The exact physical nature of the feature is unknown, perhaps simply an eroded hollow 2-3m wide?
79204	N/A	Track	183	Edge of possible track running uphill from the vicinity of East Elworth. Possibly a well-trod route from the medieval settlement onto the downs, connecting with the ridgeway. The exact physical nature of the feature is unknown, perhaps simply an eroded hollow 2-3m wide?
80163	N/A	Track	184	Edge of possible track running uphill from the vicinity of East Elworth. Possibly a well-trod route from the medieval settlement onto the downs, connecting with the ridgeway. The exact physical nature of the feature is unknown, perhaps simply an eroded hollow 2-3m wide?
80164	N/A	Track	185	Edge of possible track running uphill from the vicinity of East Elworth. Possibly a well-trod route from the medieval settlement onto the downs, connecting with the ridgeway. The exact physical nature of the feature is unknown, perhaps simply an eroded hollow 2-3m wide?



3 Results

Introduction

3.1 The soil was generally found to be only slightly magnetic, probably due to the sandy content, but to possess adequate magnetic susceptibility to support magnetic enhancement through burning. This is essentially as expected for this sort of geological context.

3.2 The relatively quiet magnetic background is ideal for the detection of weak anomalies but most at this site were rather strong due to the influence of direct heat from fires in the past, probably related to the area's use as a cremation cemetery.

3.3 There is no direct evidence to suggest the site to have significant palaeoenvironmental potential, however, the presence of burning and possible ritual practices substantially increases the chance of finding carbonised grains and peas, etc., where there are undisturbed contemporary deposits.

Archaeology

3.4 The degree to which archaeological features have survived is remarkable although they are without doubt likely to be destroyed by ploughing within a short time. This is borne out by the quantity of broken pottery vessel in the soil and quantities of stone on the south side of the track. Recent aerial photographs have revealed part of a masonry structure in the ploughsoil which may be the origin of large stones observed in a similar place during survey.

3.5 Magnetic survey has revealed two classes of monument comprising a ridge way with three identifiable phases and a cremation cemetery which seems to be associated with it.

The ridgeway

3.6 This survives today as a slightly stony elevated strip eroded on both sides by ploughing. Map evidence suggests it continues eastwards for at least two kilometres where it has been enclosed. To the west of the area it seems to have continued the line of an existing lane running off the top of the ridge to the north and there is no sign of any ridge top continuation further west.

3.7 The ending of the ridgeway here is probably significant for how the archaeology of the area is viewed – as the last elevated point on the route it may have been a focus for various activities as it turns inland away from the sea. Conversely, it is also the highest point of the lane extending up the ridge from settlement lower down and would have been a locally convenient focal point from that direction.

3.8 The archaeology of this track is quite interesting as there are two clearly defined predecessors. One is apparent as a pair of parallel ditches about four metres apart (features 124, 126, 127 at the west end and probably 88, 89 and 92 further east) which are initially slightly north of the existing track. These pass beneath this feature and emerge to the south near the west edge of the survey where they seem to contain strongly magnetic fills, most likely burnt soil from the surrounding cremation activities.

3.9 These fills are particularly important as their presence implies the track was contemporary with the areas of burning and the deposition of large quantities of probably Iron Age pottery and what is apparently Roman Black Burnished Ware. The ridgeway seems to have been a recognised landscape feature certainly during the Roman era and perhaps earlier. This is further supported by the apparent lack of funerary features within the path itself between the parallel ditches although a possible exception might be pit features 57 – 59.

3.10 A second probable alignment of the ridgeway is evident immediately south of the current line and also partly beneath it. It is a band (features 102 and 111) up to five metres wide of very low susceptibility ground, typical of buried stone or masonry. There are no indications of flanking ditches and the quantity of stone must be significant to produce the observed reduction in



magnetic intensity. Separately the reduction in the vertical magnetic gradient supports this hypothesis and suggests the feature to possess significant thickness.

3.11 Features 182 – 185 indicate the parallel edges of a faint lateral discontinuity in the subsurface that approaches the ridge from the northeast from the direction of the deserted medieval settlement. It may have been a medieval track, perhaps a holloway gaining access to the high ground from the below.

Cremations, pits and burnt soil

3.12 Another significant result of the survey is the discovery of large areas of intensely magnetic ground typically associated with the burning of soil, fired ceramic items and pits. These can be divided into four groups, each slightly different in their composition and distribution of pits but all associated with prehistoric pottery.

3.13 The first is a large area of probable burnt soil, features 90 – 100 parallel with and north of the line of the ridgeway. Between them they define a strip of ground over seventy metres long and about fifteen metres wide within which sizeable magnetic anomalies (greater than 50nT for example) predominate. Some, like feature 90, seem to represent continued and prolonged burning of the same area while others, e.g., 94 – 96 might be discrete features. Ploughing may have distributed burnt soil and caused some areas to appear detached.

3.14 This is also the area where there are vast numbers of pottery sherds comprising a mixture of coarse black Iron Age or Romano-British pottery and also Black Burnished Ware or Roman origin. Some idea of the concentration of this material is evident from the blue symbols on drawings DWG 01 and 02 which depict an incomplete distribution.

3.15 The south eastern group is apparently the best preserved and is tightly constrained within an area approximately twenty-five metres square south of and abutting the ridgeway. It is probably bounded by the flanking ditch 88 of the earlier alignment of this route but this is unclear due to possible cremations 57 – 59 slightly further north and apparently associated features 112 and 113. Within the group at around three metre intervals there are discrete strongly magnetic features (e.g. 50) arranged in slightly curving lines (e.g. 50 – 54) two to three metres apart. These are strongly magnetic which implies that substantial quantities of burnt soil or ceramic materials exist in their fill. Their size and association with Black Burnished Ware pottery suggests the presence of a cremation cemetery with perhaps thirty individuals. Among these are other, less magnetic, pit type anomalies (e.g. 170 and 171) that presumably have some other function.

3.16 Between the curving rows of probable cremations there are strips of relatively non-magnetic ground, e.g. 103 – 110. These are likely to be stony banks or perhaps conjoined mounds of material dug from the adjacent pits and could themselves have some ceremonial function.

3.17 The south western group has the same overall form as the south eastern but the linear arrangement is only faintly hinted at and there would appear to be a greater proportion of ordinary pit-type responses, e.g. features 157 - 159. This may be the result of ploughing if the more highly magnetic deposits have been ploughed away and there is certainly no sign of the possible mound material between them. An alternative explanation would be that the area had a different function, perhaps for the disposal of debris and without excavation this is unlikely to be resolved.

3.18 This group would again appear to respect the line of the ridgeway, having a definite limit parallel to the modern alignment which at this location is shared with the earlier ones. This could imply that the features were contained in a separate enclosure.

3.19 The last group lies north of the ridgeway and occupies the relatively flat top of the hill. It contains a more dispersed set of features than the others, as if able to take advantage of the level land rather than being contained on the southern slope. However, they appear to avoid the steeper northern slopes and this also reflects the distribution of pottery.



3.20 There is again a mixture of strong discrete magnetic sources and many pit-like features although damage from ploughing may have reduced cremations to simple pit-type anomalies. There is a very large quantity of pottery on the hilltop which supports an assumption of fairly severe plough damage. Most of the more magnetic features e.g. 72 – 79 are concentrated in the northern part of the group away from the extensive areas of burning 90 – 96 alongside the ridgeway but whether this is significant is difficult to tell.

Miscellany

3.21 Features 120 – 123 could be relict cultivation furrows, strip field divisions or non-ceramic land drains.

Chronology

3.22 There is circumstantial evidence to support a relative chronology for these features. The stone surface is apparently cut by one of the flanking ditches 88 of the other alignment and must therefore be earlier. At the same time these ditches are highly magnetic and must therefore contain burnt soil from the adjacent burnt ground so would have to have been open at the time. This ground is presumably part of the complex of cremations and therefore the track would have to have been in use at the same time the pottery was deposited at some time in the Roman era.

3.23 At the same time the earliest phase of the ridgeway seems to have been well built with a stone surface and may therefore be of Iron Age date in its visible form.



4 Conclusion

Significant results

4.1 The survey has found a relatively intact but at risk funerary landscape of the late Iron Age or Roman era period, directly associated with and respecting a ridgeway route surviving as a bridleway.

4.2 The Roman era route seems to have developed from an earlier, perhaps Iron Age, paved route which in Roman times may have performed a function within their coastal infrastructure.

4.3 For this landscape to exist there must be a contemporary settlement but the site of this is not currently known. Together with the ridge-top cemetery this would have considerable archaeological potential.

4.4 The results demonstrate the potential for the discovery of important sites in this landscape, especially on former downland areas where extensive cultivation has been limited to relatively modern times. Cropmarks and the observation of features continuing off most sides of the survey indicate that there is a substantial quantity of archaeology yet to find in this field.

4.5 It is difficult to be sure exactly what the cropmark seen by the ALGH, which originally prompted the survey, relates to. It is possible that it is simply an artefact of crop growth with no direct archaeological cause but it could well relate to an enclosure feature not visible in this magnetic survey.