

A G Wright & Son Farms Ltd

12th March 2023

Dear Sirs

Sunnica – EN1010106

Unique ref nos: AFP 191

Deadline 8

In response to the Council's [REP7-095] we would like to make the following points in support of their decision to promote the Rochdale envelope principle.

The Councils are correct to identify a continuing lack of agreement between SNTS and the Applicant. Some of the reasons for this situation are set out below:

The Baseline report ref APP-115 dated 18th November 2021 was prepared by Daniel Baird Soil Consultants Ltd (DBSC):

A/ **APP-115** – fails to comply with The British Society of Soil Science Guidance Note 1

[APP-115 at p21-6 References – ref 3] references The British Society of Soil Science (BSSS) Guidance Note 1 which is shown in full at [REP4-047]. It follows therefore that the soil survey within APP -115 should comply with the Guidance. The soil survey does not comply with the guidelines under the following headings - detailed below:

1/ Validation Process (stage 1) – Points 1,3,4 and 5 [See REP4-045 P1] for reasons

2/ Validation process (stage 2) – points 6,15,18,23 [see REP4-045 P3] for reasons.

Please note this list is not exhaustive.

3/ REP2-240d p133 para3.2 – DBSC suggest at APP-115 -5.3.3 that the report was done in collaboration with RAC and MAFF. It was not. DBSC did not even ask to use RAC's data.

DBSC's report fails the BSSS standards on eight points. The BSSS Guidelines state that if a report has a single failure in a category, it should not be accepted without referral to a specialist. None of these points of failure have been satisfactorily addressed by either the Applicant or Natural England.

B/ **Auger Borings**- details shown in [APP-115 p80-148]

1/ Sam Franklin's video [REP7-109c/d] shows an auger boring to 90cms where less than 5ms away at ref [APP-115 p101 LF164] DBSC stop their auger boring 30cms for stone. At Lee Farm (Sunnica East A) 225 auger borings were taken in total and 87 of them stopped at a depth of 40cms or less. This does not tie up with our findings on the boundary of Lee Farm where we found a much deeper top soil. Neither does it fit with the predictive mapping detailed in point I below. We have also attached at appendix 1 pictures of pits 5,6,7,8 which clearly show the depth of top soil and subsoil. The reference plan for the pits is at [REP6-051- appendix1]

2/ No laboratory samples were taken to support the findings of the auger borings. BSSS Guidance note 1 [REP4-47– stage 2-point 6] Lab sampling will confirm soil texture and content of stone particles >2mm. This is relevant to the assessment of Soil Moisture Balance (see point D below) which in turn effects the ALC grading.

3/ DBSC's land classification plan does not accurately reflect the land classifications recorded by DBSC's own auger borings. See [REP4-063 para D-point 7]

4/ Auger borings were missed out from the original report. At Lee Farm 22 out of 225 points were missing.

5/ The numbering of the auger borings is not logical. The fields on Lee Farm are separated by the Lee Brook which is too wide and deep to cross easily. A logical approach would be to sample the fields on one side of the brook, then sample the other side. However, Point LF30 is on the East side of the right-hand block, LF31 is on the West side of the left-hand block, likewise LF81 and LF83. This approach makes both the mapping of the points and any comparisons with soil associations more difficult. 50 sample points are mapped are not representative of agricultural land [REP2-240d -p133-para3.4]

6/ The agreed density of auger borings by Natural England in TIN 049 is 1 per hectare [REP2-240o-p3]. DBSC's report is 1.3 per hectare see [REP2-240d-p133-para3.8]

C/ Soil Inspection Pits

1/ DBSC only dug six pits on a survey of 924ha. The MAFF survey [APP-115 p42-52] quoted extensively by the applicant in support of DBSC surveyed 189ha and dug 8 pits [APP-115 p45]

2/ DBSC dug the pits after the soil auger borings were completed. Pits should be dug when the auger borings are being done. If the auger borings are suggesting a change in soil association or series a pit should be dug to investigate. Apart from a small area all auger borings were completed by October 2019 [REP2-240d -p133-para3.6] the pits were dug in September 2021 [APP- 115 pp 84-89] just before AP-115 was submitted in November 2021.

3/ The applicants state that the pits dug were reflective of the different soil series on the site [APP - 115 p84-89]. The 1:63,360 Soil survey of England and Wales plan which is based on one inch to one mile identifies 10 separate soil series on the site. Of the five pits that remain within the Sunnica site 3 are dug on the same soil series. The two others are on separate soil series. DBSC therefore only covers 3 soil series with the pits he has dug. Information of seven soil series within the site is therefore not provided

4/ Plan [REP6-051 Appendix 1] shows DBSC 5 soil pits marked in red. Pits 2,3,4 are on the same soil type Freckenham and are shown situated in grade 4 land.

5/ Pits 1,4 and 5 are situated on the edges/headlands of fields. This is surprising as the pits were dug in September which is after the cereal harvest and crops would be cleared. The land would not be too wet in September for full access to the centre of fields. Why was this not done?

6/ DBSC gives no reason why pits in the middle of fields were avoided and why no pits were dug on land predicted as BMV by the ALC Magic Plan, the 2017 Natural England Predictive BMV plan, or the more detailed 1:63,360 plan.

7/ Only the top soil of the samples taken from the pits was laboratory tested. The subsoil was not tested. It would be expected when digging pits to test the subsoil, subsoil textures can be finer and hold more available water.

8/ [REP2-240d p140 para5.26] -shows DBSC have not used the laboratory results from the topsoil to inform the grading of surrounding land.

9/ No supporting photographs of any of the pits were provided, instead the applicant chose to include photographs of two archaeological pits. Please see attached at appendix 2 pictures of two archaeological pits. One provided by DBSC and one by Oxford Archaeology (OA) who carried out the Archaeological survey for the applicant. The OA trench strongly indicates BMV.

10/ For the reasons above the Inspection pits do not provide the necessary information needed for a reliable soil survey. The pits were an afterthought rushed through just before APP-115 was due to be submitted and they were dug in areas known to be poor land or on headlands. The pits successfully avoided the land shown on the maps to be of better quality.

Without representative and referenced information from inspection pits a soil survey report cannot be accepted as reliable.

D/ Moisture Balance Calculations – MBC

1/ To produce the information contained within [APP-115 p80to148] DBSC would have to have completed the associated moisture balance calculations for all observations. SNTS requested to see the MBCs in August 2022. The applicant told SNTS that all the information to do with the MBC's was contained in APP-115. This is incorrect the information is not available in APP-115 and specifically the numbers used in the calculations to arrive at the published results are not disclosed.

2/ Natural England (NE) – have also requested the same information asking for a spreadsheet showing the MBC's three times. [REP2-090, REP5-096, REP7-104]. This information has still not been provided.

3/ [REP2-240d-p137 para5.14] – RAC have used the auger boring readings provided by DBSC and used the MBC and none of the findings are the same as the results printed in [APP-115 Annexe F p80top148]

4/ [REP4- 032 details in point 2.1.6] that DBSC at a meeting with NE on 30th November 2022 told NE that when preparing MBC that an allowance was introduced to the MBC of an estimated 20cm additional depth where permeable parent material was found within the 1.2m appraisal depth and could not be penetrated by auger or spade (no such pits were recorded in the baseline). Furthermore, an additional 20% (by volume) stone content was allowed within that material. No reference to this allowance had been made in AP-115 or in any other DBSC documentation. SNTS were unaware of its existence until it was revealed in [REP4-032 2.1.6]. Furthermore it has not been made clear where the allowance has been used in the MBC's and when it has been excluded.

There is no mechanism in MAFF's revised 1988 guidelines for ALC [REP2-240n] for any allowance to be made. Instead guidance makes comprehensive allowances for specific characteristics of observed stone and rock. There are no records of observations from pits dug by spade by DBSC (as described in the Technical Note) to support the assertion that impenetrable layers were encountered in any pits. The allowance introduced randomly on 30/11/22 by DBSC is not supported by the 1988 Guidelines or evidence presented in APP-115. Neither is it clear where the allowance has been used

or not been used in the soil grading process [APP-115 p80-148]. This makes understanding the soil grading impossible and as a consequence the results totally unreliable.

5/ No information has been provided as to how the allowance figure was arrived at, it is described as “generous” and so appears to be arbitrary. Subsoil samples were not taken from the pits, photos of the subsoil have not been provided and there is no record of pits dug to confirm impenetrable conditions as described in the baseline. On what basis were the allowance figures arrived at?

E/ Irrigation

DBSC have ignored irrigation in APP-115. SNTS do not agree with this position see [REP2-240d pp35-37 & pp233-237] [REP2-240d p298] a letter from MAFF acknowledges the benefit of irrigation a fact DBSC dismisses at [APP-115 P point 5.4.5]. Whatever the differing opinions are on the 1988 Guidelines one point is clear and that is that irrigation cannot be totally ignored. The presence of irrigation should be dealt with as another factor. DBSC has failed to do this

All six landowners within the scheme have irrigation licences. Three landowners also have winter fill reservoirs which give a secure summer water supply without effecting the aquifers. The practise of filling reservoirs during the winter is fully supported by the Environment Agency see [REP2-097h]. Irrigation as a factor cannot be ignored

F/Productivity

1,000 hectares of irrigated vegetable growing land is highly productive and will produce over 32,500 tonnes of produce per annum. This cannot be ignored when we are already importing 46% of our food. Productivity is a factor in the decision-making process for a scheme of this size.

Land which can be planted early (Feb for early carrots) and harvested throughout the winter (sugar beet) is a scarce resource in this country. The crops grown are generally grown on a 6–8 year rotation which means that the impact of taking 1,000 hectares out of production has a much greater impact than removing 1,000 hectares of land growing combinable crops. It will not be easy to move this production elsewhere in the UK.

G/The Video

The video submitted at Deadline 7 REP7-109c/d shows soil expert Sam Franklin augering to a depth of 90cms were 5meters away DBSC could only auger to 30cms. The applicant tries to explain this anomaly by stating Mr Franklin must have found a deep spot. We have dug 4 pits along the eastern boundary of Sunnica East A shown on plan [REP6-051- Appendix 1 in blue as pits 5 6 7 8] all these pits showed a depth of soil well in excess of 30cms. See pictures attached at appendix 1. It is accepted that the pictures have no exact measurements but the point made is that there is no evidence like in the video, that it would be possible to hit impenetrable stone at 30cms as described by DBSC at [APP-115 p101 point LF164]

H/ Ripon Services - Appeal decision 13th April 2021

DBSC were responsible for producing the Savills Report which is reported and commented on in the Inspector’s Decision Letter dated 13th April 2021 see [REP2-240d p94-98]. We have summarised the main points made by the Inspector that are relevant to the report submitted by DBSC at APP-115. We have referenced the Inspector’s concerns with the points above that have reoccurred in APP-115:

- 1/ Savills graded the whole site as 3B with a limitation of soil droughtiness. I -1-2-3
- 2/ Stone was found to be prevalent. B
- 3/ Penetration of the auger to its full depth was precluded by stone with two locations showing constraint at a depth of 35cms. B-1
- 4/ the report made passing mention that the survey included trial pits but without corresponding records. D-1-8
- 5/ the report was not validated by laboratory analysis B-2 D-7
- 6/ the soil type classification by DBSC was not consistent with the known predominant soil type D-3 & 6 I - 1,2&3
- 7/ where the auger failed to get below 50cms an additional allowance of soil was given for the drought calculation as crop roots were likely to penetrate to a greater depth than the auger. However, it was not clear to how, and to what extent any adjustment had been derived or made. In particular there was nothing to suggest that the allowance had been applied in a transparent manner D1,2,3,4,5&6
- 8/ In conclusion the Savills report had a number of shortcomings and the case made was found to be 'largely unconvincing.' by the Inspector. The same applies to APP-115.

I/ Maps Used

1/ ALC Magic map (appendix 3)– DBSC has failed to dig a pit in any areas shown as BMV and only one in an area of grade 3. This map shows significant areas of potential BMV it is not possible to only find 8.8ha

2/ The 2017 Natural England predictive BMV land assessment plan (appendix 4) shows 82% of the site as 60% or more likely to be BMV

3/ The Soil survey of England and Wales plan 1:63,360 (appendix 5) shows 10 soil series most of which with qualities that suggest BMV and all of which require pit observations.

The three maps do not support the DBSC report. DBSC do not explain how this anomaly has occurred in the report APP-115. See [REP2-240d-p141-para5.31]

Conclusion

As shown above DBSC has submitted a report APP-115 with many shortcomings which has enabled DBSC to substantially underestimate the presence of BMV on the site. The applicant has refused access on four occasions to the site to try jointly to resolve the BMV anomalies. The fourth attempt to gain access is detailed at [REP6-051 appendix-5to7]

The only remaining alternative to resolve this matter is the Rochdale envelope principle as proposed by the Councils. This requires a reasonable worst case to be used in quantifying the amount of BMV on the site. If the applicant had chosen to cooperate and backed the conclusions of APP-115 this could have been done on site. This sadly has not been the case so we are now at the end of the examination period with this fundamental issue unresolved.

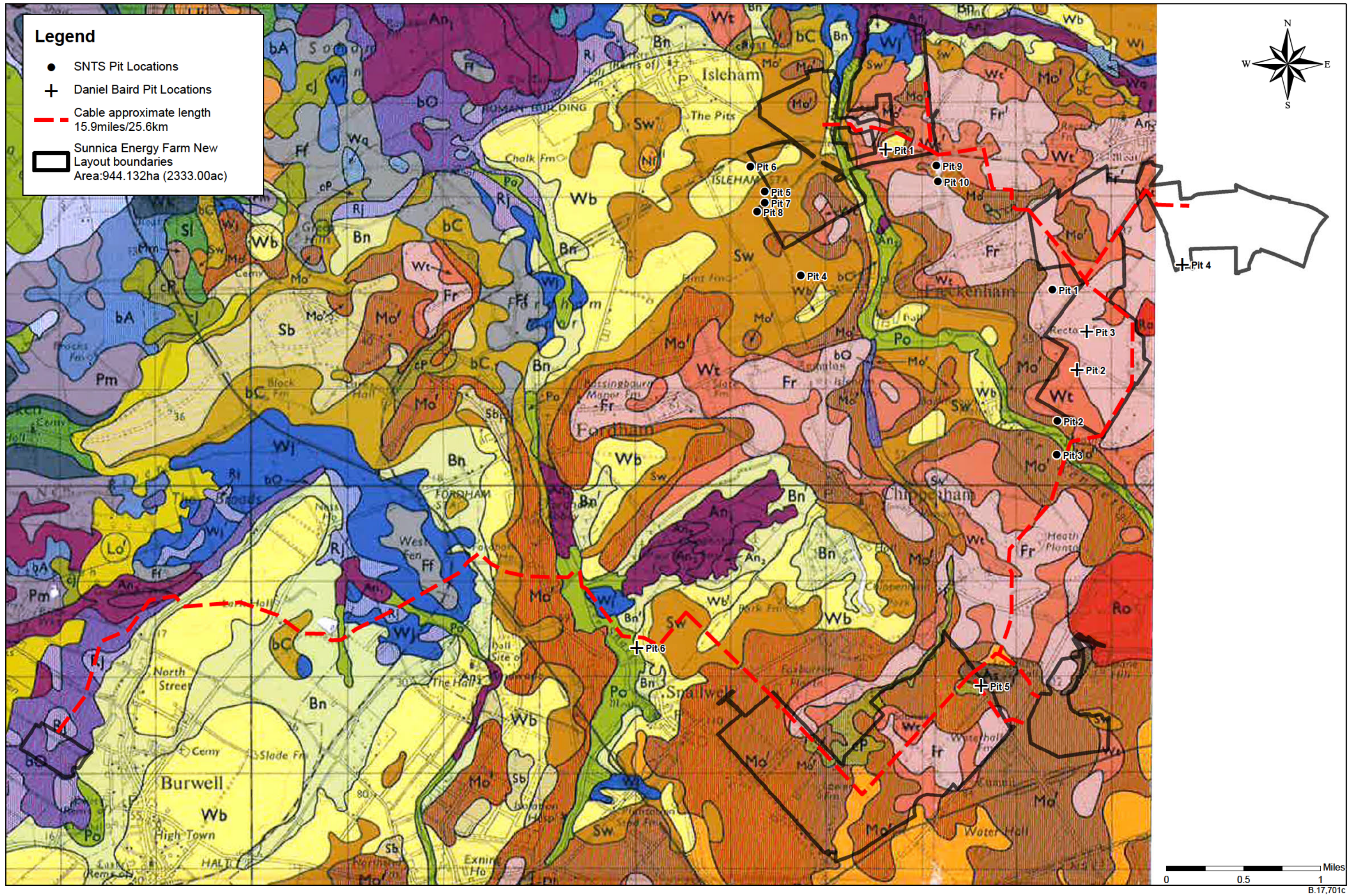
We therefore must take the 2017 Natural England Predictive BMV land assessment plan as the document to establish the reasonable worst case for the likelihood of BMV on the site. The plan

identifies 82% of the site as potentially BMV. The Scheme should therefore be assessed on the basis that 82% of the site is BMV

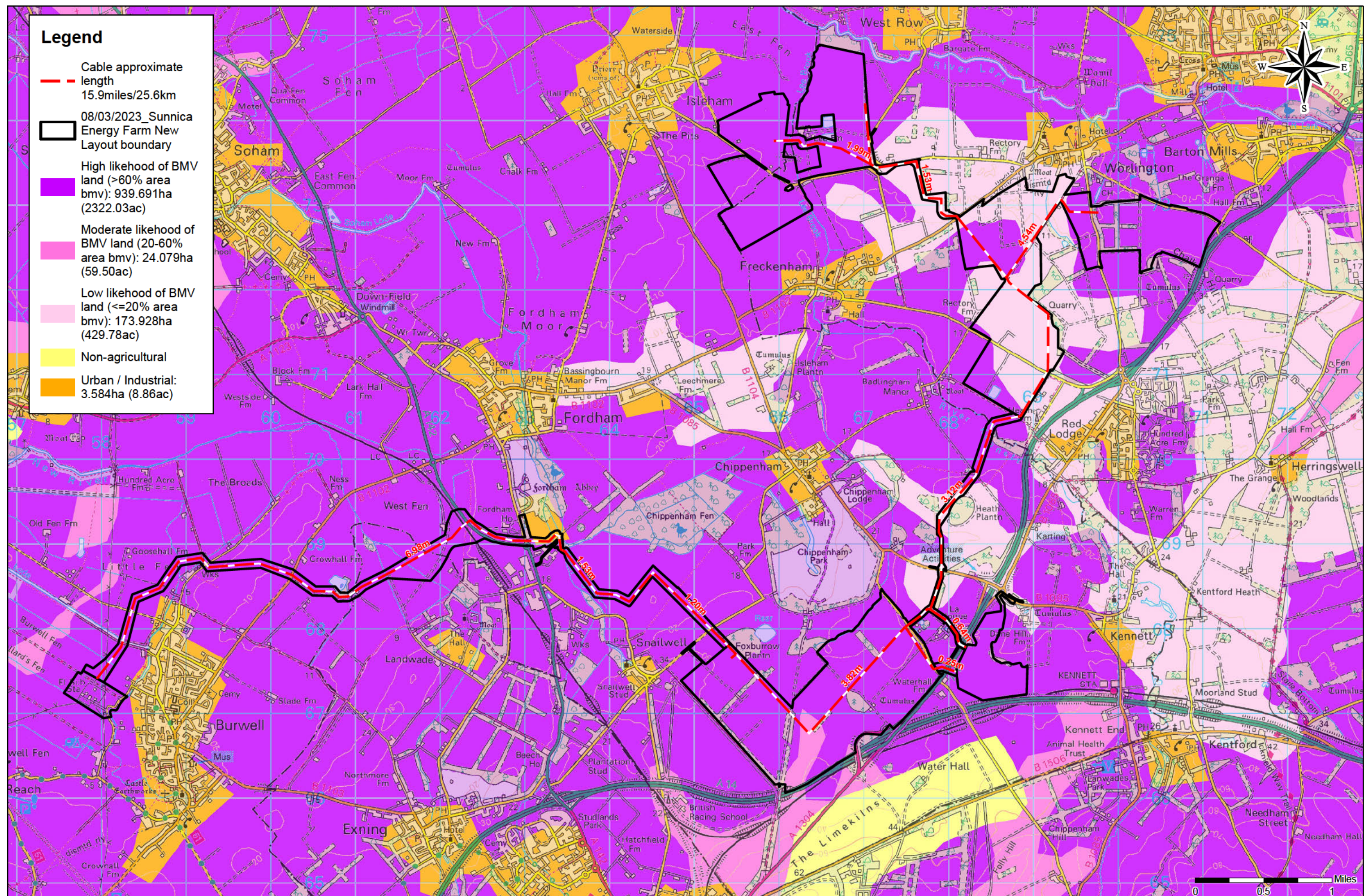




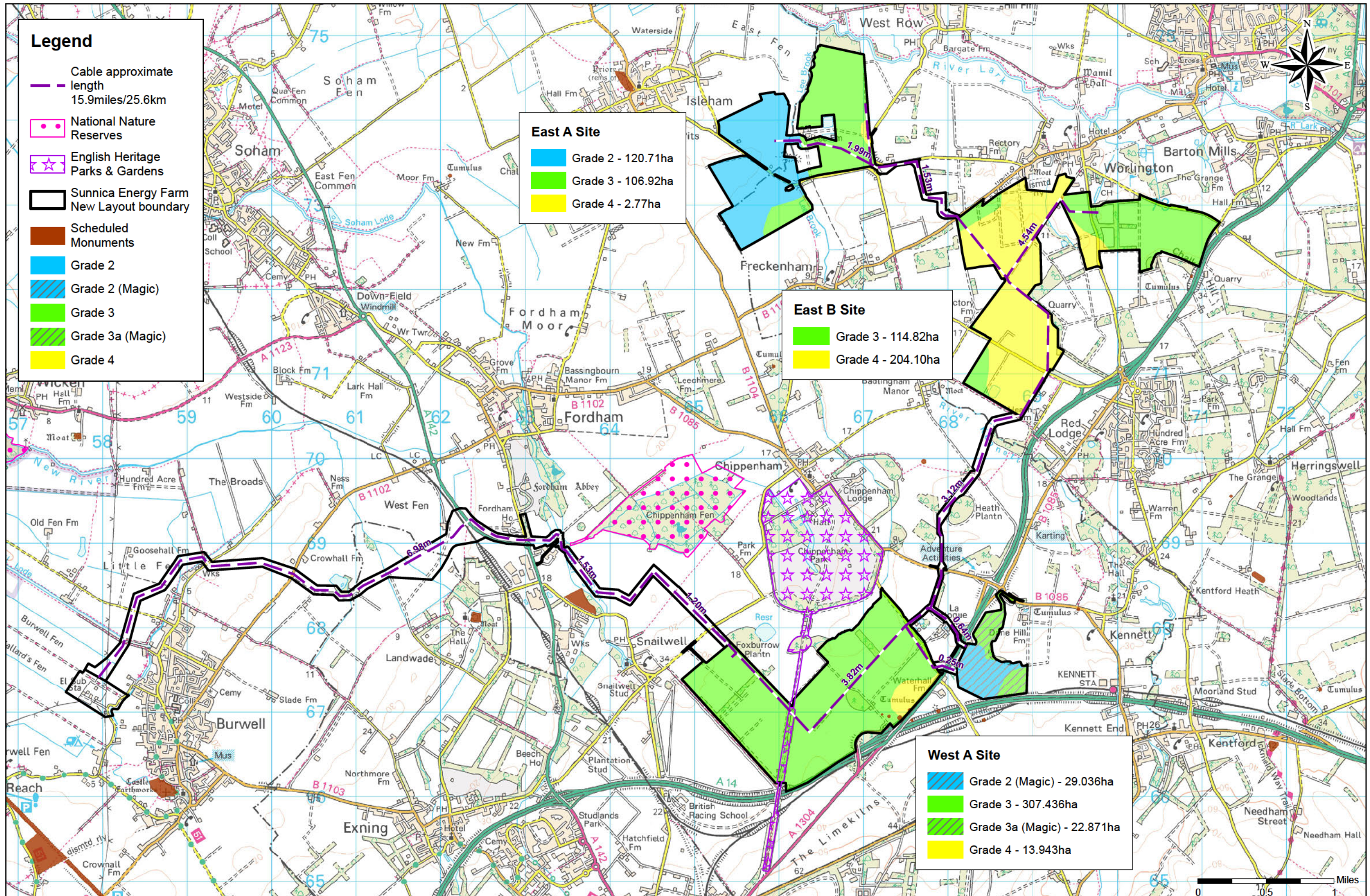
Sunnica Energy Farm Soil Plan 4



Sunnica Energy Farm Proposed Layout - (Predictive BMV Land Assessment)



Sunnica Energy Farm Proposed Layout



APP-115 Page 82-Archeological trench picture supplied by DBS



APP-075 Page 317 - Archaeological trench picture supplied by Oxford Archaeology.

