rubble. As such, the interpretation of such variation must consider the context in which it occurs.
It should be noted that this technique only records magnetic variation (relative to natural background levels). As such, the magnetic response of archaeological remains will vary according to geology/pedology. Additionally, remains may be buried beyond the effective 1 - 2m range of the instrumentation.

A digital archive of the geophysical data and report will be retained by PCG.

6.0 Results and discussion (Figs. 2 – 11)

6.1 Areas 1 & 2 (Figs 2 – 7)

The survey identified buried ditches, predominantly situated in the south-east part of Area 2 (Figs. 3 & 6: red lines). One example (**1**) clearly continues eastward into Area 3, where scatters of Roman pottery were noted on the surface during the survey across a more concentrated array of ditches (see below).

An isolated and moderately strong linear anomaly in the mid-western region has been highlighted as a potential ditch (**2**), with a further possible ditch at the northern edge of the field (**3**).

A widespread array of pit-like anomalies in the south-east region conceivably represents a group of back-filled quarry pits (**4**: red). This zone of variation is also clearly visible on the Google Earth image dated May 2020 and a concentration of stone rubble was noted on the surface during the survey. More isolated potential pits were recorded in this general locality; it is speculated that a relatively strong 'positive' response that abuts the western edge of one example might signify a focus of industrial activity, potentially the remains of a kiln (**5**).

The survey recorded widespread magnetically weak discrete anomalies in the southwest region, with more dispersed examples encountered across the site (e.g. green dots). Whilst an anthropogenic origin as pits cannot be entirely discounted, given the high potential for archaeological remains elsewhere within the site, it is not always possible to confidently differentiate between natural variations and archaeological pits solely by non-intrusive investigation. Nevertheless, it seems likely that most are of natural origin, such as tree throws and soil-filled solution holes. Larger zones of probable natural variations were also recorded (e.g. areas broadly described by green dotted lines).

Widespread traces of (predominantly) ridge and furrow cultivation were recorded (orange lines). Remains are particularly apparent in the south-west region of Area 2 and southern part of Area 1 - reflective of enhanced magnetic contrast with that of the underlying limestone geology. Examples in the northern half of the area exhibit only limited magnetic contrast where mudstone and some alluvium is recorded. The latter appear to largely terminate to the immediate south of a recently removed c.E-W boundary, with possible examples in the north-east corner situated to the east of a c.N-S former boundary (yellow lines; Sutherland, 2021). For the most part, stronger responses recorded along and adjacent to the removed boundaries are considered to signify modern ferrous-rich objects and materials (pink & blue). With that in mind, a small group of predominantly 'positive' responses to the north of the former boundary exhibit some potential as an area subject to high temperature (**6**).

Land drains were recorded in the northern part of the site (purple lines).

A magnetically strong buried service extends north from the southern boundary to the mid-southern region, thereafter abruptly turning to the west and continuing to the western boundary (blue line). The shared alignment of the western component of the service and linear anomalies to its east possibly imply contemporaneity (dashed yellow lines); the latter might therefore reflect sections of a recent land division, albeit not depicted on historic maps (*ibid*).

Strong variation was induced by electricity poles in the northern part of Area 2, with one example at the north-western edge of Area 1 (**EP**).
Other than those discussed above, magnetically stronger discrete anomalies within these areas (and Areas 3 – 5) probably signify near surface ferrous-rich debris contained with the ploughsoil (pink and blue)
.
The two presumed Bronze Age ring ditches to the immediate south of the proposed development site responded particularly well to the geophysical survey (**7** & **8**: red lines). The results also indicate possible internal features (red). The ditches appear to be sufficiently deep to have survived relatively undisturbed by subsequent cultivation, most notably ridge and furrow (orange lines).

6.2 **Areas 3 & 5** (Figs 2, 3, 8 - 11)

The survey recorded a substantial number of ditches, some of which correspond to cropmarks (*ibid*) (Figs. 3 & 10: red lines). Surface artefactual evidence suggests that these date from at least the Roman-British period, and are potentially associated with occupation (possibly settlement), the level/nature of activity remains to be determined.

The central elements of these collectively describe a relatively large triangular enclosure that tapers at its northern end (**9**). This encompasses a number of NW-SE aligned parallel ditches that, albeit only partially resolved, appear to define internal rectilinear sub divisions. Further potential ditches extend from its eastern and north-eastern edge, some appearing to bound variously-sized enclosures though these are generally less well defined, particularly to the north and east. Remnants of a possible ditch-flanked track extend eastward from this complex (**10**).

However, an archaeological interpretation for linear trends at the northern edge of this complex is tentative and a natural origin for at least some components is also feasible (e.g. palaeochannels). Suggestions of parallel linear features along its eastern side follow the course of a former path/track depicted on historic maps, though this might be incidental given the relatively broad nature of this zone of variation (**11**).

Putative ditch **1** continues eastward into this area, towards the western edge and seemingly beyond (albeit slightly offset to form the western edge of the triangular enclosure (**12**). It also appears to abut the eastern edge of a c. NNW-SSE magnetically distinct ditch that has also been identified as a cropmark (**13**). As apparent on aerial images, the survey confirmed that a gap separates the northern extent of **13** and a similarly aligned ditch to its north that extends towards the north-west corner of the field (**14**). There is no geophysical evidence of the latter's potential continuation to the northern edge of the site in either Area 1 or Area 3; any such continuation would seemingly follow the course of the existing boundary between these fields (though this would possibly be coincidental).

A small group of ditches and potential pits were recorded in close proximity to the mid-eastern eastern edge of putative ditch **14**. Though slightly remote from ditches to the east, it seems likely that they.are contemporary with this feature.

Two parallel linear anomalies in the northern part of Area 3 have been tentatively interpreted as buried ditches though, alternatively, these might be of agricultural origin (**15** & **16**). There are limited suggestions of a continuation of **15** into the southern part of Area 4.

A number of discrete anomalies in Area 3 have been interpreted as possible pits (red dots). One example close the southern boundary possibly signifies some form of burning (**17**), with a more isolated example in the mid-northern part of the field (**18**).

Clear traces of NS aligned relict ridge and furrow was recorded at the western side of Area 2, with less magnetically distinct examples in Area 4 (orange lines).

Land drains were recorded in Areas 4 & 5 (purple lines).

A short linear feature lies at the mid-northern edge of Area 5 (red line). However, not withstanding its ditch-like characteristics, this might merely be a gully that drained into The River Ray and hence of only limited archaeological value.

A buried service extends along the eastern boundaries of Areas 3 & 4 (blue line).

Magnetically strong discrete responses in Area 4 include those induced by electricity poles (**EP**).

The survey has not recorded any geophysical evidence of the postulated Roman Road in Areas 3 & 4, the potential existence of which was speculative.

Highlighted anomalies were recorded against a generally minimal backdrop of natural variation (greenscale), with distinctive zones broadly highlighted as hashed green.

7.0 Conclusions

The survey identified potential Romano-British settlement remains in the southern part of the site, some of which correspond to cropmark ditches. An adjacent linear cropmark was also recorded. These are situated on slightly higher and hence potentially better drained ground over limestone.

The results suggest that remains of former pits lie to the east of the putative settlement, with a possible kiln site in proximity to the south. Of uncertain date, feasibly these might also date to the Romano-British period.

Ridge and furrow cultivation was identified across most of the site, most apparent in areas with underlying limestone.

Modern features include in situ remains of recent field boundaries, buried services and land drains.

The survey gathered clearly-defined geophysical evidence of two putative Bronze Age ring ditches that lie to the immediate south of the proposed development site.

8.0 Acknowledgements

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9.0 References

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454000 454200 454400 454600 454800

Area 1

Area 2

Area 3

Area 4

Area 5

454000

454200

0 50 100 m

-2.5 nT 2.5

Pegasus Group

GREEN NATION SOLAR ENERGY

Geophysical Survey: Manor farm, Noke, Oxfordshire

Fig.2: Greyscale images of processed data (1:3000)