

Main Modifications to Gloucester City Plan

The Gloucester City Plan (GCP) is a plan for the area that will allocate sites for housing and employment as well as provide planning policies that will shape future development in the city. It provides a plan covering the period from 2011-2031.

Gloucester City Council has prepared a Schedule of Proposed Main Modifications to the GCP for consultation. This consultation seeks views on the proposed Main Modifications and any changes to the policy map only. It is not an opportunity to raise matters that either were, or could have been, part of the earlier representations or hearings on the submitted plan. Comments should focus on whether the proposed Main Modifications comply with legal requirements and are considered sound.

All comments received will be submitted to the Planning Inspector and considered as part of the examination.

Please note that copies of all comments will be made available for the public to view (including your name but will not include any personal contact details or signatures), and therefore cannot be treated as confidential. Data will be processed and held in accordance with the General Data Protection Regulations 2018 and Data Protection Act 2018.

We are seeking your views on the Main Modifications to the Pre-submission Gloucester City Plan, which is the version of the plan submitted for examination. We would encourage you to respond by using the online consultation facility at:

<https://www.gloucester.gov.uk/planning-development/planning-policy/main><https://www.gloucester.gov.uk/planning-development/planning-policy/main-modifications-consultation/modifications-consultation/>

However, you may also send completed forms to us via email and post:

- Email: cityplan@gloucester.gov.uk
- Post: Planning Policy, Gloucester City Council PO Box 3252, Gloucester, GL1 9FW

The consultation opens on Monday 16th May 2022 and you will be able to submit comments up to 6pm on Monday 4th July 2022.

The following response form has two parts:

Part A – Personal Details: need only be completed once.

Part B – Your representation(s). Please fill in a separate sheet for each representation you wish to make.

Main Modifications to the Gloucester City Plan Response Form

PART A: Personal Details – only complete once
Title: Mr
Name: Ben Read
Company: Black Box Planning Ltd
Email Address: [REDACTED]
Address: [REDACTED]

If you are acting on behalf of a client, please supply the following details:

Client Name:
Client Organisation: Bromford Housing Group

Keeping you updated

Would you like to be notified of future progress on the Gloucester City Plan? (* we will do this via email)	
YES <input checked="" type="checkbox"/>	NO

Part B – Please use a separate sheet for each representation

Please note – comments should be restricted to the proposed Main Modifications only and should not relate to any other aspect, site or policy of the Gloucester City Plan.

Name or Organisation:

To which Main Modification to the Pre-Submission Plan, Policies Map or updated Sustainability Appraisal does this representation relate?

Main Modification, Policies Map or SA/HRA?	MM5, MM6 and SA
Main Modification or Policies Map Number	MM or MAP
SA/HRA paragraph number	

Do you support or object to the proposed modification?

Support	
Object	x

Please provide comments below on the Main Modifications to the Gloucester City Plan. Please be as precise as possible. If you wish to support the Main Modifications, or comment on the modifications to the policies map or SA, please also use this box to set out your comments.

See accompanying Representation

(Continue on a separate sheet /expand box if necessary)

Please set out what change(s) you consider necessary to improve the Main Modifications to the Gloucester City Plan. It will be helpful if you are able to put forward suggested revised wording for any policy or text. Please be as precise as possible.

See accompanying Representation

(Continue on a separate sheet /expand box if necessary)

Signature:

██████████

Date:

04/07/22

BROMFORD HOUSING GROUP

**IN THE MATTER OF THE EMERGING
GLOUCESTER CITY LOCAL PLAN**

OPINION

No5
BARRISTERS
CHAMBERS

Introduction

1. We are instructed by Black Box Planning (“BBP”) for the Bromford Housing Group (“BHG”) who are promoting the allocation of land east of Winneycroft Lane (“the Site”)¹ during the independent examination of the Gloucester City Plan 2011-2031 (“the CGP”)² for approximately 190 houses of which 50% would be ‘affordable’³. Although the Site lies within the administrative area of the City of Gloucester, it is not within the urban / built-up area. It is not previously developed land⁴. In planning policy terms, it lies in the open countryside. Immediately to the north of the Site is the strategic Winneycroft housing allocation (pursuant to policy A6 in the Joint Core Strategy (“JCS”)) which is expected to deliver at least 620 new homes⁵ and green infrastructure.
2. The Site was not included in the Submission Draft of the GCP which is now being examined. The examination has reached the stage where the Council is considering what main modifications (“MM”) need to be consulted on following the issuing of the inspector’s “post hearings letter” on 19 August 2021. The inspector has not called on the Council to identify any additional sites.
3. The inspector identified the “status” of the GCP in her post-hearings letter (emphasis added):

*5. The GCP is the daughter plan to the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011- 2031. **The adopted JCS sets out the strategic policies for the three districts, including the quantum of development which is expected to be delivered over the plan period.** The most recently adopted Local Development Scheme (LDS) (CD009) describes the role of the GCP as, ‘Delivers the JCS locally. Identifies and allocates local sites for development. Contains criteria-based policies against which all development within the City will be determined.’ This explanation, and the short length of the plan period, is consistent with the description of non -strategic policies within the Framework.*

¹ The Site is also known as “Snow Carpet” and/or “the Sneedhams Green Moat Site”

² Although the word “local” is missing from the title of the plan, it is in fact a Local Plan for the purpose of the planning acts.

³ In excess of the policy requirement for 20%

⁴ Although it contains a medieval moat which is a Scheduled Monument.

⁵ None of which will be affordable housing

6. However, some of the policies in the GCP, as submitted, are referred to as being strategic. Consequently, MMs are required to ensure that references to any of the policies being strategic are removed, and to make clear how the GCP relates to the policies of the JCS. This is to ensure that there is no ambiguity within the plan, **as to its limited role to implement the policies of the JCS, and, where appropriate, to refine them without overreaching the parameters set within the JCS.**

.....

14. Consequently, even though, with the MMs proposed, the Council has provided for a potential of 920 new dwellings, this still leaves, at the most optimistic interpretation of Council's housing figures, a **substantial gap** between Gloucester's housing needs and the availability of suitable sites.

15. *The JCS is predicated on their being limited opportunities for housing developments within Gloucester's urban area. I am aware that the keenly awaited, and oft delayed, review of the JCS is considered to be the appropriate arena in which to progress the identification of additional strategic sites. Nonetheless, there is nothing within the JCS, subject to Policy SD10, which would preclude a more positive approach to the provision of additional housing within the City's administrative boundary, and which would go some way towards bridging the gap in housing provision which is set out within the JCS.*

16. *As it stands, whilst I am aware that the GCP together with the JCS will make up the development plan, and that with the MMs which I have requested there will be a clearer articulation of the relationship of the two plan documents, with specific reference to setting out how the policies of the GCP relate to specific policies within the JCS. Nonetheless, MMs are required to set out a positive approach to the bringing forward of sites for housing consistent with Policy SD10 of the JCS and Policy SP2 of the JCS. The urban capacity figure of 7,772 identified and planned for within the GCP, should be considered as a minimum figure, and reference made to the housing requirement of at least 14,359 dwellings in Policies SP1 and SP2 of the JCS.*

4. In effect, the inspector is saying that the GCP is not the place to identify further strategic sites, but she does accept that the housing requirement figure in the JCS should not be regarded as an obstacle to further sources of housing supply.
5. Policy SD10 of the JCS to which the inspector makes reference states:

Policy SD10: Residential Development

"1. Within the JCS area, new housing will be planned in order to deliver the scale and distribution of housing development set out in Policies SP1 and SP2.

2. Housing development will be permitted at sites allocated for housing through the development plan, including Strategic Allocations and allocations in district and neighbourhood plans.”

3. [approach of previously developed sites in the built-up area]

“4. Housing development on other sites will only be permitted where:

.....

iv. There are other specific exceptions/circumstances defined in district or neighbourhood plans.”

The GCP is a “district plan” for the purposes of this policy.

6. Policy SP2 of the JCS – “Distribution of New Development” – provides, inter alia:

“2. To meet the needs of Gloucester City the JCS will make provision for at least 14,359 new homes. At least 13,287 dwellings will be provided within the Gloucester City administrative boundary, including the Winnycroft Strategic Allocation, and urban extensions at Innsworth and Twigworth, South Churchdown and North Brockworth within Tewkesbury Borough defined in Policy SA1, and sites covered by any Memoranda of Agreement.”

7. The inspector has found that the submitted GCP results in a “substantial gap” (see above) between the housing requirement in JCS policy SP2 and that planned for in the GCP. To address that gap those instructing us have been promoting a policy amendment (a MM) that would facilitate currently unidentified but suitable sites coming forward anywhere in the administrative area of the City. In order for that to be consistent with JCS policy SD10 the GCP will need to identify “specific exceptions/circumstances” that this is acceptable.

8. The submitted CGP was accompanied by a Sustainability Appraisal (“SA”), and the evidence base also included a Strategic Assessment of Land Availability (“the SALA”). Both were the subject of criticism by BBP at the examination hearings. They will be considered further below.

Opinion

9. In our opinion it is essential, first, to understand what the remit is of the CGP – or, as the inspector put it, its ‘status’. That will inform a proper understanding of the roles of the SA and SALA. As the inspector noted (see above) the GCP is a “daughter” document of the JCS. This means that it deliberately does not seek to revisit matters established in the JCS but simply produces policies (non-strategic) to implement the strategic policies in the JCS so that ‘plan coverage’ is completed. A local authority adopting this approach runs a number of risks, not least that if policies in the JCS are for any reason properly to be regarded as out-of-date then the production of the daughter document will not cure this. For example, if the JCS no longer contains an up-to-date assessment of housing need, that state of affairs will persist even when the GCP is adopted. The Courts have held that this is not an unlawful approach *per se* (see *Gladman Development Ltd v Wokingham BC* [2014] EWHC 2320 (Admin)).
10. The JCS was, on its face (policy REV1), to be subject to an early review which has ‘stalled’ somewhat. This indicates that, prima facie, the strategic policies in the JCS ought to be scrutinised carefully in development management decision-taking when it comes to deciding whether policies are up-to-date.
11. The remit of the GCP was set out in the JCS as follows:
 - a. Policy SP1 sets a housing requirement for Gloucester CC of “at least 14,359 new homes”. “This is to be delivered by development within existing urban areas through district plans, existing commitments, urban extensions to Cheltenham and Gloucester, and the provision of Strategic Allocations at Ashchurch.”
 - b. Para 3.1.17 provides: “A key part of the delivery will be through the development of the Strategic Allocation sites that are identified through Policy SA1. These large sites will make a key contribution towards the housing and employment needs of the area. However, whilst the JCS provides the strategic-level part of the development plan, there is a

significant role for delivery at the non-strategic level through both the district and neighbourhood plans.”

- c. Para 3.1.18 provides: “Each authority will also be covered by a district-level plan, namely the Gloucester City Plan, Cheltenham Borough Plan and Tewkesbury Borough Plan. These plans will provide more detailed and locally specific planning policies as well as local site allocations. The district plans will deliver the individual district capacities identified through the JCS in accordance with the spatial strategy.”

12. Policy SP2 in the JCS, “Distribution of New Development”, provides:

- a. *“development will be focused at Gloucester and Cheltenham, including urban extensions to these areas.”*
- b. *“To meet the needs of Gloucester City the JCS will make provision for at least 14,359 new homes. At least 13,287 dwellings will be provided within the Gloucester City administrative boundary, including the Winnycroft Strategic Allocation, and ...”*
- c. *“The unmet needs of Gloucester and Cheltenham, beyond their administrative boundaries, will only be delivered on Strategic Allocation sites allocated through Policy SA1 and any other sites with an agreed sharing mechanism through a Memorandum of Agreement between the relevant local planning authorities.”*
- d. *“The identification of any additional urban extensions to help meet the unmet needs of a local planning authority must be undertaken through a review of the plan. Any additional site allocations made through a local plan or any neighbourhood plans must be in conformity with the JCS spatial strategy.”*

13. Para 3.2.16 provides: “In meeting the needs of Gloucester it has been necessary to allocate sites on the edge of the urban area in Tewkesbury Borough. However, due to significant constraints and availability of land it has not been possible to allocate sites in the JCS to meet all of Gloucester’s need over the plan period. Nevertheless, Gloucester has a good supply of housing land for the short to medium term that will enable it to meet its requirements to

at least 2028/29. This will allow adequate time for an early review of the plan to explore further the potential for additional sites to meet Gloucester's needs in the longer term towards the end of the plan period. This would also allow the consideration of additional development options that may become available, both within and outside the JCS area. This could include the unlocking of further development opportunities within the urban area, as well as potential new urban extensions in Tewkesbury Borough and Stroud District or elsewhere in the housing market area. The JCS authorities have a Memorandum of Understanding in place with Stroud District in this regard."

14. Paragraph 3.2.22 provides: "All three authorities have worked together to find sustainable sites to meet the development needs of the area, transcending their administrative boundaries. As such, the three urban extensions proposed (excluding Winnycroft) to meet the needs of Gloucester are located entirely within Tewkesbury Borough."
15. Table SP2a identified 1,518 houses being identified in the GCP as "further potential".
16. As noted above, policy SD10 provided that housing development would be delivered on sites allocated in district plans in order to "deliver the scale and distribution of housing development set out in policies SP1 and SP2. It also contains an 'exception' policy for determining applications on unallocated sites, which at policy SD10 4 4.iv provides that housing development can be permitted where

"There are other specific exceptions / circumstances defined in district or neighbourhood plans."
17. The key questions for the inspector in examining the GCP is whether the approach it takes is:
 - a. "Legally compliant", and
 - b. "Sound".

18. In the current context, whether the plan is “legally compliant” is likely to turn on whether the legal requirements for SA/SEA have been met, and in particular, reg 12(2)(b) of the Environmental Assessment of Plans and Programmes Regulations 2004 which requires a report (the SA - see also s19(5) of the 2004 Act) to “identify, describe and evaluate the likely significant effects on the environment of ... reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.” The information required is set out in Schedule 2 to the Regulations and includes (paragraph 8) “An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.”
19. In *R (Friends of the Earth) v Forest of Dean DC* [2015] PTSR 1460 the court held that ““Reasonableness” in this context is informed by the objectives sought to be achieved. An option which does not achieve the objectives, even if it can properly be called an “alternative” to the preferred plan, is not a “reasonable alternative”. An option which will, or sensibly may, achieve the objectives is a “reasonable alternative”. The SEA Directive admits to the possibility of there being no such alternatives in a particular case: if only one option is assessed as meeting the objectives, there will be no “reasonable alternatives” to it. The question of whether an option will achieve the objectives is also essentially a matter for the evaluative judgment of the authority, subject of course to challenge on conventional public law grounds. If the authority rationally determines that a particular option will not meet the objectives, that option is not a reasonable alternative and it does not have to be included in the SEA Report or process.”
20. In respect of ‘evaluative judgments’ a decision-maker’s conclusions can only be challenged on the basis of irrationality. But, applying an inconsistent approach can be irrational on the facts of a particular case. Making a material error of fact can also give rise to an error of law. Failing to give adequate and intelligible reasons can also give rise to an error of law (for a successful example on ‘error of fact’ and ‘reasons’ (see *Aireborough NDP Forum v Leeds CC* [2020] EWHC 1461 (Admin) – note also that in this case an ‘irrationality’ argument failed).

21. Whether a plan is “sound” is also an evaluative planning judgment to be reached having regard to the matters set out in the NPPF (“soundness” is not defined in the applicable legislation).
22. Against all of this background, we now turn to give our opinion on the matters we have been asked to address.

Whether the approach to the SALA sites is inconsistent? If it is, does this undermine the Sustainability Appraisal?

Whether the SA, given its reliance on the SALA and on the basis that the assessment therein is inconsistent, is legally compliant?

23. The SALA was a key part of the evidence base considered by the authors of the SA and now relied on by the inspector. As noted above, the consideration of alternatives requires a consistent approach in order to be rational.
24. However, the inspector appears to be alive to the inconsistencies:
 - a. She indicated as much (we are instructed) during the examination hearings. A clarification note from the Council was requested and provided (doc Exam 21).
 - b. In Exam 21 the Council states (para 2.1) that “The purpose of the SALA process is to find and assess development sites and to ascertain if they are suitable, available and achievable (economically viable). Sites not considered to be suitable are not considered to be reasonable alternatives in an SA.” Nevertheless, para 2.3 (last paragraph) states “This is a consistent process undertaken for every site submitted to the SALA.”
 - c. Exam 21 also considers the approach taken with the Site (see section 3). It records (3.5) Historic England’s response to a screening opinion request in 2017 and that “It is unlikely that Historic England would support an application for development on this site” as it has “the potential to cause harm to the significance of the monument”. Exam 21 concludes (3.6) that the Site was not suitable for allocation on heritage impact grounds.

- d. Exam 21 at section 4 also answers the criticisms of those instructing us as to 'consistency' generally.
25. In July 2021 (Exam 22B) those instructing us responded at length, inter alia, to Exam 21 submitted by the Council. The criticism of the SALA / SA process is robust and cogent (see the conclusions at para 52-58). In particular it is pointed out that the SALA's conclusions on the potential impact of development at the Site (see para 30) does not rule out the Site as a candidate for allocation and references evidence that suggests the Site could be developed satisfactorily (para 37).
26. In her interim findings letter dated 19 August 2021 (Exam 25) the inspector does not address this issue 'head on'. However:
 - a. At para 1 the inspector says that she finds the GCP to be "legally compliant". This must be taken at this stage that she thinks it has been subject to adequate SA. We will have to wait for her final report to see the reasons for this conclusion.
 - b. In her suggested Main Modifications ("MM") which she understandably refers to in general terms, she does not call for the allocation of the Site (or indeed any additional sites).
27. The issue as to why the inspector appears to be accepting the Council's explanation on the 'consistency' point is not yet resolved. Without her final report it is difficult to fathom what the reasons might be. At the very least, the issue raised by those instructing us calls for explanation in the final report.
28. If the final report states unequivocally that the SA's consideration of 'alternatives' (based on the SALA) is legally compliant and why, then that leaves open the prospect of an irrationality challenge. If the matter is not adequately reasoned, then that leaves open the prospect of a 'reasons' challenge.
29. For the present, we conclude that there is much in the criticism set out in the July 2021 submission to the inspector that suggests the Council's approach is legally flawed.

Whether the SALA is an appropriate mechanism to screen out sites to be considered in the SA, for single reasons? Rather than considering some sites which may be considered unsuitable for a single reason in the SALA against wider sustainability objectives in a balanced manner, for example, similar to the decision-making approach advocated in the heritage balance at NPPF paragraph 202?

30. The SA/SEA process is one that has to arrive at balanced conclusions taking into account relevant matters including advice in the NPPF and expert consultation responses from bodies such as Historic England.
31. The NPPF does not rule out development that has “an” impact on heritage assets. Rather it calls for a balanced approach between the effect on the significance of the asset and the public interest including meeting the need for development.
32. Two recent Secretary of State decisions illustrate the correct approach. First, on 23 April 2020 the Secretary of State allowed a housing-led appeal in the green belt (where a high level of policy protection operates) at the Wheatley Campus of Oxford Brookes University⁶ which included a Scheduled Monument (“SM”) which the inspector described as follows:

“What is abundantly clear today is that the SM strikes a rather forlorn, neglected and uninspiring feature. Nothing has been done in recent years to interpret, celebrate or even maintain it. It has been overrun by brambles, nettles and self-seeded trees. Given its current predicament, it is not unreasonable to suggest that the SM goes largely unnoticed and unappreciated by the public at large.”

33. The inspector and the Secretary of State balanced the harm that would arise to the setting of the SM with the public benefits (as the NPPF requires). Those benefits included a “SM improvement scheme” to be secured by condition. The inspector explained that the improvement scheme would include the:

“maintenance and the provision of features such as public seating, an information board and research into the SM’s origins. Given the current state of the SM, I consider this to be a significant heritage benefit which

⁶ Recovered Appeal ref APP/Q3115/W/19/3230827

would enable the general public to appreciate and understand the asset in a way that is far removed from today's underwhelming experience."

34. Of course, each case turns on its own facts, but the relevance to the present case is obvious.
35. Second, on 3 March 2021 the Secretary of State granted planning permission for a mixed-use development (including housing and education) in Burley-in-Wharfedale⁷ (again in the green belt) on a site where the heritage assets included the remains of a Roman Temporary Camp ("RTC") which, although non-designated, was treated by all parties as being of equivalent significance to a SM. The inspector said:

"567. In this case the main parties and HE⁸ agree that the proposed development would also give rise to significant heritage benefits. Indeed, HE considers that by retaining and enhancing the external earthwork, undertaking further archaeological assessment, enabling the development of support material for the school, and securing the long-term management of the earthworks, the proposal would deliver positive benefits. I share that view, and have noted the applicant's reference to the approach adopted by the Court of Appeal in *Palmer v Herefordshire Council*. In that case, it was accepted that where a proposed development affects a heritage asset in different ways, some positive and some negative, the decision-maker may legitimately conclude that although each effect has an impact, taken together there is no overall adverse effect on the asset.

568. Moreover – like the applicant – I consider that in some circumstances the heritage benefits may actually outweigh the harm, and give rise to positive benefits. In view of the points detailed above, that appears to be the case here. This is confirmed by the Council and Applicant in the Planning SoCG, where it is agreed that subject to the agreed conditions, the approach of revealing the Roman Temporary Camp, incorporating it within the development in an appropriate manner and utilising it as an educational resource, represents heritage benefits of significant value, which outweigh any associated harm to the significance of this asset in its current form. The main parties and HE also agree that the grant of planning permission for the current proposal would allow the proper

⁷ Called-in Decision ref APP/W4705/V/18/3208020

⁸ Historic England

investigation and celebration of this asset to take place, and would assist with its long-term conservation. Again, I share this view.”

36. Again, the relevance to the present case is obvious. In particular we note the approach taken by HE (which appears to indicate that the reporting of HE’s approach in the SALA in the present case needs revisiting).
37. In this case during the evidence-gathering phase of the GCP the effect on the significance of a scheduled monument was ‘in play’ as one factor (albeit an important one) in the assessment undertaken in the SALA. But the effects and any benefits that could be secured had not been fully assessed at the time that the SALA effectively discounted it as a candidate for allocation.
38. That left those considering its allocation in something of a dilemma: allocate subject to a policy requirement that might see planning permission refused on heritage grounds or discard it. Leaving aside any consistency point (see above), a decision to discard at that stage is not irrational subject to an important caveat.
39. If, after the ‘sift’, sufficient sites had been identified to meet the need for development, there would be no need to re-visit discarded sites. However, if outstanding need remained, then the “alternative” of re-evaluating discarded sites against that background would be called for. In effect, each discarded site should have been re-considered by asking “does the outstanding need outweigh the adverse effect for which the site was discarded?” At this stage the focus would shift from trying to identify the “best” sites to those which would have the “least worst” effects which in the circumstances would nevertheless be acceptable. Further, the question of ‘net benefit’ to a heritage asset would have to be re-visited.
40. This does not appear to be an “alternative” which was considered. In our opinion there is a strong argument that not to do so is irrational where there is an unmet need for housing. As the inspector notes at paragraph 14 of her interim findings letter, while the Council has met the minimum requirement figure set out in the JCS there is still a “substantial gap” so far as meeting need is concerned.

Whether, given that the City cannot meet its own housing needs either directly and even after the provision of JCS Strategic Allocations beyond the administrative area, it is incumbent of the SA to apply greater scrutiny to potential alternatives for housing delivery?

41. Given our conclusions above, we can take this question shortly.
42. The inspector has, in effect, identified an additional “alternative” in her interim findings letter. She is calling for MM6 to make it clear that a positive approach to development on unallocated sites is to be taken. In effect, she appears to be calling for an approach that would be compliant with JCS policy SD 10 4.iv (see above).
43. The process of SA is ‘iterative’; before the GCP can be adopted in a modified form, it will need to be subject to further SA, which will include the inspector’s MM approach to alternatives.
44. How this proposed MM should be carried through is a matter we return to below. However, we note that there are not many parts of the administrative area of Gloucester City which are likely to be free from policy designations that might preclude development even under the Inspector’s proposed “positive approach”. The Site is one of few where such a policy might give rise to ‘in principle’ support. Those instructing us can best make this point to the Council by producing a plan to accompany their response to MM6.

Whether development can come forward on sites that are not allocated within the GCP and do not comply with the exceptions listed at Criteria 3 and 4 of JCS Policy SD10, without a specific policy in the GCP to set out further exceptions (as set out at SD10 4. iv)? Or whether supplementary text supporting a more permissive approach would be sufficient to trigger a ‘specific exception / circumstance?’

45. In her interim findings letter of 19 August 2021 (Exam 25) the inspector is alive to the point being made by those instructing us (and doubtless others) that the approach adopted in the submitted GCP (based on the JCS) still leaves “a substantial gap between Gloucester’s housing needs and the availability of suitable sites” (see para 14). Rather than call for additional allocations, she advocates a policy approach within the administrative boundaries of the City which “would go some way towards bridging the gap” (para 15). We surmise that her proposed MM6 to “Add additional paragraph reiterating the positive approach to be taken by the

Council in providing housing within the administrative boundary of Gloucester, in addition to the sites which are allocated to bring forward housing” is her recommendation on this issue. But at this stage it is not wholly clear (see above) why she has apparently rejected the another “reasonable alternative” of making further allocations.

46. It seems that the inspector in the appendix to her initial findings letter is calling for an “additional paragraph” to the explanatory text of the GCP rather than the inclusion of a new policy to this effect.
47. In any assessment of a future planning application on the Site, given that it is not allocated in the JCS or (at present) in the GCP, policy SD10 4.iv is of crucial importance. It directs the reader to look for “specific exceptions/circumstances” defined in the GCP. It does not expressly limit these to “policy” exceptions. However, the NPPF at paragraph 16.d) provides that plans should “contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals.” In our opinion that points strongly to including the MM6 proposal in a policy rather than in supporting text as is apparently proposed. Its subject matter also has all the characteristics of a non-strategic policy referenced in NPPF paragraph 28. As noted in paragraph 19, it is the policies in the development plan which are important for the determination of planning applications.
48. Failing to include MM6 as a policy would, in our opinion, run a risk of the inspector’s obvious intentions being frustrated at the development management stage. Including the exception in the supporting text would not, for the purposes of paragraph 35 of the NFFF, amount to the positive preparation, effectiveness or consistence with national policy called for and would therefore not be ‘sound’.

Whether the matters raised give rise to grounds for Legal Challenge, should the GCP progress to adoption as currently intended?

49. Challenges to the adoption of a development plan document by a local planning authority seldom succeed because the task of testing the soundness of a development plan document is not a matter for the court. It is a matter of planning

judgment, exercised within the relevant statutory scheme and in the light of relevant policy and guidance. Under s113 of the 2004 Act the court's role is to review that exercise of judgment on traditional public law grounds. The question is whether the local planning authority's adoption of the plan, following the recommendation of the inspector who conducted the examination, was perverse and beyond the range of reasonable judgment. Provided that the inspector and the local planning authority reached a conclusion on soundness that was not irrational, their decision cannot not be questioned in the courts (see R (Oxted Residential Ltd) v SSCLG [2016] EWCA Civ 414).

50. As noted above, the inspector's final conclusions are not yet known. The inspector's conclusions on:
 - a. Her approach to the consideration of reasonable alternatives, and
 - b. Her reasons for concluding that the SA is legally compliantwill need to be carefully scrutinised in due course.

Conclusions

51. Notwithstanding that we have identified deficiencies in the SA/SEA process concerning the consideration of alternatives (making additional allocations), those instructing us should fully engage in the MM process. The following points should be made in consultation responses:
 - a. The need for MM6 to ensure a positive approach is to be taken in respect of housing applications within the administrative area is effectively an acknowledgement that there is a "reasonable alternative" that needs to be included in the plan that was not considered by the Council and was missed in the SA. However, the SA also failed to consider the need to make additional allocations which is also obviously a reasonable alternative.
 - b. The proposed MM set out in the Inspector's interim findings letter do not demonstrate that additional allocations have been considered as a reasonable alternative. Nevertheless, the wording of MM6 when it emerges should be considered at face value on a 'without prejudice' basis.

- c. For the reasons set out above, MM6 should propose an additional policy provision in the GCP.
- d. MM6 needs to cross reference JCS policy SD10 4.iv and make it clear that it is a “specific exception/circumstance” for the purpose of that policy.
- e. The words of MM6 need to be ‘permissive’ of development. There is no problem if it contains a list of criteria to be met / considered so long as the criteria do not make compliance impossible in practice and are consistent with the NPPF (for example with regard to heritage assets).
- f. MM6 should be clear that it applies to all applications within the GCP administrative area, and not just those within the built-up area.

52. Those instructing us have suggested the following wording for such a policy:

‘The City Council will support sustainable residential development proposals within the administrative area of the City where they adjoin the urban area or sites allocated for development elsewhere in the Joint Core Strategy or Gloucester City Plan, to help meet the housing needs of the City.’

together with an additional explanatory paragraph as follows:

‘JCS Policy SD10 sets out the approach to residential development in the combined authority areas. Criterion 4iv includes provision for District Plans to set out specific exceptions/circumstances where residential development can come forward outside of those listed in SD10. Sustainable residential development proposals within the administrative area of the City, which help to meet the identified needs for housing in the City, is a specific circumstance where development will be supported as a matter of principle, subject to assessment in the context of relevant development management policies set out elsewhere in the Development Plan.’

53. In our opinion, such wording is appropriate.

Christopher Young QC
Hugh Richards
No 5 Chambers
Birmingham – London – Bristol – Leicester

24 November 2021

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BROMFORD HOUSING GROUP

IN THE MATTER OF THE GLOUCESTER CITY LOCAL PLAN

OPINION

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Christopher Young QC
Hugh Richards
24 November 2021
Case Ref: 813949

Respondent ID: 29326017

Black Box Planning on behalf of Bromford Housing Group and Edward Ware Homes

Hearing Statement

Matter 1: Legal Compliance, Sustainability Appraisal, including Duty to Cooperate.

1. This Hearing Statement has been prepared on behalf of Bromford Housing Group (Bromford) and Edward Ware Homes (EWH), and should be read alongside the Representations submitted in response to the pre-submission (Reg19) version of the Gloucester City Plan (GCP) in February 2020. It seeks to respond to specific questions set out in the Inspector's Matters, Issues and Questions raised in respect of Matter 1, where relevant to concerns held by Bromford.

Sustainability Appraisal

2. **Have all reasonable alternatives been considered when implementing the strategic policies of the JCS in relation to policies and sites? Have these reasonable alternatives been considered on a like for like basis? Are there any policies where there were no reasonable alternative options to consider? If so, what is the justification?**
3. The GCP has been prepared in the context of the adopted JCS, which was intended to be subject to an immediate review which has yet to progress to any meaningful extent, and was recognised not to meet the needs of the City. This was against a housing requirement of at least 14,359 but a plan provision of only 13,287 (1072 dwelling shortfall which was the subject of JCS Policy REV1 – the immediate review). The GCP seeks to deliver further housing allocations, but the sum of those allocations, commitments and completions will result in the delivery of 13,084 dwellings to the end of the plan period (see Housing Background Paper Table at 1.1). This is a result in delays in delivery at the Strategic Allocations in Tewkesbury Borough and a reduction in the anticipated number of sites to be allocated in the GCP (down from 1518 in the JCS to 972 in the GCP Submission Draft). The GCP should, at least, plan to meet the needs set out in the JCS.
4. The context of housing delivery in Gloucester City is one which does not meet the needs of its population, which is even more pronounced when considering affordable homes, set within physical constraints of the administrative area. It is important that effective use is made of development sites, correctly recognised by the GCP (GCP 3.1.1).

5. The baseline for considering options for the GCP through the Sustainability Appraisal must therefore be informed by this clear and pressing need to deliver new homes and the strategic requirements set out in the JCS, even if some of that requirement has been transposed into an early Review, notwithstanding that the partial review has not progressed to any meaningful degree and Tewkesbury Borough recently referred to it as having been abandoned. In such circumstances, it would surely focus the importance of meeting the reduced requirements identified.
6. Identifying reasonable alternatives assumes that options and potential site allocations are considered in more detail through the Sustainability Appraisal Framework criteria to consider the potential for and the significance of effects against a range of topic areas, which can be balanced. In the GCP SA¹, these topic areas have been identified as:
 - Housing
 - Economy and employment
 - Health and equality
 - Transport and accessibility
 - Air quality
 - Climate change
 - Water resources
 - Landscape and historic environment
 - Biodiversity
 - Soils.
7. Bromford and EWH are concerned that the GCP SA does not consider any reasonable alternatives, let alone all reasonable alternatives.
8. The two stage plan approach has included identifying a Spatial Strategy through the JCS, to include provision for strategic housing allocations. The provision for further non-strategic allocations to meet housing needs will therefore be a more granular approach to these topic areas.
9. However, instead of adopting a more granular approach to considering potential alternatives, the SA adopts a stance of there being '*limited possibility for investigating options through the City Plan*'² given the City Centre first approach. Such an approach needs to be proportionate and while a City Centre first approach may seek to focus development within the City Centre, it is clearly not sufficient to meet the

¹ Integrated SA paragraph 2.7

² Integrated SA paragraph 4.11

development needs of the City and it will be necessary to look elsewhere within the administrative boundary, as the JCS acknowledged.

10. The reliance on the Strategic Assessment of Land Availability to discount sites has resulted in a site selection methodology which is inconsistent through time and has also 'screened out' potential development opportunities without sufficient consideration, before going on to consider sites against the sustainability topics, which is a more appropriate extent of detail given the context of the area. This approach to discounting sites with perceived constraints is also inconsistent with the NPPG in preparing Housing Land Availability Assessments where it recognises that '*an important part of the desktop review, however, is to identify sites and their constraints, rather than simply to rule out sites outright which are known to have constraints*'.³ Where constraints are identified, the assessment should go on to consider what steps could be taken to overcome them and where needs cannot be met authorities should revisit their assessment. Bromford are concerned that these exercises have not been undertaken in the SALA which underpins the approach to site selection, and therefore alternative approaches. This also undermines the ability of the plan to be 'positively prepared'.
11. In practice, the inconsistency in the methodology of the SALA process is evident in the preparation of SALA Heritage Assessments. This is evidenced in three practical examples all in close proximity to the Scheduled Monument at Sneedhams Green, which is also located adjacent to the JCS Allocation at Winneycroft, as follows:
 - SALA Ref: 06NEW17 – Land East of Winneycroft Lane & North of Green Farm. The site was considered as part of the August 2019 SALA, but discounted on the basis of not being suitable. This was due to heritage impacts, albeit it was recommended for a more detailed SALA Heritage Assessment. This was not completed until September 2019. The conclusions of the SALA pre-determined the assessment. Notwithstanding the assessment was based on a historic EIA Screening Opinion, was inaccurate and also related to matters of the setting of the heritage asset (with an evidence base which directs that there will be no impact to the heritage asset itself and therefore these matters are a matter of judgement). Importantly, no consideration of mitigation was given to the site which, in the context of NPPF 32, is inconsistent with the objective approach which should have been adopted.
 - SALA Ref: 07NEW17 – Land East of Sneedhams Road – Draft Allocation SA15 (South of Winneycroft) for 30 new homes on 0.85ha. The SALA appraisal recommends a full SALA Heritage Assessment given the

³ NPPG Paragraph: 010 Reference ID: 3-010-20190722

proximity to the SM and also a known Roman settlement although there is no evidence of this being completed (it is also not in the Examination Library).

- SALA Ref: SUB33 – Land at Snow Capel Farm. This site is located to the south of 06NEW17 and the Strategic Allocation at Winneycroft. It was identified as having a landscape sensitivity and being remote from other residential development. However, it was also considered in detail as part of a SALA Heritage Assessment in March 2015 which comprised a detailed assessment of the historic environment. A methodology and assessment of potential for mitigation was adopted in completing the assessment.

12. Bromford and EWH do not wish to set out the planning merits of each site here, but the basic comparison demonstrates an inconsistent approach to site selection. The binary approach adopted, in some cases, in the SALA has discounted sites which should have been considered in more detail. It is incumbent, in identifying sufficient sites to meet the needs of the City to undertake a more detailed assessment. The SA considers synergistic effects in the assessment matrix, but the SALA precludes sites being considered on this basis as a result of generalised binary assessments.

13. Notwithstanding this, and on a site specific matter, there is significant evidence to demonstrate that the heritage impacts in respect of 07NEW17 are overstated, including recent archaeological fieldwork which demonstrates no barrier to development.

14. The SA is undermined in this case because it:

- Does not adopt a consistent and objective approach to site assessment in the SALA and does not revisit assumptions where it is clear that housing needs are not being met;
- Does not consider potential to mitigate constraints in all sites which are considered unsuitable in the SALA;
- Does not refer to the most up to date information in assessing sites; and
- Undermines its own methodology by adopting a binary approach site assessment in the SALA, rather than considering synergistic effects. In doing so, it predetermines the weighting associated with the assessment criteria in the SA, which are set out in the sustainability topics. In the context of heritage assets, as it happens, paragraph 5.97 and 5.98 recognise in assessing the sustainability topics that a number of site allocations have the potential, individually and cumulatively to have impacts on the setting of designated heritage assets. The extent of the harm is, in some case, uncertain until the site

level details arise (these are listed in Table 6.4 – SA of Site Allocation Summary).

Gloucester City Plan Pre-Submission (Reg 19) Consultation Response

Land East of Winneycroft Lane & North of Green Farm

Prepared by Black Box Planning
on behalf of Bromford



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[Appendix 1 – SALA Extract](#)

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[Appendix 3 – Illustrative Layout](#)

[Appendix 4 – Hadnall Scheduled Monument Case Study](#)

1. Introduction

- 1.1 These Representations have been prepared by Black Box Planning, on behalf of Bromford in response to the Pre-Submission (Reg 19) Gloucester City Local Plan consultation which runs between 7th November and 20th December 2019.
- 1.2 Bromford are one of the largest Registered Providers of housing in the UK, with a housing stock of approximately 44,000 houses in Central and South West England. Their business is the delivery and management of affordable housing, seeking to address a growing housing crisis in this Country where people simply do not have the opportunity to live in a house of their choosing. This issue is particularly acute in Cities like Gloucester, which are constrained geographically and cannot meet their own housing needs.
- 1.3 Bromford, alongside Edward Ware Homes, have an interest in the progression of a development proposal on land at East of Winneycroft Lane and North of Green Farm (the Site). The development would be an affordable housing led scheme, seeking to stem the growing affordable housing need within the City. Whilst this Representation focuses on tests of Soundness set out in the NPPF, it also provides an overview of the merits of incorporating an allocation of approximately one hundred and fifty dwellings on the Site. This will be delivered using a mixture of policy compliant affordable housing and grant capital investment using grant funding for the further affordable provision. The Site is well placed to succeed in such provision where others have failed in close proximity, notably the JCS Strategic Allocation at Winneycroft, which adjoins the Site to the north and does not make any contribution to affordable housing.
- 1.4 Both Bromford and Edward Ware Homes are supportive of a plan led approach to housing delivery. It is recognised that, in the interests of good planning, there is merit in progressing the completion of Part 2 Gloucester City Plan, following the adoption of the Joint Core Strategy (JCS) in December 2017. The Gloucester City Plan has been prepared to be consistent with the objectives of the JCS. However, it is also recognised that the progression of such a plan is precarious given that the JCS was adopted despite not meeting the development needs of the area, particularly in Gloucester City and recommending an immediate review.
- 1.5 It is proposed that the GCP will have a plan period to 2031 which is aligned with the JCS and together they will form the Development Plan for Gloucester City.

1.6 The JCS Review process has commenced with an Issues and Options Consultation between November 2018 and January 2019. In this context, the GCP is being progressed on the basis of delivering housing which does not meet the minimum housing requirement set out in the strategic Plan, which is already under review before the Development Plan is adopted in complete form. Whilst Bromford commend the City for the progress of a Local Plan, it is considered that it needs to be more aspirational and focused on meeting the needs of the population from a housing perspective. A major component of this which is absent to any meaningful degree is the promotion of development which makes a significant contribution towards affordable housing delivery, an area of the housing sector which is driving a large (and growing) portion of the requirement. The only logical response is to allocate more sites for residential development.

1.7 This Representation is structured as follows:

- Section 2 – An overview of relevant national planning policy;
- Section 3 – an assessment of the draft GCP against the ‘tests of soundness’;
- Section 4 – An overview of the site, proposal and key issues; and
- Section 5 – Conclusions and recommendations.

2. Planning Policy Overview

- 2.1. The National Planning Policy Framework sets out the approach which should be followed in preparing Local Plans. It sets out a core objective of the planning system being genuinely plan led. This is an approach Bromford endorse.
- 2.2. Prior to the publication of the Draft Local Plan to the Secretary of State, Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012 require that the Plan be made available (in accordance with Regulation 35) for a period of not less than six weeks; and to ensure that a statement of representations and a statement of fact is sent to all consultation bodies. This consultation relates to that required by Regulation 19.

National Planning Policy Framework, February 2019

- 2.3. Section 3 of the NPPF sets out the approach to Plan-making to be pursued by planning authorities in preparing Local Plans. It sets out that plans should:
- Be prepared with the objective of contributing to the achievement of sustainable development;
 - Be aspirational but deliverable;
 - Be shaped by early and proportionate engagement;
 - Contain policies which are clear and unambiguous;
 - Be accessible; and
 - Serve a clear purpose.
- 2.4. Paragraph 23 goes on to set out that strategic policies should provide a clear strategy for bringing sufficient land forward, at a sufficient rate, to address objectively assessed needs over the plan period.
- 2.5. Paragraph 33 requires plans to be reviewed, at least, every five years. This, in turn, is prescribed at Regulation 10A of the Town and Country Planning (Local Planning) (England) Regulations 2012. In this case, the Joint Core Strategy sets out a range of strategic policies and was adopted in December 2017. The Gloucester City Plan Local Development Scheme (LDS) (December 2017) targets adoption of the City Plan in Spring 2020. This timetable has now slipped and it is not envisaged that the Plan will be adopted, following Examination, until Spring 2021 at the earliest.
- 2.6. Paragraph 35 sets out that plans will be required to be prepared in accordance with legal and procedural requirements, and examined to demonstrate that they are sound. Plans are sound if they are:

- a) **Positively prepared** – providing a strategy which, as a minimum, seeks to meet the area’s objectively assessed needs; and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;
- b) **Justified** – an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence;
- c) **Effective** – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidence by a statement of common ground; and
- d) **Consistent with national policy** – enabling the delivery of sustainable development in accordance with the policies in this Framework.

2.7. Paragraph 36 identifies that the tests of soundness remain relevant to non-strategic policies and will be applied in a proportionate way. In this case, the provision of sufficient housing allocations within the City Plan is an integral test of soundness which goes to the heart of the strategic policy requirement to meet objectively assessed needs.

3. Tests of Soundness

- 3.1 This chapter provides an overview of a number of concerns raised in respect of the Soundness of the Draft City Plan. These concerns broadly relate to the following fundamental issues:
- The failure of the draft Plan to meet the objective housing, including affordable housing, needs of the City; and
 - The failure of the draft Plan to consider reasonable alternative through the Sustainability Appraisal.

Overview

- 3.2 Gloucester City Council, in conjunction with Cheltenham Borough and Tewkesbury Borough Councils produced the Joint Core Strategy (JCS), setting out the strategic policies for the joint areas. It established a plan period to 2031 and was adopted in December 2017. On adoption, it included an acknowledgement that it did not plan for or meet the objective housing needs for the area and was under obligation to progress an immediate review for Gloucester City and Tewkesbury Borough. The fragile nature of the JCS is further demonstrated by the acknowledged 5-year housing land supply shortfall in both Cheltenham and Tewkesbury Borough, despite the strategic plan only being 24 months old. Although the JCS review process has now commenced, it is far from a stable footing from which to go on to adopt the City Plan based on those outdated needs in parallel with the Review, which will, rightly so, push the goalposts further, in delivering housing to meet the needs of the population of the City. Neither the adopted JCS nor the draft City Plan do so at this stage.
- 3.3 The JCS identifies a minimum level of growth across the three areas of 35,175 new dwelling up to 2031. At least 14,359 of these new dwelling are identified to meet the needs of Gloucester City. Policy SP2 of the JCS sets out the spatial distribution of housing and makes provision for 13,287 dwellings to be provided within the Gloucester City administrative boundary, albeit it goes on to identify that this will include a total of 4,895 dwellings in urban extensions located within Tewkesbury Borough (Table SP2a) at Twigworth, South Churchdown and North Brockworth.
- 3.4 The JCS identifies further strategic growth at Winneycroft, within the City administrative boundary, to deliver 620 dwellings.
- 3.5 The inclusion of nearly five thousand dwellings within Tewkesbury Borough is a recognised result that the City cannot meet its own housing needs. Irrespective of the JCS absorbing a large portion of housing within Tewkesbury Borough, there remains a need for 1072 dwellings which cannot be met by the JCS strategic policies or the allocations set out in the draft City Plan (this figure is 1159 dwellings, having regard to the reduced urban capacity figure within the City Plan). This under delivery gives rise to grave questions regarding the soundness of the Development Plan.
- 3.6 There is an attempt to deal with this shortfall at Policy REV1, which triggers an immediate review of the housing provision in Tewkesbury and Gloucester. The review deals with matters of a strategic level, but from a general plan led approach, it is critical that the shortfall is addressed over the plan period. Paragraph 7.1.14 of the JCS makes that point clear.

- 3.7 The consideration and trigger of an immediate review at a strategic level does not depose the City Plan of attempting to meet the shortfall. Meeting the housing needs of the area is a fundamental principle of sustainable development. The solution is to allocate all suitable housing sites. The draft GCP does not do so, which is extremely disappointing and goes to the heart of the soundness of the plan and meeting social and economic objectives for the area. Allocation of approximately 150 dwellings at Land East of Winneycroft Lane (Ref: 06NEW17) would make an essential contribution to the shortfall. In addition, the focus on affordable housing led delivery by Bromford will make an even more significant contribution to the delivery of affordable housing, for which there is also a pressing need in its own right. This should be seen in the context of the adjacent strategic development site which, disappointingly, did not make any contribution.

Is the Plan Positively Prepared?

- 3.8 No.
- 3.9 Whilst the merits of a plan led planning system are recognised by Bromford and the progression of the GCP is commended in Gloucester City, by its own admission the plan cannot meet the chronic need for additional housing in the City, particularly affordable housing. It states at paragraph 2.5 of the Draft GCP that *'it has been necessary to consider all possible development sites on both greenfield and brownfield land to ensure that the very best use is made of these sites.'* This sentiment has not been delivered through the plan and it is unsound as a result.
- 3.10 It is recognised that the GCP will not meet the needs of the City. This, in part, was dealt with historically through the early JCS review mechanism at policy REV1. There are at least two important and relevant considerations:
- The issue of housing need is not only a strategic one. Whilst the JCS identifies the OAN used for the plan period and identifies a number of strategic development locations to meet some of that need, it is also incumbent on the City Council to maximise housing delivery within their urban area and administrative boundary – the plan says so at paragraph 2.5; and
 - The JCS review has already commenced and the GCP will be out of date soon after it is adopted (notwithstanding issues with Soundness) assuming even the most optimistic of timeframes. Whilst Bromford recognise these challenges and do not consider it a reason not to progress a plan led approach, it highlights the importance of maximising housing delivery.
- 3.11 Whilst there remain sites which are suitable for the delivery of both market and affordable housing within the administrative area of the City, they should be allocated. If they are not, the GCP cannot be considered sound.
- 3.12 This comes in the context of a significant shortage of affordable housing. This is recognised in the recent 'Pre-Submission Gloucester City Plan Housing Background Paper, September 2019', where the acute shortage of affordable housing is highlighted from the outset. This goes to the heart of meeting the housing needs of the City's population.

- 3.13 Whilst it is not the position of this Representation to make detailed assertions in respect of the short-term land supply position. It is the Council's position that there is sufficient housing in the short term to meet five-year requirements, using best case assumptions on delivery and spreading historic undersupply against the future years of the plan period (Liverpool), rather than meeting that shortfall in the next five years (Sedgefield) as should ordinarily be expected. This is a precarious position, which relies on delivery of almost twice as many houses per annum as the historic delivery rates and which have not been seen since 2008. It also includes a number of dwellings which are subject of lapsed or undeliverable planning permissions.
- 3.14 Notwithstanding this, the affordable housing approvals and delivery rates within the City have been even more precarious. The evidence base sets out that only 68 affordable dwellings were approved as part of larger sites in 2018/19 (Appendix 8 of the Housing Background Paper), this equates to only 11%, an unsustainable rate of approval when assessed against an acute need. This should also be seen in the context that future delivery rates are unlikely to improve without the allocation of further sites, especially in light of the failure to delivery any affordable homes as part of the strategic allocation at Winneycroft.
- 3.15 Taken together, the Plan does not meet the objectively assessed needs of the City. The difficulty of meeting those needs within the administrative boundary of the City is recognised and this has been tested through the JCS at a strategic level. However, this does not mean that it is solely a strategic issue. Where suitable sites are identified, which can make a contribution to housing delivery, they should be allocated in the GCP rather than deferring the entire matter to the JCS review.
- 3.16 Bromford's commitment to an affordable housing led scheme at the site will be a positive step in addressing this position.

Is the Plan Justified?

- 3.17 The draft GCP has failed to take into account reasonable alternatives to a strategy which falls well short of providing for the needs of the City. As set out above, it is recognised that the full housing needs cannot be met within the administrative boundary. However, that makes it more important to consider all potential development sites thoroughly. In the case of Land East of Winneycroft Lane, this has not been done for the reasons set out in Section 4.

Sustainability Appraisal

- 3.18 The preparation of the draft GCP has been shadowed by a draft Sustainability Appraisal (SA) over the eight years of its production, since the scope in 2011. The preparation of a SA is a requirement of any new Local Plan. The NPPG sets its *'role is to promote sustainable development by assessing the extent to which the emerging plan, when judged against reasonable alternative, will help to achieve relevant environmental, economic and social objectives.'* (NPPG, Para: 003 ID 11-003-20190722). It is a statutory requirement to prepare one alongside the Local Plan.
- 3.19 It is required to consider all reasonable alternatives, including the preferred approach against those alternatives. In assessing alternatives, the NPPG makes clear that it should:

- Outline the reasons the alternatives were selected, and identify, describe and evaluate their likely significant effects on environmental, economic and social factors using the evidence base.
- Identify any likely significant adverse effects and measures envisaged to prevent, reduce and, as fully as possible, offset them; and
- Provide conclusions on the reasons rejected options are not being taken forward and the reasons for selecting the preferred approach in light of the alternatives.

- 3.20 The SA lists at Appendix IV an appraisal of site options which have been considered as potential alternatives progressed through the assessment process. However, the published document lists do not provide this Appendix in detail. Irrespective of this omission, previous iterations of the SA have not incorporated land East of Winneycroft Lane, despite its active promotion by a recognised developer for many years. This is a glaring omission.
- 3.21 The site has, however, been submitted and considered through the Strategic Assessment of Land Availability (SALA), most recently published in August 2019, and referenced as site 06NEW17. A copy of the assessment extract included is attached at Appendix 1 of this Representation.
- 3.22 The Council have reached a negative conclusion in respect of the site, on the basis of heritage impact, in the face of evidence to the contrary. This is a disappointing conclusion and one which comes as a result of a failure to fully engage with the key issue pertinent to site, the potential for development to impact on the moated site at Sneedham's Green which is a Scheduled Monument. A summary of the key heritage considerations is set out at Appendix 2 of this Representation.
- 3.23 In conclusion, there is no heritage reason why the site cannot come forward to accommodate a residential development, in part. In addition, there is also, in practical terms, an opportunity to deliver a range of material benefits which reveal the heritage asset whilst preserving it for the long term including an appropriate landscaped setting. This is in contrast to its existing state where it sits within an agricultural field slowly degrading. This is unfortunate and retrograde. Attached at Appendix 4 is a case study where sensitive and forward-thinking housing development has been utilised to enable the exposure and maintenance of a Scheduled Monument. Similarly, the illustrative layout at Appendix 3 shows how housing could be accommodated in this context. At this stage, the plan makes provision for approximately 150 dwellings. A more detailed overview of the approach to development is set out at section 4.
- 3.24 The SALA concludes that the site is not suitable because of 'significant heritage constraints'. This conclusion is presented following the assessment itself, which advocates that '*any application should be supported by a desk-based assessment, trial trench evaluation and geophysical survey. Development options are likely to be limited by heritage assets. Historic England should be consulted with regard to any application. Will require full SALA Heritage Assessment.*' However, despite submission of evidence to demonstrate that the heritage context has changed significantly since the construction of the M5, resulting in a level change, and continues to do so with the delivery of the strategic housing site at Winneycroft immediately to the north, there is no heritage reason why the site could not come forward.

- 3.25 The absence of a more detailed assessment of the site in the SA is disappointing and unsound. There is no practical reason why it was not considered as part of that process. Notwithstanding this, it provides a suitable development site and, in light of the shortfall in housing allocations to meet needs, a suitable allocation.
- 3.26 Bromford have concerns over the soundness of the SA and the extent to which it has robustly considered alternatives. This concern is compounded because the plan already not meeting its needs, where there is a recognised acute requirement for more affordable housing.

Is the Plan Consistent with national policy?

- 3.27 For the reasons set out in this Representation. The Plan, generally, is not consistent with national policy. In light of a growing need for affordable housing within the City, the Plan should do more to explore all alternatives for housing delivery.
- 3.28 As a matter of detail, NPPF paragraph 16 sets out that plans should, amongst other things, *'contain policies clearly written and unambiguous, so it is evident how a decision maker should react to development proposals.'*
- 3.29 Policy A2 sets out the approach to affordable housing delivery, seeking that sites of 10 dwellings or more, or more than 0.5ha, provide 25% affordable housing. It goes on to set out that:
- 'The City Council will support grant aided schemes that deliver greater than 25% affordable housing, and tenure and house types, that meet the city's needs. The occupation of affordable housing will be limited to people in need of affordable housing and shall be secured in perpetuity.'*
- 3.30 Bromford are supportive of the approach set out in Policy A2. As read, it is concluded that all schemes irrespective of their location within the administrative area would be supported if they utilise grant funding. However, it is ambiguous as to the proportion of housing that would need to be delivered using grant funding and whether this would also apply to schemes which incorporate a convention mix of affordable housing (secured through s106), market sale housing and grant funded housing to be operated as affordable would be supported. The policy does not discount such an approach and, in the context of the presumption in favour of sustainable development, should be supported.
- 3.31 Notwithstanding the positive approach, the ambiguity is unsound.

4. Land East of Winneycroft Lane

- 4.1. The site measures approximately 8ha of agricultural land immediately to the south of the Winneycroft Strategic Allocation (Ref: Strategic Allocation A6), which now has a Reserved Matters approval for the construction of 420 dwellings (ref: 18/01141/REM) and which is being progressed by a housebuilder. Although, unfortunately, it will not deliver any affordable housing.
- 4.2. Whilst there are known ecological constraints, including Great Crested Newts, located within the site, the principal constraint to development is the medieval moated site at Sneedham's Green, a designated Scheduled Monument, which is located within the site.
- 4.3. However, the site has been promoted by Edward Ware Homes since 2017. In doing so, the land has been subject to a number of detailed assessments and a technical team has been appointed to consider matters in preparing feasibility plans and strategies. These include in respect of matters of ecology, drainage, highways and transportation, landscape and heritage. At this stage, it is not considered that there is any barrier to the delivery of development on this site from a technical perspective.
- 4.4. The recent approval of the strategic allocation to the north has also materially changed the context of the site and its surroundings. In essence, whereas the site previously was detached from the urban area, it now adjoins it with the construction of largescale development in close proximity.

Heritage

- 4.5. With regard to the principal constraint of the site, this has been subject to detailed consideration. The Briefing Paper, attached at Appendix 2, prepared by EDP sets out the key considerations.
- 4.6. The main issue in terms of either archaeology or heritage considerations is that there is a Scheduled Monument (SM) within the boundary of the site and whether the delivery of residential development would/could harm the significance as a nationally important archaeological resource.
- 4.7. The SM is located in the centre of the site and comprises the remains of a medieval moated site.
- 4.8. The land within the site is within the setting of the moat, but it is assessed as making no more than a small contribution to its significance as a designated heritage asset because of the extent to which the landscape around it has been changed in the recent past.
- 4.9. Whilst it is still located within an agricultural field (comprising pasture), this is nothing more than a degraded relic of the asset's historic setting, where the construction of the M5 motorway in the late 1960s/1970s not only buried the southern half of the enclosure beneath the upcast spoil, but also removed much of the hedgerow network and remodelled the local topography.
- 4.10. This change was recognised in the evidence base for the JCS. It was identified that the setting of the SM was no longer rural and concluded as now being urban edge. This conclusion has been reinforced by the strategic development to the north.

- 4.11. The proposed development of the site may change the setting of the SM, it could do so alongside a scheme of benefits which could give rise to the long term management and protection of the asset for which there is currently none in place. It could also provide an excellent opportunity to greater appreciate the significance of the asset by providing public access and bringing forward interpretation such as signage and fencing.
- 4.12. Careful and considered design can perceived 'residual' harm to the setting of the monument. This, however, would also need to be assessed in the wider context of delivering a significant contribution to housing, including affordable housing delivery in the City.
- 4.13. The heritage advice is clear. There is no heritage reason why development could not be brought forward on the site in line with relevant national planning policy.

Proposed Development

- 4.14. The site has historically been promoted for the delivery of approximately 200 dwellings. However, alternatively a scheme of 150 dwellings could readily accommodate a range of benefits to the management and better revealing the SM for public education and enjoyment. There are a number of case studies of similar approaches, including one set out at Appendix 4 in Hadnall, Shropshire
- 4.15. The attached illustrative layout includes provision for 150 dwellings with access from Winneycroft Lane.
- 4.16. There are not considered to be other constraints that would preclude development of this site.
- 4.17. Bromford has identified the site as a sustainable location to bring forward an affordable housing led proposal which would focus on the delivery of 65% of the total as affordable tenures, in accordance with the definition set out at Annex 2 of the NPPF. It would provide for a balanced mix of tenures and sizes which respond to the acute need in the City, but also include some market accommodation.
- 4.18. The scheme would utilise available grant funding and start to rebalance the failure to deliver any affordable housing as part of the adjacent strategic allocation.

5. Conclusions/Recommendations

- 5.1. In light of the information set out in these Representations, the GCP is currently unsound as drafted.
- 5.2. It is not positively prepared, failing to meet the objectively assessed needs of the City. It simply does not allocate enough housing land, irrespective of the constraints and ability to meet all needs within the administrative area in total. This is recognised in the draft Plan, but the onus should be on the identification of all suitable sites – it does not do this.
- 5.3. It is not justified. It does not consider all reasonable alternatives to the identified strategy. Whilst the land east of Winneycroft Lane has been promoted and the detailed evidence-based documents prepared to support its allocation, it has not been included in any comparative assessment. This is a disappointing omission. It is recognised that, conventionally, that the site would be considered to be an omission site, but such a viewpoint is not relevant in this instance because all suitable sites should be allocated in light of the acute shortage of housing land within the City. To do otherwise renders the GCP unsound. It is the exclusion of a suitable site which is unsound, not the exclusion of a site in preference of another.
- 5.4. It is not consistent with national policy.

Recommendations

- 5.5. The only effective remedy to the concerns raised in these Representations are to include the site identified as an allocation for up to 150 dwellings and associated infrastructure. It is recognised that this will require additional provision to protect the setting of the SM and Bromford, along with their advisors, would welcome further discussion with officers on this matter.

Appendix 1:

SALA Site Assessment

Appendix 2:

Heritage Briefing Paper

Appendix 3:

Illustrative Layout

Appendix 4:

Hadnall Scheduled Monument Case Study

Respondent ID: 29326017

Black Box Planning on behalf of Bromford Housing Group and Edward Ware Homes

Response to Gloucester City Council Post Hearing Submissions

July 2021

1. This Note has been prepared on behalf of Bromford Housing Group (Bromford) and Edward Ware Homes (EDH), following review of the various Examination Documents submitted by Gloucester City Council (GCC) in response to the Inspector's request for further information.
2. Comments are raised in respect of each Examination Document where relevant, in turn.

EXAM 7a – Further Note on Gloucester City Housing Land Requirements

3. The additional Note (Exam 7a) builds on the Note prepared by GCC during the examination. However, the conclusion that the Gloucester City Plan should be planning for a housing requirement of 7,772 remains the same.
4. The housing requirement figure identified for Gloucester City, having regard to the provisions of the NPPF to meet the housing needs of the area, in the JCS is 14,359. This is set out within Policy SP2 of the JCS, which goes on to state that at least 13,287 dwellings will be provided within the Gloucester City administrative area, including the Winnycroft Strategic Allocation and strategic allocations in Tewkesbury Borough. The remaining 1,072 was subject to REV1, an immediate review required by the JCS to investigate further options for meeting the housing needs in the City, including within the urban capacity. This review has never been progressed, instead a full Review is being progressed and is, four years after adoption, still at a very early stage.
5. Reference in the GCP that it should be planning for 7,772 would disorientate the objectives of the Plan in seeking to meet its need for new homes. It should be more aspirational than that, rather than setting a false ceiling that bears no resemblance to an objective analysis.
6. Paragraph 4.1 of the draft Gloucester City Plan already recognises this and re-iterates that the housing need for Gloucester City is 14,357. Paragraph 4.2 goes on to provide context in setting out that the JCS housing distribution strategy seeks to maximise urban capacity, alongside the identification of urban extensions to help concentrate new development in an around the existing urban areas.

7. Table SP2b identifies components of supply to reach an interim figure of 13,287 dwellings, including a housing figure for the urban capacity of 7,772.
8. The conclusion reached by GCC in EXAM7a takes, verbatim, the figure set out at Table SP2b in the JCS as being the housing figure which the GCP should seek to plan for. This conclusion takes the JCS out of context and will result in a plan which is unsound because is not positively prepared or consistent with national policy. It is a retrograde step for the housing, including affordable housing, needs of the City.
9. The urban capacity figure in the JCS represents a moment in time and not a figure which was ever intended to be set in stone moving forward and it recognised that they were based on estimates at that time.
10. Elsewhere within the JCS area, Cheltenham Borough has also recognised this as the case, clarifying at Paragraph 11.3 of the adopted Cheltenham Plan that:

'At the time the JCS was produced, the Cheltenham Plan capacity which contributed towards the total supply for Cheltenham had not been finalised, and was therefore based on the best information at the time.....Further work has now taken place on evaluating the sites to be allocated within the Cheltenham Plan which the following table reflects, and fully explains the differences between the JCS trajectory and the new figures being proposed.'
11. The Urban Capacity figure in the JCS bears no relationship to the figure which should be planned for in the GCP. Instead, it should be the needs of the City, including affordable housing needs, which should be the target. This is brought into focus given that the Strategic Allocations in Tewkesbury Borough, which were expected to deliver 4,895 new homes within the plan period, will no longer do so. Appendix 6 of EXAM 11 provides a trajectory for the Strategic Allocations and identifies, based on the most optimistic figures, that 564 dwellings will be completed beyond the end of the plan period because of delays in delivery of those sites.
12. There was discussion at the hearing sessions about whether the GCP provides a positive framework for bringing development forward and delivering sites, which may not currently be identified. It is not considered that it does currently. Attached at **Appendix 1** is an email sent to Mr Gooch, GCC Planning Policy Manager, following the hearing sessions to consider the issue in further detail, relative to the discussion at the examination. Such an approach would create a more positive approach to decision making and delivering the homes needed in the City, whilst remaining in the context of the policies of the GCP and JCS read as a whole.

13. Currently, JCS Policy 10 (3) limits the extent to which development can come forward to the existing built-up areas of Gloucester City on previously developed land and conversions. The built-up area is distinct from the administrative area of the City which is essentially the wider urban area and has been leapfrogged by the Strategic Allocations in Tewkesbury Borough. However, JCS Policy 10 (4iv) introduces the opportunity for Local Plans to introduce a positive approach to development decisions, enabling previously unidentified sites to come forward to meet the housing needs of the City. The attached email sets out an appropriate Main Modification to Policy A2 to enable such an approach, to the benefit of affordable housing delivery, which is distinct from a rural exception policy.
14. The introduction of such a modification would go some way to addressing the concerns raised in respect of the positive approach adopted by the GCP and also providing an opportunity to move beyond the ceiling being sought on the urban capacity and housing the GCP seeks to deliver. In turn, this will have a beneficial impact on seeking to meet the City's housing needs, with a focus on affordable housing.
15. The modification will also aid meeting shortfalls in affordable housing delivery resulting from the modification to reduce the requirement from 25% to 20%, in line with the JCS. In practice, the delivery of affordable housing through the allocation will be heavily impacted by viability constraints, which are acknowledged by GCC in Exam 8a – Viability, below. Affordable housing is a principal component of infrastructure which is frequently sacrificed to aid viability, such as at the Strategic Allocation at Winnycroft where the main element of the site will not deliver any affordable housing.
16. The use of Homes England Grant will be an important part of AH delivery, in an authority which only delivered a net increase of 58 affordable homes in 2018/19 and 2019/20 (see BBP Matter 10 Statement paragraph 8) or 6.5% of all permissions, without the aid of grant funding.
17. In summary, setting out that the GCP should plan to deliver 7,772 new homes would not be consistent with a positively prepared approach and would be unsound. Nor would it represent a plan which should be aspirational. In setting out such a figure, which bears no relationship to the housing needs of the City, it would stifle a positive strategy to delivering housing in the administrative area. The GCP should recognise this. A Modification to Policy A2 has been suggested by BBP which goes some way to promoting a positive approach, with a focus on affordable housing delivery, a critical component of the wider housing need in the area, but it is also considered the GCP should go further, as it is capable of doing in the context of the JCS at Policy SD10 4(iv).

Exam 11 – 5YHLS & Exam 18 – Evidence of Delivery on Challenging Sites

18. Whilst it is not the intention to comment on the housing land supply Submission in detail, there is a relationship with Exam 18 insofar as it is recognised that many of the development sites within the built-up area of the City present a number of challenges. This is not uncommon, as set out in Exam 18. However, the 5YHLS assessment makes a number of extremely positive assumptions about delivery rates and lead in times for sites within the built-up area.
19. The lead-in times referred to in Exam 11 at paragraph 7.2 indicate that sites of 100 dwellings or less without planning permission will have a lead in of 1 year from planning consent to the first housing being completed and sites over 100 will have a lead in of 18 months. It is unclear whether this includes the planning process itself. If it did, such a timeframe would be even more unrealistically optimistic.
20. Notwithstanding the planning process, the sites set out at Exam 18 list a range of case studies. None of which were completed in the timeframes indicated at 7.2 of Exam 11. More realistically, lead in times from an implementable/deliverable planning permission to delivery of first homes are in excess of three years on sites of under 100 dwellings and even longer for sites of more than 100 dwellings.
21. Consideration of an implementable planning permission is also a key consideration, as a number of the sites in Exam 18 have a long planning history which precedes the recorded case study which led to delivery. For example, Black Dog Way was first granted planning permission in 2004 (04/01272/FUL) and then again in 2007 (07/001314/FUL). It was not until 2016 that a Joint Venture proposal between Newland Homes and Rooftop was considered to be deliverable. It took a further three years for homes to be completed (in 2019).
22. The application of reflective lead in times would impact the housing delivery trajectory.

Exam 21 – Position Note, Matter 1 and the Assessment of Heritage Assets

23. The Council's Position Statement Exam 21 (EX21) has been produced following discussion at the Hearing sessions about the Sustainability Appraisal (SA) and the consideration of reasonable alternative strategies. The broad principle of the Council's strategy is that it cannot meet its own housing needs within the administrative area of the City and therefore all sites identified as suitable, available and deliverable were included as allocations in the GCP. This is reflected in paragraph 1.5 of EX21.

24. Through the SA sites considered suitable for development, as a principle, have been assessed against the Sustainability Objectives set out in the matrix within the SA. This is a rounded assessment and follows established methodology. Black Box Planning, on behalf of Bromford and EWH, have not raised issue with the methodology and the broad sustainability objectives in the matrix. The core issue is that the whole SA is reliant on the Strategic Assessment of Land Availability (SALA) to determine whether sites, and therefore potential allocations, are suitable for development. This, in turn, provides a binary sift of whether sites can be considered in more detail against a range of sustainability objectives.
25. Paragraph 1.7 of EX21 sets out that *'it is not necessary to test all options through the SA i.e those that are not considered to be reasonable because this, for many local authorities, could be a very long list and unreasonably costly in terms of time and resources.'* In this case, such a list would not be long or unreasonably costly, because there is only one strategy/option being progressed. However, for that approach to be objective and transparent and therefore sound, a consistent approach must be adopted to the mechanism by which sites are included or excluded. Nothing in the Council's EX21 directs that a consistent approach has been adopted in this case. In fact, it is considered, that the approach is less transparent than first understood, for the reasons set out below, because the Heritage Appraisals set out in the Council's Evidence Base do not appear to be a basis which has informed the SALA or Local Plan preparation process.
26. Much of the discussion at the Hearing sessions, focused on heritage considerations but is recognised in EX21 that such an approach could, equally, be relevant to other planning issues, such as flood risk. This is welcomed. However, focusing on heritage, the national policy approach set out at 16 of the NPPF, which directs that a positive approach should be adopted in development plan to the conservation and enjoyment of the historic environment. This is recognised in the GCP where sites are allocated in sensitive historic environments (including where the impacts of development are not yet known). NPPF196 (now 202 in NPPF21) directs that where a proposal will lead to less than substantial harm to the significance of the asset, the harm should be weighed against the benefit. This approach is known as the heritage balance, an exercise which should occur in addition to a planning balance. However, in a plan making context such an assessment would ordinarily take place in the SA, having regard to the synergistic effects against all sustainability objectives. However, in this case the binary sifting of sites at the SALA stage has precluded such an approach in some cases (not all cases, as some sites which do have an impact on heritage assets have been allocated).
27. In light of the above, there are three principal issues relevant to the SA process, but not necessarily the SA itself:

- That the SALA sites have been assessed on an inconsistent basis;
- That the SALA is not the appropriate vehicle in which to discount sites because it often does so for a single reason; and
- Case by case consideration of sites has not been detailed enough in the context of the SA having regard to the significance of effects in the context of a number of topic areas and having regard to the significance criteria against all sustainability objectives and mitigation available. In the case of heritage, this also reflects the heritage balance set out at NPPF196 (NPPF202).

28. The issues, above, recognise that the list of potential sites in Gloucester is not long and it would not be a resource hungry process to engage and assess them in more detail, looking for solutions not problems as they set out at the Examination Hearing Sessions. Before turning to each of the three issues set out above, a brief response is provided to each of the issues set out in the EX21, is provided below.

The Council's Strategic Assessment of Land Availability (SALA) Process

29. EX21 sets out the methodology for assessing Heritage Constraints from Para 2.3. The approach/methodology is centred on an appraisal and written response prepared by the City Archaeologist and Principal Conservation Officer accordingly. However, the written responses for any of the SALA sites do not appear to have been published.

30. The SALA itself does contain the following in respect of heritage for 06NEW17 (Land East of Winnycroft Lane or the 'Moat Site' as referred by the Council:

'The site contains a scheduled monument (the medieval moated site at Sneedham's Green). The site is also adjacent to a known Roman settlement. Any application should be supported by a desk-based assessment, trial trench evaluation and geophysical survey. Development options are likely to be limited by heritage assets. Historic England should be consulted with regard to any application. Will require a full SALA Heritage Assessment.'

31. This commentary is considered in more detail, below, in the context of the specific SALA response for 06NEW17. However, it does not provide anything determinative which would necessarily preclude development. It should also be seen in the context of a significant heritage evidence base submitted by the developer which does not appear to have been considered by the Council in reaching their conclusions. This includes preparation of a number of Heritage Assessments prepared by their heritage consultant, EDP, who have the benefit of advising on heritage matters for the Strategic Allocation to the north at Winnycroft to the stage of outline planning permission. A Briefing Note submitted to GCC with the SALA Submission, along with a Baseline

Heritage Appraisal are attached at **Appendix 2 and 3** of this Note respectively. Of relevance at this stage, is paragraph 2.4 of the Briefing Note (**Appendix 2**), which identifies that the area of the Strategic Allocation kept open and undeveloped immediately to the north of O6NEW17, was intended to address the archaeology which was found on that site – the known Roman Settlement, the need for sports pitches within the site and views of that site within the AONB, and not to create a buffer to the setting of the Scheduled Monument as set out in EX21. The issues relating to views from the AONB have been addressed on O6NEW17 by way of a site specific LVIA (**Appendix 10**) which concludes that visual impact is not a constraint to development.

32. The methodology, at paragraph 2.4 of EX21, goes on to set out that *‘where constraints have been identified, the assessment will need to consider what action could be taken to overcome them.’* This has never happened at O6NEW17, albeit it has elsewhere with other sites identified within the Plan, by way of mitigation. Notably, an example of constraint referred to is policy within the NPPF. In a heritage context, set out above, this includes a balanced approach of assessing impacts against benefits (NPPF196/202).

33. At paragraph 2.5 it recognises that not every site submitted needs to be found suitable. However, as a matter of soundness, it is necessary for a consistent, objective and transparent approach to be applied to all sites in reaching that conclusion. This has not happened in this case. Such an issue was central to the Inspectors’ comments (**Appendix 4**) in respect of the West of England Joint Spatial Plan which was ultimately withdrawn for a similar reason. It was highlighted at paragraph 11 that:

‘However, in light of the above, we conclude that robust evidence has not been provided to demonstrate that the 12 SDLs proposed in the plan have been selected against reasonable alternatives on a robust, consistent and objective basis. Consequently, given that the SDLs are an integral part of the plan’s spatial strategy, we cannot conclude that the spatial strategy is itself sound. Additionally, the absence of a robust SDL selection process or a strategy which is not based on specific SDSLs means that there is not a clear basis on which to select alternative/additional SDLs.....’

34. In the case of the GCP, the absence of reasonable alternatives to consider in the SA, is a direct consequence of a SALA process which has not adopted a robust, consistent and objective approach to considering sites. This goes to the heart of the soundness of the approach. As a consequence, it has resulted in a Plan which meets less of the needs of the population it serves than would otherwise have been necessary. This is an unsustainable approach.

35. Finally, EX21 concludes, in respect of methodology, at paragraph 2.7, that there could be sites with constraints that can't be overcome and that it won't be necessary to carry out more detailed assessment where it is clear that they will not be suitable for development. In this case, the existence of a Scheduled Monument is not, in itself, a clear indication that the constraint cannot be overcome. There are many examples of moated Scheduled Monuments adjacent to modern development. There is one within 1km to the north in the grounds of the, aptly named, Moat Primary School. There are a further 24 Scheduled Monuments within the locality.
36. Respectfully, all of the extensive evidence produced, as requested by the specialist officers of the Council and Historic England, indicate that the Scheduled Monument is not an in-principle barrier to development. The evidence previously submitted to the Council includes:
- Heritage Briefing Note (November 2019), prepared by EDP – **Appendix 2**;
 - Baseline Heritage Assessment (March 2017), prepared by EDP – **Appendix 3**;
 - Water Environment Assessment: Tier 2 (May 2021), prepared by JBA – **Appendix 5**;
 - An Archaeological and Heritage Assessment (May 2021), prepared by EDP – **Appendix 6**;
 - An Archaeological Written Scheme of Investigation (November 2020), prepared by Headland Archaeology – **Appendix 7**;
 - A Geophysical Survey (January 2017), prepared by GSB Prospection – **Appendix 8**; and
 - Archaeological Trial Trenching (January 2021), prepared by Headland Archaeology – **Appendix 9**.
37. Importantly, the Heritage and Archaeological Assessment (**Appendix 6**) concludes that the development of the site will not have direct effects on any designated heritage asset, including potential impacts on the waterlogged archaeological remains located within the SM. The impacts on the setting of the SM will result in both positive and negative effects, and overall there will be a very low degree of harm to the significance of the asset because of those effects on its setting. The harm would be at the lower end of the spectrum of 'less than substantial'.
38. Whilst I appreciate that the list above presents an extensive reading list, the issue is that it is a long and detailed evidence base which has been prepared objectively. The conclusions are also consistent. However, an alternative conclusion has been reached, without presentation of any meaningful assessment to discount a site. This is set against the inclusion of sites, as allocations which include known and unknown heritage impacts. This is inconsistent.

Assessment of SALA Ref: 06NEW17 – Land East of Winnycroft Lane

39. The comments made in section 3 of EX21 relate to the assessment of the site East of Winnycroft Lane. The points raised are welcomed, however, BBP have set out some clarifications correcting inaccuracies in some of the information, below.
40. It is set out at paragraph 3.3 that the site was presented to the 2019 SALA. Both BBP and EDP (Heritage Consultants) sat on the SALA2019 Panel which considered the site, where it was received positively in discussion with the professionals present.
41. Paragraph 3.4 sets out that the playing pitches included as part of the Strategic Allocation to the north were located on the boundary with 06NEW17 to create an appropriate buffer to the Scheduled Monument. This is inaccurate, as set out above, the pitches were located there because of the known archaeological remains comprising Roman archaeology which is also referred to but located within the Strategic Allocation and not considered a preventative constraint in that case.
42. There is no reference to the need for a buffer in this location in the Archaeology Officer Comments to that application, in the Officer's Report or the Planning Proof of Evidence for the Public Inquiry, which all considered matters of heritage including archaeology. There is also no reference to such a consideration in the Officer Report for the subsequent Reserved Matters application, which included matters of layout to be considered in detail.
43. Importantly, the JCS allocation at Policy A6 does refer to a general provision to respect all heritage assets (Policy A6vii), but there is no specific reference to the Scheduled Monument. However, there is specific reference to the setting of the Grade II listed farm buildings and the importance of respecting their setting.
44. Specific commentary is set out in the Ecus Historic Environment Assessment of Allocation Areas Addendum (September 2016) (**Appendix 11**) prepared to support the JCS Evidence. From paragraph 5.2.24 it provides an assessment of the setting of the SM relative to the Strategic Allocation. It recognises that the setting of the SM has changed and was adversely affected by the dumping of spoil from the construction of the M5, which has impacted on much of the archaeology across the site (see **Appendix 9**, Trial Trenching and **Appendix 6**, Archaeological Assessment). The setting is now 'isolated and enclosed' (Ecus Historic Environment Assessment paragraph 5.2.25). It went on to recommend, in the context of the SM that:

'Development should seek to create a positive relationship with the scheduled moated site at Sneedham's Green, such that it becomes a borrowed landscape in order to reduce the risk of it becoming side-lined and neglected as a result of the development's

proximity. Consideration should be given to the provision of an interpretation panel on the footpath network.'

45. This conclusion, which formed part of the JCS evidence base, advocates a very different approach to the one being portrayed in the SALA response. The development around the SM provides an opportunity to create the borrowed landscape being advocated, engaging with the SM and improving its legibility, rather than creating a buffer for the SA to turn away and neglect it.
46. The evidence base for the site directs that development will be appropriate and capable of offering some benefits to the interpretation of the SM. Nothing in the SALA assessment indicates otherwise.

History of Site Historic Environment Assessments

47. It was understood that the Site Historic Environment Assessments were prepared following recommendations set out in the SALA to inform a more detailed assessment of relevant heritage considerations for a range of sites. These were included as part of the evidence base to inform the site selection process in the GCP. The comments raised at the Examination Hearings and in the BBP Matters Statements for Issues 1 and 4 were prepared on such a basis. In doing so concerns were raised about the consistency of the approach with some sites having a very detailed assessment, others having a superficial assessment and others none at all.
48. However, having read EX21, it is now understood that the Historic Environment Assessments were not prepared to inform the evidence base and site selection process at all. Instead, they should be considered as Planning Briefs to inform a pre-application or application submission. This appears to be wholly inconsistent with previous submissions. The Council's Matters Statements for Matter 1, at paragraph 2.2, and Matter 4 at paragraph 47.1, where it could reasonably be concluded that the Historic Site Assessments (HIS007) have informed the progression, or otherwise, of sites through the Local Plan process.
49. The Council go on to conclude that a Historic Environment Assessment was not prepared for 06NEW17, but rather it was a Note to set out their position. This adds to the confusion about the transparency of the process, given that it is included within the HIS007 submissions as a Historic Environment Assessment for SALA Sites (HIS007/a).
50. EX21 presents that the Council are now moving away from the evidence base which is published to support the GCP, including the SALA process. The Historic Environment Assessments recommended by the SALA, for the SALA, are not relevant to the

conclusions in the SALA. Instead, the conclusions reached in the SALA are based on internal officer reports which do not appear to be published. In addition, the conclusions of the SALA have not been informed by the evidence base submitted alongside the site. In the case of O6NEW17, that is now an increasingly detailed base which concludes that the site would be suitable for development in the context of the historic environment. In light of this, there now appears that there was even less transparency in the site selection process undertaken by the SALA, with little documentary evidence other than the SALA itself published to support the conclusions.

The Relationship of the Sustainability and Strategic Assessment of Land Availability

51. Having reviewed the Council's response to the Inspector's queries set out above. It is now possible to provide further commentary on the soundness of the GCP, in the context of the Sustainability Appraisal. This gives specific consideration to the three issues raised in respect of the relationship between the SA and the SALA. This is an important consideration because the SA sets out that there are no reasonable alternatives to consider in determining an appropriate strategy to meet the development needs of the City, which cannot be done within its administrative area. The SALA provides the source of all sites considered for allocation and therefore is a proxy extension to the SA because all sites considered suitable in that process have been taken forward for allocation in the GCP, such is the shortage of housing land in the City.

Have the SALA sites been assessed on a consistent basis?

52. It now appears that the SALA sites, from a heritage perspective, were not informed using the Historic Environment Assessments, but were instead informed by internal judgement set out by Officers but has not been published in full. They also do not appear to have been informed by the evidence base submitted alongside site submissions and discussions in respect of specific sites.

53. Unfortunately, rather than clarify the issue, EX21 appears to compound the view that the approach has been inconsistent and lacks transparency.

54. The evidence base, which has been attached to this Response, is detailed and responds to all of the barriers to a positive conclusion set out in the SALA, such as trial trenching and a detailed Setting Assessment. There are no in principle barriers to the suitability of O6NEW17, which provides an example of the inconsistent approach.

Is the SALA an appropriate vehicle in which to discount sites on a binary basis in the absence of any reasonable alternatives within the SA?

55. The Council's view at paragraph 1.7 of EX21, that it is not possible to test all reasonable alternatives because the list could be very long, seems somewhat misplaced here because no reasonable alternatives are tested through the SA. Instead, irrespective of heritage, which has been the focus here, a number of sites have been discounted on a binary basis rather than a more holistic approach having regard to all of the sustainability objectives (and weightings) in the SA. The NPPF presents a number of balancing exercises which are required to reach a conclusion on sustainable development, from a social, environmental and economic development perspectives.
56. Taking heritage as an example, it has been identified as the principal basis on which to discount a number of sites. However, this has not been assessed in the context of the wider sustainability objectives which may be achieved by delivering development on those sites. For example, the social and economic benefits of delivering an affordable housing led development within the administrative area of the City or the benefits of better revealing a heritage asset to enable greater appreciation of it given its lack of legibility currently and securing a long-term programme of management to do so, irrespective of a less than substantial impact (at the lower end of the spectrum) to the designated asset. Notwithstanding the appropriateness of the SALA in its own right, in this case, such considerations should be undertaken as part of the SA.

Conclusion

57. The content of EX21 has been reviewed in the context of previous submissions and the discussion at the Examination Hearings, as set out above.
58. Unfortunately, rather than clarify and address the issues raised, EX21 compounds the concerns presented on behalf of Bromford and Edward Ware Homes. The approach adopted to the SALA and the SA is inconsistent and lacks transparency based on the information submitted and the explanations provided. It fails to consider any reasonable alternatives, where such alternatives reasonably exist having regard to the submitted evidence base. This has resulted in a plan which does not meet its development needs and is not justified in doing so. Having regard to NPPF35, the GCP is not justified or positively prepared. It is also not consistent with national policy in a number of areas as a result.



Appendix 1 –

BBP Email to GCC, 28th May 2021

From: [Ben Read](#)
To: [Adam Gooch](#)
Subject: GCC Examination - introducing a more permissive approach to suitable development sites
Date: 28 May 2021 11:33:00

Hi Adam,

I have been giving the matters raised at the EiP, in respect of enabling a more permissive approach to suitable development sites coming forward across the administrative area irrespective of whether they are allocated. In my opinion, the Development Plan would not facilitate this as currently worded, principally because of the matters of restraint set out at JCS SD10. SD10 (3) limits opportunities for development on sites which are not allocated to previously developed land in the existing built-up areas of Gloucester City. SD10 4 goes on to set out a number of exceptions to this where development will be permitted, including: affordable housing on rural exception sites in accordance with SD12, infilling within the existing built up areas of the City and Right to Build Orders. None of these exceptions would be consistent with the approach adopted, for example, at East of Winnycroft Lane, and would limit sites which are generally suitable when having regard to social, environmental and economic considerations set out in the Development Plan as a whole. However, SD104iv does provide an opportunity for Local Plans to go further in setting out circumstances where other forms of development would be acceptable. To trigger such an exception, appropriate wording would be required within a Policy in the City Plan, rather than supplementary text (albeit this could be used to provide some context to the policy wording).

In the context of the above, the discussion at the Examination Hearings was to enable sites which were not considered to be suitable at the site selection stage of the SA (in this case that was the SALA) but where new information comes to light to demonstrate they are now suitable, or the Council changes their view of them for reasons relating to balanced judgement. In my view this is an entirely appropriate principle for the City Plan because of the constraints to meeting needs within the administrative area, the city first focus which is adopted to meeting those needs and the obvious sustainability benefits associated with locating development in the administrative area. Albeit it is recognised that the City will not be able to meet all of its needs, it should create an environment where the City Plan facilitates this were suitable opportunities exist. To do so on a holistic basis, I consider that an entirely new policy would be required. However, I have also explored the opportunity to facilitate a scheme to the East of Winnycroft Lane, which is an affordable housing led proposal (but not an exception site) which utilises grant to provide additionality (i.e the delivery of affordable homes which would otherwise not be delivered, and therefore not subject to convention s106 provisions).

Policy A2 promotes the delivery of affordable housing, including the use of grant to deliver greater than 25% affordable housing. However, it does not go far enough to be provide clarity on such schemes being capable of an exception set out at SD10 4 iv where they may come forward in areas of general restraint within the administrative boundary. If such schemes, generally, were to emerge where they are currently unknown to the CC, this would be a major benefit to the delivery of affordable housing in the City outwith of the exception site policy which is currently inflexible to take account of up to date requirements on the use of Homes England subsidy, and not applicable in Glos City in any event. It is considered possible for it to invoke SD10 4 iv with the following amendment:

'The City Council will support grant aided schemes on suitable sites within the administrative area of the City that deliver greater than 25% affordable housing, and tenure and house types, that meet the city's needs. The occupation of affordable housing will be limited to people in need of affordable housing and shall be secured in perpetuity.'

In conjunction with the above, a new paragraph of supporting text, following 3.1.17, would help to clarify this as follows:

'JCS Policy SD10 sets out the approach to residential development in the combined authority areas. Criterion 4 iv includes provision for District Plans to set out specific exceptions/circumstances where residential development can come forward outside of those listed in SD10. The provision of schemes which secure in excess of 25% affordable housing on suitable sites, when assessed against the Development Plan as a whole, within the administrative area of the City is a specific circumstance where development will be supported as a matter of principle.'

I hope that the above is helpful. It would go some way to removing unnecessary constraints to development on sites which could make a significant contribution to affordable housing needs. Otherwise there is a real danger of such opportunities being delayed significantly, unnecessarily. This is a sound approach generally. With specific regard to east of Winnycroft Lane, further information relating to heritage assessment (sent to you previously) and design vision is now with your colleagues. The additional evidence supports the delivery of development on the site as a matter of principle. The heritage considerations are ultimately a matter of planning balance (having regard to the relevant statutory tests and the two stage balancing exercise set out in the NPPF), which has been adopted for a number of sites already proposed for allocation. Winnycroft Lane is no different from this perspective. My concerns relating to approach to site selection remain and I hope that this is a matter we can advance and potentially resolve by way of further exchange and discussion, but a consistent approach to site selection and balanced consideration would remove the barriers to allocating the site. Based on the existing approach in the SA, I am of the view this would logically lead to an allocation. The suggestions set out above in respect of A2 are helpful, but do not address the procedural points and points of concern raised in respect of SA so I hope to continue dialogue with you to resolve these in any event. Nonetheless, the changes suggested would help to create a policy framework which would support affordable housing delivery in a flexible manner and make a valuable contribution to the significant need which exists.

I look forward to discussing matters with you in more detail shortly.

Kind regards
Ben

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**Appendix 2 –
Heritage Briefing Paper, November 2019**

Land East of Winneycroft Lane and North of Green Farm Briefing Paper on Archaeology & Heritage Matters edp3746_r004b

1. Introduction

- 1.1 This Briefing Paper on archaeology and heritage matters has been prepared on behalf of Edward Ware Homes by The Environmental Dimension Partnership Ltd (EDP) and provides information on the potential constraint that is posed to the development of Land East of Winneycroft Lane and North of Green Farm, Gloucester by archaeological and heritage assets.
- 1.2 It has been prepared in respect of the promotion of the site for development through the *Gloucester City Plan*, the Pre-Submission draft of which was approved for public consultation by the City Council on 26 September 2019.
- 1.3 Its aim is to identify the nature and magnitude of any archaeological or heritage constraints to the development of the site that would preclude or significantly restrict its deliverability or capacity and therefore count against its inclusion in the Plan as a residential allocation; assessing those constraints against the current legislative and planning policy framework.
- 1.4 However, whilst the site is identified as Land East of Winneycroft Lane and North of Green Farm for the purposes of the *Gloucester City Plan*, it is known by the promoters and project team as Land at Snow Caple Farm and will be referred to by that name in the paragraphs which follow to distinguish it from adjoining landholdings at Winneycroft.

2. EDP's Involvement

- 2.1 Prior to being appointed in respect of the Snow Caple Farm site, EDP was appointed by Barwood Development Securities Ltd in March 2013 to take forward the promotion of the Winneycroft site adjoining to the north for allocation within the emerging Joint Core Strategy and for the preparation, submission and determination of an outline planning permission which provides for the construction of up to 420 new homes and associated infrastructure.
- 2.2 Barwood Development Securities Ltd's site to the north of Land at Snow Caple Farm is now being delivered as part of the *Strategic Allocation A6 – Winneycroft* within the Joint Core Strategy that was adopted in 2017 and where the policy wording identifies that the allocation as a collective whole has to provide **at least** 620 new homes.
- 2.3 As well as providing technical inputs in respect of archaeology and heritage issues, ecology, landscape and arboriculture, EDP's role in the delivery of the Barwood site all the way to the positive determination of the outline planning application also included the preparation of the masterplan and the supporting documentation.



- 2.4 The illustrative masterplan, which accompanied the outline planning application, included open space in the south eastern corner adjoining the boundary with the Snow Caple Farm site that is the subject of this Briefing Paper. This was intended to address the area of archaeology which was found by the geophysical (magnetometer) survey completed for Barwood, views in from the Area of Outstanding Natural Beauty (AONB) and a need for sports pitches within the site. It was not required to address the impact of development on the scheduled monument and was not sited/designed for that purpose.
- 2.5 EDP was appointed by Edward Ware Homes to assist in the promotion of *this* site through the Joint Score Strategy coordinated by Gloucester City Council in tandem with Tewkesbury Borough Council and Cheltenham Borough Council and adopted on 11 December 2017.
- 2.6 EDP's remit was to identify and assess the archaeology and heritage, ecology and landscape issues around the development of the site and to compile an evidence base for each topic area defining any constraints in terms of its deliverability and capacity for development.
- 2.7 As well as progressing desktop studies and consideration of the scheduled monument's setting and significance, EDP's work to date has included the completion of a geophysical survey which found no evidence for the presence of significant archaeological features or remains, but did identify a former field boundary and evidence for extensive disturbance most probably associated with the construction of the adjacent M5 motorway.
- 2.8 Insofar as archaeology and heritage matters are concerned, EDP was instructed to consult with Historic England regarding the appropriate approach to be employed in respect of the scheduled monument located within the site, it being an aspect of the historic environment that was highlighted by the Council's evidence base for the JCS as warranting and needing improved management.
- 2.9 This process took place in two phases (spring-summer 2017 and autumn 2017) and the most relevant correspondence from the second phase of consultation with Historic England is reproduced here in **Annex EDP 1**.
- 2.10 This comprises an exchange of emails and letters with Melanie Barge, Inspector of Ancient Monuments at Historic England, between 5 September and 24 November 2017 and where the contribution that the existing setting of the scheduled monument makes to its heritage significance was the main area of debate.
- 2.11 No further consultation has taken place with Historic England since the exchange of written correspondence in autumn 2017.

3. Relevant Issues

- 3.1 As highlighted by the preceding section, the principle issue in terms of either archaeology or heritage considerations is that there is a scheduled monument within the boundary of the site

and hence bringing forward development here could potentially cause harm to its significance as a nationally important archaeological resource.

- 3.2 This scheduled monument comprises the *moated site at Sneedham's Green, 220m north east of Green Farm*, which is situated close to the centre of the site and comprises remains of a medieval moated enclosure that was partially infilled when the M5 motorway was built to the east of the site boundary.
- 3.3 Desktop research and the completion of a geophysical (magnetometer) survey have found absolutely no evidence for the presence of archaeological features, deposits or remains at the site, other than the course of a former field boundary.

4. Discussion

- 4.1 The site has no '*in principle*' archaeological or heritage constraints which would prevent its allocation for residential development, although it does contain/include the *moated site at Sneedham's Green, 220m north east of Green Farm*, which is designated as a scheduled monument recorded by Historic England on the National Heritage List as List UID 1019399.
- 4.2 The medieval moated site is identified as being 'nationally important' under the *Ancient Monuments and Archaeological Areas Act, 1979* (as amended) and accordingly receives statutory protection from deliberate damage for its physical form and fabric.
- 4.3 As it meets the definition of a 'designated heritage asset' given in Annex 2 of the National Planning Policy Framework (NPPF), it is current national policy that '*great weight*' should be given to its conservation and any '*harm*' (i.e. damage or loss) caused to its significance should require '*clear and convincing justification*', regardless of whether that results from direct impacts to its form and fabric or as a result of change taking place within its setting.
- 4.4 However, whilst Paragraphs 193 and 194 of the Framework caution against harm being caused to designated heritage assets such as the *moated site at Sneedham's Green, 220m north east of Green Farm*, Paragraph 200 recognises that development proposals can bring forward benefits when it recommends that:
- 'Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.'*
- 4.5 The land within the site is within the setting of the moat, but it is assessed as making no more than a **small** contribution to its significance as a designated heritage asset because of the extent to which the landscape around this scheduled monument has been changed in the recent past.



- 4.6 Whilst it is still located within an agricultural field (comprising permanent pasture), this is nothing more than a degraded relic of the asset's historic setting, where the construction of the M5 motorway in the late 1960s/1970s not only buried the southern half of the once trapezoidal enclosure beneath upcast spoil, but also wiped away much of the hedgerow network and remodelled the natural topography of the farmland landscape.
- 4.7 The Council's evidence base for the Joint Core Strategy (JCS) Examination acknowledged that the moat's setting is no longer '*rural*' and is now better described as '*urban edge*', a conclusion that will be reinforced and further accentuated through the development of the adjoining land to the north. This is provided for within the adopted JCS and will ensure that the moat at Sneedham's Green all but adjoins the southern edge of Gloucester at Matson once the residential development of the former Winneycroft Farm site is completed.
- 4.8 The residential development of the land to the north will further degrade the setting of the scheduled monument, which already sits within an artificial bowl created by the M5 to the east and is adversely affected by the noise from vehicles on that busy transport route. This has no doubt increased significantly since the construction of Gloucester Services because it is circa 300 metres from the end of the run-in lane exiting the north-bound services and is situated on a relatively steep uphill gradient. There is certainly no doubt that vehicles on the northbound M5 form a characteristic aspect of the experience of this asset.
- 4.9 Therefore, whilst the proposed development would change the setting of the monument, it could also potentially bring forward heritage benefits in terms of its ongoing management and long-term conservation, as well as enabling the greater appreciation of its significance by providing public access and bringing forward interpretation.
- 4.10 Even then, any 'residual' harm perceived to be caused to the monument by the careful and considered residential development of the land around it would have to be assessed in the underlying context of the NPPF, where the public benefits that it would bring forward would need to be balanced against any harm that would result. The finding of harm in itself would not necessarily preclude development.
- 4.11 In light of that assessment, there is no heritage reason why development of the site could not be brought forward in line with legislation and planning policy and hence this should not preclude its inclusion as an allocation within the emerging LDP.



Annex EDP 1
Historic England Consultation

From: Barge, Melanie <Melanie.Barge@HistoricEngland.org.uk>
Sent: 19 September 2017 16:16
To: Andrew Crutchley
Subject: RE: Land at Snow Caple, Matson (Gloucester)

Dear Andrew

Thank you for your e-mail and hope you are well too.

We have now changed our pre-application advice process, as Hugh told you, but it is still a formal process. Previously an applicant was given 15 hours free before we charged for our services. We have now replaced this with a free cycle of advice: to cover a meeting/ site visit, assessment of proposal, discussion and a single letter. After that we will charge for any additional or extended advice. An application will be logged on to our system and then allocated to the relevant Inspector.

I am not as familiar with the Gloucester City Evidence base as you are and so I am not clear as to where the quote you provide comes from. Please can you provide a reference so I can locate it.

I am more familiar with the conclusions of the JCS Examination (JCS Summary Comments, pp2-3) which states that:

There was also discussion around an omission site to the south of the Winnycroft allocation. The site is the location of a Scheduled Monument (SM) and other potential heritage assets. The JCS authorities view is that the presence of the SM represents a significant constraint to development and it would therefore be inappropriate to allocate the site for development. (JCS Summary Comments, pp2-3). <http://www.gct-jcs.org/Documents/New-Evidence-Base-and-Associated-Documents/Main-Modifications-Examination-Document-Library/MM35-JCS-ExaminationSummary-Note-10082017.pdf>

From this statement it is clear that the Joint Authorities feel the site is inappropriate for development.

However if you can provide me with a master plan proposal for the site I would be happy to provide formal comments on the proposal. We have a minimum requirement for information to allow us to log and then respond to a pre-application inquiry. For us to provide advice we do need to see plans of the proposed development. This allows us to properly assess any impacts and respond accordingly. I understand there is a draft master plan already prepared and this can form the basis of any formal comments I make on development at this site. Once you have sent a master plan the application can be logged and I can provide a considered response.

I am very familiar with the site and do not feel a meeting at this stage will be useful.

I look forward to hearing from you.

Mel Barge (Ms)
Inspector of Ancient Monuments
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From: Andrew Crutchley [mailto:andrewc@edp-uk.co.uk]

Sent: 05 September 2017 12:01

To: Barge, Melanie

Subject: Land at Snow Caple, Matson (Gloucester)

Melanie

Snow Caple, Matson

Good morning, I hope you are well. I understand that my colleague, Rob Skinner, exchanged emails with you in the spring/summer regarding the above site and the presence of the *Moated Site at Sneedham's Green Scheduled Monument* [Ref. 1019399], in order to ascertain Historic England's informal view in respect of development proposals.

I understand that the exchange concluded on 20 June with a recommendation to *'send me a copy of the proposed outline masterplan [so] I can provide a more considered response through our formal pre-application process. You can then share this with Gloucester City Council'*.

At this stage, there is no fixed masterplan for the proposals and that remains a work in progress, but in light of the Inspector's question regarding the proposed extension of the draft Winnycroft allocation (to include the site) at the most recent session of the Joint Core Strategy; and more particularly in light of the answer which Gloucester City Council gave to that question on the day in Cheltenham; my client is keen to open a formal dialogue with the Council regarding the site's promotion for development.

As you will be aware, the Council's own evidence base, prepared for the JCS, concludes that:

'development [at Winnycroft] should seek to create a positive relationship with the scheduled moated site at Sneedham's Green, such that it becomes a borrowed landscape in order to reduce the risk of it becoming side-lined and neglected as a result of the development's [presumably the Barwood site] proximity. Consideration should be given to the provision of an interpretation panel on [the] footpath network'

This is clearly a very laudable aspiration, and one which my client's land interest has the potential to bring forward and deliver. However, the Council have advised them that, in order for them to engage in pre-application discussions, it is first necessary for us to have opened a formal pre-application process with Historic England with regard to the scheduled monument.

To that end, I have spoken with Hugh Beamish in the Bristol Office; and from that I understand there is no longer a 'formal' pre-application process for consultation with Historic England, and that pre-application discussions have reverted back to direct contact with the relevant Inspector for the particular area in question. Therefore, whilst you have previously provided Rob with Historic England's informal position in respect of the moated site at Sneedham's Green, I would be grateful if you could now set out a formal opinion so that we can move forward with GCC.

Within that context, I note that the Ecus report, commissioned by and for the Council (to inform the JCS), identifies that *'the proximity of modern development to the north, and the noise and visual interference of the M5, intrude on the tranquillity and sense of remoteness such that the over-riding character of the area is one of land on the urban-fringe'*; and that was written before the Barwood site to the north was approved, let alone built.

So, in short, we believe that a sensitively designed residential development at the site, which *'creates a positive relationship'* with the scheduled moat by utilising it as a *'borrowed landscape'*, could address GCC's shortfall in housing numbers and safeguard the asset for future generations through the creation and implementation of a long term management regime, including the promotion of public access to (and enjoyment of) this feature. Therefore we believe there is merit in engagement in dialogue with the Council and Historic England as part of the promotion.

In a similar vein, I believe it may well be desirable to meet and have a look at the moat/site together, particularly in light of the length of time that has elapsed since the Barwood scheme was being considered. Subject to your availability, I could get something in the diary fairly quickly.

Please give me a call if you would like to discuss the above further, or if you would like additional information. However, in the meantime, I look forward to hearing from you shortly.

Kind regards.

Yours sincerely,

Andrew

Andrew Crutchley BA (Hons), PG Dip (Oxon), MCIFA
Director



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Mr Andrew Crutchley

Direct Dial: 0117 975 1300

The Environmental Dimension Partnership (EDP)

14 Inner Courtyard

Our ref: PA00585868

Whiteway Farmhouse

Cirencester

Gloucestershire

GL7 7BA

17 October 2017

Dear Mr Crutchley

Pre-application Advice

LAND AT SNOW CAPLE, MATSON, GLOUCESTER

Thank you for sending us further information about your clients proposed development at Land at Snow Caple. I understand that the master plan you have provided is indicative and is still being worked on. It does however provide me with enough information to understand the potential impacts of any development on the scheduled monument of Sneedham's Moat.

Advice

Sneedham's Moat is a moated site with about half of its moat surviving as a water filled feature. It was added to the scheduled of Ancient Monument's in 1951 to preserve it, as far as possible, in the state in which it has come down to us today. (Paragraph 6, DCMS Scheduled Monument and Non Designated Nationally Significant Archaeology Policy, October 2013).

Around 6,000 moated sites are known in England, with about 200 in Gloucestershire. Specifically around Gloucester there are a number of these moated sites, which includes Sneedham's Green, within a short (3 mile) distance of the Medieval City. These may represent the country houses/estates of wealthy and influential men from Gloucester. At the time of their construction Gloucester was a powerful and important city in Medieval Europe. Moated sites were located in rural locations as they were supported by the surrounding farmland and formed an administrative centre of large estates. That link to the countryside contributes to the monuments significance.

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There is little known about the history of Sneedham's Green moated site and few documentary sources have been located referring to it. It current lies within a rural landscape which has been altered in recent times by the construction of the M5 motorway to the east of the site. The motorway does sit within a cutting as it passes the site and spoil from the construction was spread on the field around the moat, raising the ground level. This means that the motorway is not clearly visible from the site and as you look eastwards the cutting mostly hides the motorway from view, though it is still audible. The land to the east and west rises up and is either farmland or wooded.

The proposed housing close to and surrounding the moated area would in our opinion cause harm to the significance of the monument, by removing the connection with its rural landscape and setting. The level of harm would be high and further assessment of the proposals may place that harm at Substantial.

The National Planning Policy Framework clearly states that substantial harm to designated heritage assets of the highest significance, which includes scheduled monuments, should be wholly exceptional (paragraph 132). If there are no substantial public benefits to the scheme the Local Planning Authority should refuse consent (Paragraph 133).

Even if further assessment identified the harm as less than substantial that harm would need clear and convincing justification and (NPPF 132) and public benefits (NPPF 134) to outweigh that harm.

In your previous correspondence you quote text from the Councils evidence base for the JCS with regards to Winnycroft, which mentions Sneedham's Green. I have still not managed to locate that quote. Could you please provide a link or reference to the location of that paper please?

As I have already stated I am more familiar with the conclusions of the JCS Examination (JCS Summary Comments, pp2-3) which states that:

There was also discussion around an omission site to the south of the Winnycroft allocation. The site is the location of a Scheduled Monument (SM) and other potential heritage assets. The JCS authorities view is that the presence of the SM represents a significant constraint to development and it would therefore be inappropriate to allocate the site for development. (JCS Summary Comments, pp2-3).

<http://www.gct-jcs.org/Documents/New-Evidence-Base-and-Associated-Documents/Main-Modifications-Examination-Document-Library/MM35-JCS-ExaminationSummary-Note-10082017.pdf>

From this statement it is clear that the Joint Authorities feel the site is inappropriate for development. If you can provide evidence contrary to this conclusion I would be pleased to review it.

We feel that this proposal will cause harm to the significance of the highly designated heritage asset. This is through a change in its setting which contributes to its significance. The level of harm in our opinion is high and further, more detailed, assessment may place that harm at substantial.

Thank you for involving us at the pre-application stage. Your current proposal does not



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address our concerns, as set out above, and so is unlikely to receive our support if submitted for statutory approval.

Yours sincerely

Melanie Barge

Inspector of Ancient Monuments

E-mail: melanie.barge@HistoricEngland.org.uk

24 November 2017

Our Ref: **L/EDP3746/AC/fj**

Sent by Email: Melanie.Barge@HistoricEngland.org.uk

Melanie Barge
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Historic England
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Dear Melanie

Land at Snow Caple, Matson, Gloucester

Thank you for your comments, in respect of the above site, dated 17 October 2017 [PA00585868], which presents Historic England's position in respect of Edward Ware Homes' proposal to bring forward residential development on land around the scheduled moated site at Sneedham's Green, south of Matson, in Gloucestershire.

Your letter of 17 October 2017 makes a number of points about this monument's significance and its setting, to which I respond in the following paragraphs.

In terms of 'advice', it is stated that "*Sneedham's Moat is a moated site with about half of its moat surviving as a water filled feature. It was added to the schedule of Ancient Monuments in 1951 to preserve it, as far as possible, in the state in which it has come down to us today*".

It is subsequently identified that 'it currently lies within a rural landscape which has been altered in recent times by the construction of the M5 motorway to the east of the site. The motorway does sit within a cutting as it passes the site and spoil from the construction was spread on the field around the moat, raising the ground level. This means that the motorway is not clearly visible from the site and as you look eastwards the cutting mostly hides the motorway from view, though it is still audible. The land to the east and west rises up and is either farmland or wooded'.

First and foremost, historic Ordnance Survey maps illustrate that, at the time of its first designation in 1951, the moat existed as a polygonal enclosure with an opening on the east side and a linear earthwork in the south which ran alongside the field boundary.

In contrast (today), the moat survives as the northern and western 'arms' of the enclosure, as well as the northern end of the eastern arm, whereas the southern portion

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of the monument has been erased as an earthwork feature (along with the adjoining field boundary).

It is not known for certain when the southern portion of the moat was lost as a landscape feature, but it is understood to have coincided with the construction of the M5 motorway on land adjoining the eastern boundary of the Snow Cople site. In any event, it is clear that the moated enclosure no longer survives in the form in which it was recognised as being of 'national importance', with there being evidence that the M5 construction works that changed its surrounding landscape were also responsible for the direct, physical change to the monument's appearance and condition.

In that regard, it is very clear that the construction of the M5 motorway has had a profound impact on not only the appearance and survival of the Sneedham's Green moated enclosure, but also on the 'surroundings in which it is experienced'. This is clearly downplayed in your comments above, but more accurately captured in Paragraphs 5.25 and 5.26 of the Ecus Environmental Consultants report for the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy, which was prepared in September 2016 and provides the 'Additional Site Assessments':

"The construction of moated sites during this period is believed to have been as much a symbol of wealth and prestige as a defensive feature, and would most likely have been intended to be visible. The present situation of the monument has been adversely effected by the raising of ground levels around it with arisings from the construction of the M5 cutting, such that the moated site now appears to lie within a topographic hollow. The position of the monument within a field bounded with hedgerows also restricts visual access, such that the character of the monuments setting is now isolated and enclosed. Public footpaths do cross within the vicinity of the site, from where its physical remains can be viewed, although the loss of its southern ditch and the lack of any interpretation limit understanding of its function.

Whilst the fieldscape and distant views of the undeveloped Robinhood Hill and Cotswolds preserve a good sense of the former rural character of the area, the proximity of modern development to the north, and the noise and visual interference of the M5, intrude on the tranquillity and sense of remoteness such that the overriding character of the area is one of land on the urban-fringe. The open views available from adjacent to the monument of the surrounding area do however afford understanding of the topographic situation of the monument and a sense of its former agricultural economy".

I have included a copy of the Ecus report for your information, as I understand that you remain unaware of its conclusions and advice, but clearly the assessment on the monument's setting is of interest when it identifies that (even before the adjacent Barwood application was consented) the *"the proximity of modern development to the north, and the noise and visual interference of the M5, intrude on the tranquillity and sense of remoteness such that the overriding character of the area is one of land on the urban-fringe"*. If that was the situation prior to the adjoining Barwood land being developed, it surely must be accepted that the setting of the scheduled enclosure is no longer 'rural' in the manner which your 17 October commentary identifies.

More pointedly, the Ecus assessment for the Joint Core Strategy is clear in recognising that setting can be influenced and affected by non-visual factors; a position outlined in current Historic England



guidance (GPA3, 2015) and since endorsed by Justice Lang in the High Court judgement regarding the Kedleston Road site in Derbyshire.

Whilst the M5 motorway may be carried in a slight 'cut' to the east of the Snow Caple site, it would be wholly disingenuous to suggest that it does not have a significant bearing on the surroundings in which the scheduled monument are 'experienced' nevertheless. Whilst the vehicles are to some extent screened from view from the moat, it is abundantly clear that the passing motorway traffic fundamentally alters the experience in terms of noise and ambience, especially given its position just beyond the running-in lane from the northbound Gloucester Services to the south. Hence, the Ecus report is unambiguous in dismissing this asset's setting as being 'rural'.

It is worth noting that, in providing written evidence ahead of the most recent of the JCS Hearings, Gloucester City Council relied on heritage reports prepared by EDP for the Barwood site to the north and made no reference to the commentary or advice contained in its own evidence base. Clearly the reports prepared by EDP refer to a different site, for a different proposal and to inform/support the submission and then determination of an outline planning application, rather than to consider whether this specific site is of such 'sensitivity' that development should be prevented or restricted because of its heritage impact. In that respect, their relevance and usefulness for the Snow Caple site currently before us are considered to be limited in the extreme.

It is therefore worth repeating that Paragraph 5.1.9 (on Page 34) provides the following advice to the Local Authorities under the heading 'Maximising Enhancements and Avoiding Harm', when it considers the scheduled monument; i.e.:

"Development should seek to create a positive relationship with the scheduled moated site at Sneedham's Green, such that it becomes a borrowed landscape – in order to reduce the risk of it becoming side-lined and neglected as a result of the development's proximity. Consideration should be given to the provision of an interpretation panel on footpath network".

The use of the term 'borrowed landscape' is clearly relevant here – because it infers that the moat should actually be brought into the developed area '*in order to reduce the risk of it becoming side-lined and neglected as a result of the [Barwood] development's proximity [to the north]*'. Given that Barwood never had any means to deliver improvements to the monument; either in terms of the footpath network or the provision of an interpretation panel; and there is certainly no requirement for them to do so within their consent; it is clearly difficult to understand how the current situation within the Winnycroft allocation will not run counter to this laudable aspiration.

Based on its present extent, the Winnycroft allocation does not 'create a positive relationship with the scheduled moated site at Sneedham's Green'; similarly, it does nothing to 'reduce the risk of it becoming side-lined and neglected'; two objectives which can only realistically be delivered by the sensitive development of the land at Snow Caple controlled by Edward Ware Homes.

In view of current Case Law, where 'substantial harm' (NPPF Para 133) is assessed as comprising an impact so serious that the significance of the asset is 'vitiating altogether or very much reduced'; it would be surprising for a sensitively designed development on this site to generate an impact of such



magnitude to meet the high threshold for substantial harm, most particularly given the extent to which the construction of the motorway has changed the physical appearance of the monument and the surroundings in which it is experienced.

Moreover, it must equally be recognised that, whilst development on this site has the potential to cause harm to the scheduled monument through change within its setting, it also has potential to bring forward significant benefits in terms of the delivery of much needed new housing, but also in terms of the moat's long-term conservation and management. Of course, these benefits would need to be factored into the balancing exercise when weighing up the acceptability of development on this piece of nondescript farmland.

As you will no doubt have seen, the Planning Inspector's final report (26 October 2017) for the JCS places a greater weight on the desirability of rapid adoption for the Strategy than on either finding new allocations or expanding existing allocations. Nevertheless, it is clear from the Council's verbal evidence to the Planning Inspector's questions (and her final written report subsequently) that an opportunity still exists to bring the Snow Cagle site forward for development through the Local Plan process, subject to the provision of the required evidence base.

We will no doubt speak again in connection with that process, but in the meantime please do not hesitate to contact me if you would like to discuss any of the above points in greater detail. In the meantime I look forward to speaking with you again soon.

Kind regards.

Yours sincerely

A handwritten signature in black ink that reads 'Andrew Crutchley'. The signature is written in a cursive, slightly slanted style.

Andrew Crutchley BA (Hons), PG Dip (Oxon), MCIFA

Director

Email: andrewc@edp-uk.co.uk

Enc: Ecus report



**Appendix 3 –
Heritage Baseline Assessment, March 2017**

Snow Capel, Matson, Gloucester

Heritage Topic Paper

H_EDP3746_01a_March 2017

Introduction

- 1.1 This Heritage Topic Paper has been prepared by the Environmental Dimension Partnership Ltd (EDP), on behalf of Edward Ware Homes Ltd. It presents the results of an archaeological and heritage review of Snow Capel, Matson, Gloucester (hereafter referred to as 'the site').
- 1.2 This note considers the archaeology and heritage issues pertaining to the site's potential to accommodate residential development, and in doing so identifies opportunities and constraints which influence its deliverability and/or capacity in that respect.
- 1.3 The site is located on the southern outskirts of the City of Gloucester, the centre of which lies c. 4km to the north-west. The settlement at Matson is located c.1km to the north. The site measures c.8 hectares (ha) in area and is centered on National Grid Reference (NGR) 385116 214169.
- 1.4 The site boundaries are defined by the M5 motorway to the south-east, farmland to the north-east and by open grassland at Sneedham's Green to the west. The site consists of a single field of pasture and is enclosed by dense mature hedgerows on the south, west and east sides, and a thin hedgerow on the north side.
- 1.5 The land slopes gently to the west, with a high point of c. 60m above Datum Ordnance (aOD) on the eastern boundary and a low point of c. 55m aOD in the north-west corner.
- 1.6 The British Geological Survey records the underlying solid geology at the site as being mudstone of the Blue Lias and Charmouth Formations. No superficial deposits are recorded across the site, however much of it appears to be covered by a layer of made-ground resulting from the construction of the M5 motorway.

Methodology

- 2.1 This Heritage Topic Paper summarises the preliminary and interim results of a Heritage Desk-Based Assessment currently being undertaken. This is being produced in accordance with the *Standard and Guidance for Historic Environment Desk-Based Assessment* issued by the Chartered Institute for Archaeologists (CIfA, 2014).
- 2.2 The assessment has involved consultation of readily available archaeological and historical information from documentary and cartographic sources. The major repositories of information comprised:

- Information held by the Gloucester City Historic Environment Record (HER) on known archaeological sites, monuments and findspots, within 500m of the application site;
- Maps and documents held by the Gloucestershire Records Office;
- The National Heritage List for England curated by Historic England;
- Aerial photographs held by the Historic England Archive (HEA); and
- Records made during a site visit in February 2017.

2.3 The assessment also considers the nature and significance of any effects arising beyond the boundary of the site; i.e. through potential changes to the settings of designated heritage assets, as defined in Annex 2 of the NPPF

Baseline Information

Designated Heritage Assets

- 3.1 The site contains a scheduled monument, *Moated site at Sneedham's Green, 220m north east of Green Farm* (**NHLE: 1019399**). Planning policy dictates that there would be a presumption in favour of the physical retention or preservation *in situ* of this monument and against development of the land that it occupies. The monument is described below.
- 3.2 The site does not contain any listed buildings, historic parks and gardens or registered battlefields, and there are no other designated heritage assets of any kind within the 500m search area identified around its boundary.
- Scheduled Monument: Moated site at Sneedham's Green, 220m north east of Green Farm (1019399).*
- 3.3 The significance and setting of the Moated site at Sneedham's Green (**1019399**) are discussed here in brief. A full investigation and assessment will be available within the forthcoming Desk-Based Assessment.
- 3.4 The monument consists of the known extent of a medieval moated site; a sub-rectangular or trapezoidal moat enclosing an island. Only the northern side and parts of the western and eastern sides of the moat are extant, enclosing an area c. 66m by 42m that is open on the south side. The extant moat is c. 14m at its widest point, c. 8m at its narrowest and c. 1.5m deep. It is water-filled and may represent a source of waterlogged archaeological deposits. The scheduled area extends beyond the extant part of the monument to the south, encompassing the former entirety of the moat and a 2m buffer around it.

- 3.5 The southern extent of the former moated enclosure is located underneath a layer of overburden deposited during the construction of the M5 motorway. Within this area, and the extant part of the monument, it is not known to what degree archaeological deposits are preserved; it is apparent from an aerial photograph that the monument was disturbed during the motorway's construction. The ground surface was clearly scoured, both within the moated enclosure and around it, which will have impacted upon buried remains.
- 3.6 The M5 works resulted in the infilling of part of the former moat (that had been incorporated into a post-medieval field boundary) and also associated earthworks. A geophysical survey conducted on behalf of Edward Ware Homes in 2016; has identified an anomaly corresponding to part of the former moat, suggesting that at least some buried remains are present.
- 3.7 The moated site has not been accurately dated, although an antiquarian author suggests that it was the site of a manor house of the De Sneedham family who are mentioned in the records of St Peter's Abbey, Gloucester in the 12th and 13th centuries AD (Bazeley, 1878).
- 3.8 The scheduled monument derives its significance primarily from its archaeological interest as defined by the extant moat, the deposits within it and any buried archaeological remains within the scheduled area that are related to it. The monument also has some historic interest, as it illustrates the nature and appearance of the medieval landscape in the locality and is associated with the history of the De Sneedham family, the history of settlement at Sneedham and with the general history of the medieval aristocracy of Gloucester.

Setting and Contribution made to Significance

- 3.9 The field in which the monument lies represents a setting that is considered to contribute to the monument's significance in a neutral way, neither harming it nor particularly enhancing it. The field's openness allows for an experience of the moat within a setting of agricultural fields and, with its fenced enclosure, the remnant of the moat is preserved and not subject to intensive erosion.
- 3.10 The modern field was created following the amalgamation of several fields during the construction of the M5 motorway. These fields originated in the post-medieval period, as enclosures of agricultural land, with their form fossilising the earlier medieval agricultural pattern. The field formerly contained ridge and furrow earthworks (a remnant of the medieval landscape) and other earthworks that aerial photographs have identified as having been previously destroyed by ploughing.
- 3.11 As such the field does not represent the historic setting of the moated site and, the capping layer of modern material has altered the landform within it, meaning that the impression of the monument's topographic surrounds is a modern construction.

- 3.12 Beyond the site the only aspects of the wider landscape that contribute to the monument's significance are those that have a demonstrable historic association with it, and therefore contribute to its historic interest. These include the settlement at Sneedham's Green.
- 3.13 The contribution made by the green is however diminished by the difficulty of experiencing the moat from it, and thus appreciating the link between the two. Glimpsed views are possible through the hedge that divides the green from the field at the site, but the moat is not prominent in them.
- 3.14 Elsewhere the wider surroundings of farmland have little relevance to the significance of the moat, representing a neutral aspect of its setting, and one from which the asset; being low to the ground; is not readily experienced. The motorway is considered to represent a negative aspect of the monument's setting because traffic on it creates a constant noise that dominates the experience of the area.

Constraints and Opportunities for development

- 3.15 Notwithstanding any direct impacts upon the scheduled monument, development of the site would certainly be within its setting, and would have the potential to impact upon its significance.
- 3.16 Potentially, changing the character of the setting from an agricultural field to residential development could cause harm to the monument's significance; changing a neutral setting into one that has a negative effect. However, as the monument's setting does not reflect its historic context, development also has the potential to enhance the experience of the monument by 'opening up' the historic landscape in the locality. The monument could be made more publicly accessible, and an intelligible link between it and related elements of the surrounding historic landscape could be re-established.
- 3.17 Any change to the monument's setting would have to be carefully managed in consultation with Historic England. Archaeological evaluation of the monument, including the part that is probably capped by modern overburden, would potentially provide a valuable source of data that could be used to inform a future management plan, thereby securing a direct physical benefit for its form and fabric.

Non-designated Heritage Assets

- 3.18 There are no known, non-designated heritage assets recorded within the site on the Gloucester City HER. Non-designated heritage assets within 500m of the site include the buried remains of Late Iron Age and Roman period settlement at Winneycroft farm, to the immediate north-east of the site; a find site of Roman pottery at the M5 to the immediate south-east of the site; medieval agricultural ditches and three Second World War sites consisting of a former depot, a search light battery and part of a former anti-aircraft battery.
- 3.19 Roman period archaeological remains are fairly common in the hinterland of Gloucester, which was a Roman *Colonia*. Finds of Roman date are known from the locality and, at Winneycroft

Farm, c. 40m to the north-east, archaeological remains of a small settlement, consisting of enclosed roundhouses, has been recorded (Cotswold Archaeology, 2014).

- 3.20 In addition, during the construction of the M5, Roman pottery was recorded within the section of the motorway that is adjacent to the site. Given this evidence, it is considered to be possible that Late Iron Age or Roman period buried remains are present within the site. Such remains would be most likely to consist of buried infilled ditches or pits, associated with agriculture, and may be related to the settlement identified to the north-east. Such remains would be likely to be of low archaeological significance, although remains of settlement could be of moderate significance.
- 3.21 The archaeological trench evaluation at Winneycroft Farm also recorded buried remains of medieval date, consisting of buried infilled furrows and evidence for arable agriculture across the field to the immediate north of the site. It is likely that agricultural activity extended into the site and that similar remains are located within it. Such remains would be considered of low archaeological significance.
- 3.22 Although Second World War remains are present in close proximity to the site, there is no evidence to suggest that any of this activity extend to within it. As such there is considered to be very little potential for buried remains from this period to occur or be encountered within the site.

Aerial Photographs

- 3.23 Aerial photographs, covering the site and its immediate environs, were identified within the collection maintained by the HEA in Swindon. Photographs show the site prior to disturbance during the construction of the M5 motorway, and show cropmarks associated with the scheduled monument. A photograph taken in 1969 (during the construction works) shows the extent of disturbance, illustrating that the entire site area, including the area of the scheduled monument, was disturbed.
- 3.24 A photograph taken in 1946 shows the southern part of the scheduled monument with part of the moat preserved within the course of a later field boundary ditch. Linear earthworks can be seen within the interior of the moat and an entrance is apparent on the east side. The image also shows ditches and ridge and furrow earthworks across the field to the north of the monument.
- 3.25 Later photographs from the 1950s and 1960s show that many of the earthworks seen on the 1946 image had been levelled by ploughing. Some of these photographs show cropmarks reflecting the former extent of the moat and possibly interior features within the moated area. A photograph dating from 1955 shows possible cropmarks to the east of the moated site that might reflect buried remains in this area.

Geophysical Survey

- 4.1 In December 2016 a geophysical survey was carried out at the site (GSB, 2016). This did not record any anomalies of definite archaeological potential, although it did record an anomaly related to a field boundary, part of which is thought to correspond to a part of the former medieval moat.
- 4.2 Uncertain anomalies were recorded that might represent buried archaeological remains, beyond the extent of the scheduled monument, associated with the moated site. However, given the nature and extent of modern disturbance, such anomalies could also represent the presence of modern debris in the topsoil.

Conclusions

- 5.1 The presence of the scheduled monument within the site presents an 'in principle' constraint only to development within the scheduled area, because of a presumption in favour of its physical retention.
- 5.2 The monument does not however present a significant constraint to development within the remainder of the site. Whilst development within the monument's setting has potential to harm its significance, it also presents opportunities to deliver enhancement. This is on the basis that the asset is in poor condition, where the preparation and implementation of an improved management regime could bring about a long term improvement in its conservation.
- 5.3 With regard to non-designed heritage assets, no known assets are located within the site. Evidence from aerial photographs, and from the consideration of known archaeological remains within the site's locality, suggests that there is potential for archaeological remains to be preserved within the site. Nevertheless, the geophysical survey did not identify any potentially significant anomalies other than those representing known features, although its results may have been affected by the presence of modern overburden.
- 5.4 Any previously unrecorded remains would be unlikely to be of greater than low significance, although the presence of medieval settlement remains associated with the scheduled moat cannot be ruled out.
- 5.5 The presence of buried remains within the site is unlikely to represent a constraint to development, and any archaeological remains may in fact be capped by a deep layer of modern overburden deposited during the construction of the M5 motorway. This may mean that they are buried at such a depth that development within these areas would have no impact upon them in any event, ensuring that they could be physically preserved within the site.

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**Appendix 4 –
JSP Inspector Letter, September 2019**

Examination of the West of England Joint Spatial Plan

Inspectors: Malcolm Rivett BA (Hons) MSc MRTPI and Steven Lee BA (Hons) MA MRTPI

Programme Officer: Helen Wilson

Lisa Bartlett
Senior Responsible Owner
JSP

11 September 2019

Dear Ms Bartlett

West of England Joint Spatial Plan (JSP) Examination

1. Further to our letter of 1 August 2019 we write to set out in more detail our fundamental concerns about the soundness of the West of England Joint Spatial Plan (JSP). However, we are not seeking to comment on all the issues discussed at the hearings held so far and instead focus on the key points which have led us to conclude that there are very substantial soundness problems with the plan.
2. At the outset we wish to note that we recognise the enormous amount of effort and resources the Councils have dedicated to preparing the plan and their commendable commitment to joint working. On our part we have always sought to examine the plan in a positive and pragmatic way. However, ultimately we must examine its soundness against the tests set out in the *National Planning Policy Framework*, most particularly to ensure that the JSP is both justified and effective. The Councils will, of course, be aware that many of the points we raise in this letter are ones which have also been made, albeit in numerous slightly different ways, by examination participants (including local residents, parish councils, community groups and the development industry) at Regulation 19 consultation stage, in response to the consultation on additional evidence prepared during the examination, in hearing statements and at the hearings themselves.

The Spatial Strategy and Selection of Strategic Development Locations

3. The Councils confirmed at the hearings that the proposed 12 strategic development locations (SDLs) are an integral part of the plan's spatial strategy and that there is no overarching spatial strategy which sits above the SDLs and has guided their selection. On this basis it is therefore clearly a pre-requisite of the justification and soundness of the JSP's spatial strategy that the SDLs have been selected against reasonable alternatives on a robust, consistent and objective basis.
4. Moreover, although policy 1 details a housing supply figure for each district, these are simply a 'bottom-up' summation of (i) existing local plan commitments, (ii) assumptions on 'urban living' and non-strategic growth and (iii) anticipated delivery at each of the relevant SDLs. Furthermore, it was confirmed at the hearings that, in terms of the 17,000 or so dwellings

identified as needed to be provided for at SDLs, no requirement figures (either precise or indicative) have been considered or identified for any individual settlements, for each local authority area or for any other sub-area of the West of England as a whole. Thus, we understand that the SDLs were selected on the basic presumption that any candidate SDL anywhere within the plan area could meet the plan area's housing needs just as well as any other candidate.

5. However, given that the plan area comprises two housing market areas (Wider Bristol and Bath) and that the Councils and examination participants have referred to various local housing needs (eg Bristol City's 'unmet' needs and those of Weston-Super-Mare and north South Gloucestershire), we are not persuaded that this approach is justified. For example, in the light of such local housing needs, we do not find it credible that housing at Charfield or Buckover SDLs, in the north of South Gloucestershire, could meet the same needs as would be provided for some 25 miles or so away by Churchill or Banwell SDLs in the south of North Somerset; or indeed that any of these four SDLs would meet the same needs likely to be provided for by Brislington or Whitchurch SDLs on the edge of the Bristol built-up area.
6. Nevertheless, notwithstanding the above, the specific reasons given for selecting the chosen SDLs and rejecting other reasonable alternatives (most comprehensively set out in Appendix 5 of the *Consolidated Sustainability Appraisal* (WED009), prepared in response to our initial letters) show that housing needs below the plan area-wide level were in fact instrumental in selecting at least some of the SDLs. For example, it is indicated that Charfield and Buckover SDLs were selected, in part, because they would help to meet the housing needs of the north of South Gloucestershire. Consequently, by definition, the vast majority of candidate SDLs, which are not in this part of the plan area, could not hope to be selected in the light of this factor. Whilst meeting the housing needs of the north of South Gloucestershire could, in principle, be a justifiable aim of the plan, as far as we can tell it has never been clearly cited as such, other than in connection with the reasons given for selecting or rejecting individual candidate SDLs within South Gloucestershire. Nor has this aim itself been appraised through SA or tested against possible alternatives. In a similar vein many of the other reasons given for the selection or rejection of SDLs have not been clearly stated to be aims or objectives of the plan, nor robustly appraised against alternative approaches.
7. We appreciate that some of the reasons given for the selection/rejection of candidate SDLs match or align with the eight principles set out in paragraph 4.2 of *Topic Paper 2* (SD7A) – eg directing housing growth away from the north east of Bristol towards the south east or embracing housing delivery models such as garden villages. At the hearings the Councils variously and confusingly stated that these principles (a) had informed the selection of SDLs, (b) merely describe the selected SDLs, and (c) both of these. Furthermore, we note that there is no reference to these principles in *The Formulation of the Emerging Spatial Strategy* document (SD7C) of November 2016, which we understand was the first published document in which selected SDLs were identified. Indeed, as we understand it, these principles were not first published until a year or so later in the first version of *Topic Paper 2* (SD7B) at the time of the Regulation 19 consultation on the

plan. Consequently, we cannot be certain what the selection process actually entailed.

8. Moreover, even if it could be demonstrated that these principles did form the basis on which the selection/rejection of SDLs was undertaken (a) there is no priority or sequential approach to them (other than for 'urban living') so it is unclear how SDLs have been selected against them when most candidates are likely to meet at least one of the principles; (b) there is no comprehensive and consistent assessment of candidate SDLs against the principles; and (c) as far as we can tell, no appraisal or testing against possible alternatives has been undertaken of the principles themselves. Additionally, we remain to be convinced that, in terms of assumed mitigation measures (eg transport), candidate SDLs have been appraised on a consistent basis and that realistic reasonable alternatives for the size/configuration of SDLs have been considered.
9. The problems caused by the absence of a spatial strategy which is not based on specific SDLs are particularly highlighted in relation to the Green Belt, the protection of which is a strong element of national policy. The plan contends that exceptional circumstances exist to remove land from the Green Belt for five of the proposed SDLs (totalling around 8,550 dwellings, taking account of anticipated delivery after the current plan period). However, on the stated basis that any candidate SDL could meet the plan area's housing needs just as well as any other, there would, on the face of it, be little justification to select SDLs in land currently designated as Green Belt when there are reasonable alternatives outside the Green Belt. Nonetheless, we recognise that early Sustainability Appraisal work identified that a strategy of entirely avoiding the Green Belt would be likely to result in unsustainable patterns of development. However, in the absence of any follow-up evidence to demonstrate broadly how much housing development would be appropriate both outside and within the Green Belt to ensure the plan provides a sustainable pattern of development, we cannot see how exceptional circumstances to remove land from the Green Belt for five SDLs and around 8,550 dwellings can be demonstrated. If we were to accept that there are, in principle, exceptional circumstances to remove land from the Green Belt there is no clear evidence as to why there should not be considerably more or considerably less housing on land currently in the Green Belt as advocated by many examination participants.
10. We appreciate that *Topic Paper 2* explains that SDLs in the Green Belt were selected only after all candidate SDLs outside of this designation, deemed to be sustainable, suitable and deliverable, had been identified. This approach could potentially be justified if it was not for the fact that the plan identifies as a contingency location (to be brought forward at a later date if needed) land at east Clevedon which is outside of the Green Belt. We have reached no view on the merits of an SDL at east Clevedon. However, whilst we appreciate that the Councils now wish to modify the plan so as not to make reference to contingency locations, it does not appear to be consistent with the approach detailed in *Topic Paper 2* to select SDLs in the Green Belt in preference to east Clevedon.
11. As stated in our previous letter we have not definitively reached the view that any of the individual SDLs proposed in the JSP could not, in principle,

form a sound part of a plan for the West of England or for any of the individual local authority areas. However, in the light of the above, we conclude that robust evidence has not been provided to demonstrate that the 12 SDLs proposed in the plan have been selected against reasonable alternatives on a robust, consistent and objective basis. Consequently, given that the SDLs are an integral part of the plan's spatial strategy, we cannot conclude that the spatial strategy is itself sound. Additionally, the absence of a robust SDL selection process or a strategy which is not based on specific SDLs means that there is not a clear basis on which to select alternative/additional SDLs (either in a review of the JSP or in local plans) should this be necessary if one were to "fall away" (eg because of deliverability problems) or if the quantum of development needs were to change over time.

12. We first set out our concerns about the spatial strategy and the SDL selection process in June 2018, a few weeks into the examination. In the spirit of pragmatism and recognising the desirability of getting a sound plan in place, we gave you the opportunity to prepare a considerable amount of further evidence in an attempt to address these concerns. Unfortunately, this has not been successful and for the reasons detailed above our concerns remain and, indeed, have deepened. In the light of this we consider that any further work to simply re-justify the selection of SDLs included in the plan or any change in the way the existing strategy is merely articulated in the JSP, could not now be considered to be anything other than retrospective justification of the plan. Consequently, it would be very unlikely to persuade us that the SDLs, and thus the spatial strategy overall, were selected on a robust, consistent and objective basis.
13. Instead, we believe that it is likely to be most appropriate for the Councils to return to the plan preparation process to formulate a robust, consistent and objective framework against which candidate SDLs can be selected for inclusion in the plan. Whilst it is not the only possible way the problems we have identified could be addressed, this could involve developing, as a first stage, a clear, high-level spatial strategy for the plan area which, not based on specific SDLs, identifies how housing, employment and other development should be broadly distributed. The selection of specific strategic development locations included in the plan would then logically follow on from this. However, it must be recognised that the 12 currently-proposed SDLs might or might not be the ones most appropriate to include in the plan in the light of any such strategy. Moreover, we do not think there is currently the evidence on which we could formulate such a strategy and, in any case it would almost certainly involve key policy decisions which we believe are most appropriately made by the Councils/Combined Authority themselves. This is essentially a plan preparation function and, given that it is fundamental to the plan as a whole, is not one which can be easily carried out during the examination.

Strategic Development Location Policy Requirements

14. Notwithstanding, and separate from, our concerns about the selection of the SDLs included in the plan, we also expressed concern in our first letter at the start of the examination about the plan's Chapter 4, paragraph 66 statement that the long list of SDL policy requirements (policies 7.1 – 7.12) are a

“starting point” and would “evolve”. This is not a basis on which formal development plan policy should be written and adopted because it creates undesirable ambiguity and uncertainty. The Councils’ response at that stage was merely to suggest modification of paragraph 66 to remove the “starting point” and “evolve” references.

15. Since then the SDL policy requirements have, in fact, evolved with a significant number of modifications proposed to them by the Councils during the examination up to this point. And, given the amount of further work necessary to progress many of the SDLs to local plan site allocations, we would be surprised if there were to not be a need for the requirements to evolve further. The situation with regard to the Nailsea SDL, brought to our attention at the hearings, highlights this point: policy 7.7 makes clear that the Nailsea SDL relates to “land to the south west of Nailsea”. However, the Councils indicated that, in the light of responses to the *Issues and Options Consultation* for the *North Somerset Local Plan*, they are currently reconsidering the location of the Nailsea SDL. Whilst we reach no conclusions on the relative merits of these two locations, this demonstrates the potential for over-prescriptive policy 7.1 - 7.12 requirements to constrain the ability of local plans to formulate robust site allocation policies for the SDLs.
16. We also recognise that to be acceptable in planning terms the SDLs will need to be supported by infrastructure and comply with various other policy requirements. However, in the light of the above and based on the comments of representors on the requirements detailed in policies 7.1 – 7.12 (as proposed to be modified by the Councils), we consider it likely that we would ultimately conclude that many of these requirements are too specific, and provide insufficient flexibility, to be effective as formal development plan policy in the JSP. This is particularly so in advance of allocation of the sites and when there is, thus, no certainty about their precise location.
17. We do not dispute the Councils’ argument that for the SDLs to be deemed sound evidence is needed to demonstrate that it is realistic that deliverable infrastructure requirements could be brought forward to make the developments acceptable in planning terms. However, the need for such evidence does not then automatically justify as formal planning policies for SDLs (which are not site allocations) specific infrastructure and other detailed requirements.
18. We would not be able to reach final conclusions on these policy requirements in advance of discussing them in detail at hearings. Nonetheless, as a result of the discussions already held on the principle of the SDL policy requirements, we believe it likely that we would ultimately conclude that many of the policy 7.1 – 7.12 requirements would inappropriately constrain the Councils in preparing robust site allocation policies for deliverable housing developments in the subsequent local plans. On this basis they would not be justified or effective.
19. We envisage there are two main possible ways for this problem to be addressed. If the Councils are keen to set out, comprehensively and in detail, specific infrastructure and other requirements for the SDLs which are ultimately included in the JSP, then this is likely to be most justifiably and

effectively done in connection with formal allocation of the SDLs. However, if the Councils remain committed to the allocation of the SDLs in the individual authorities' local plans, then for the JSP to be sound it is likely to be necessary to significantly reduce in number and/or make much more flexible the current requirements set out in policies 7.1 – 7.12. It could also be appropriate to use supporting text (as distinct from formal policy) to indicate the specific issues which are likely to need to be considered in formulating the local plan site allocation policy requirements for the SDLs. The adoption of one approach for some of the SDLs and of the other approach for the remainder, as raised as a possibility at the hearings, would also potentially be feasible.

Non-Strategic Housing Growth

20. Policy 2 provides for non-strategic housing growth to be brought forward through the follow-on local plans. Whilst the policy itself does not indicate the amount of this type of development, Figure 5 (and supporting evidence) is clear that a total of 3,400 dwellings is assumed. However, the written evidence and the responses from the Councils at the hearings do not convincingly explain the derivation of, or justify, the assumed 3,400 dwelling non-strategic housing growth provision.
21. We appreciate that in response to our initial letters the Councils have now considered through the *Consolidated Sustainability Appraisal* a higher, 5,000 dwelling, non-strategic growth option. Nonetheless, at the hearings the Councils confirmed that the *Consolidated Sustainability Appraisal* does not set out the reasons for rejection of this reasonable alternative in favour of the JSP strategy. Indeed, in seeking to justify the selection of the JSP strategy against reasonable alternatives, the *Consolidated Sustainability Appraisal* simply refers the reader back to *Topic Paper 2*, a document prepared before a number of reasonable alternatives (including the 5,000 dwelling non-strategic growth alternative) had been appraised. Obviously this does not assist in justifying the selected 3,400 figure for non-strategic housing growth.
22. Notwithstanding the above, through the discussions at the hearings it became apparent that there is, in reality, no cap set in the JSP to the amount of non-strategic housing growth which could be allocated in local plans or granted planning permission. Indeed, if other sources of housing supply (commitments, 'urban living' and SDLs) were not to deliver as anticipated, increasing the amount of non-strategic housing provision above 3,400 dwellings would seemingly be the easiest way of the Councils ensuring that the overall supply of at least 105,500 homes could be achieved.
23. On the evidence we have read and heard we consider that high levels of dispersed development across the West of England, unguided by any strategy, would not be sustainable. In the light of this (and the potentially un-capped amount of non-strategic housing growth which could come forward) we find it particularly concerning that the JSP does not provide any steer on where non-strategic housing growth should be located or of the housing needs it should be seeking to address, other than the Chapter 3 paragraph 11 reference to enabling "local communities to thrive". Moreover, the fact that it is assumed that non-strategic housing growth could take

place on land to be removed from the Green Belt through local plans (and we understand that there are such proposals in emerging local plans) is of particular concern. We do not have the evidence to determine whether or not exceptional circumstances exist to remove land from the Green Belt for any particular non-strategic housing growth development site. Nonetheless, the JSP in effect allowing the removal of land from the Green Belt through local plans for non-strategic housing growth (particularly when there is no limit to the amount of such release) does not sit comfortably with the Councils' contention that SDLs have only been proposed in the Green Belt after all other sustainable alternatives for housing have been exhausted.

24. In the light of the above we consider that to be sound the plan should set out a clear policy steer on the amount and broad location of housing needs to be provided for by non-strategic housing growth. However, we anticipate that such policy would require the preparation of a considerable amount of justifying evidence and, potentially, assessment against reasonable alternatives. In the absence of this we are not in a position to advise on the content of this policy.

Employment Land Requirements

25. Paragraph 5 of Chapter 1 of the JSP makes clear that the scope of the plan includes identifying the amount of employment land needed across the West of England and the most appropriate spatial strategy for this growth. This is intended to be addressed through JSP policy 4, which supports the delivery of 82,500 additional jobs across the plan period, primarily at 13 existing key strategic employment locations. Additional employment land is also identified at most of the SDLs. Clearly, given that we have not yet held a hearing session on policy 4, we cannot reach any final conclusions on it, including importantly with regard to the justification of the 82,500 additional jobs growth figure. Nonetheless, the 82,500 figure aside, based on all we have heard and read to date (including the Councils' Policy 4 (Matter 5) hearing statement) we remain to be convinced that the policy is effective given that it does not detail the amount of employment land to be provided for across the plan area as a whole, at the identified key strategic employment locations or within each district. Indeed, this particular omission seems to conflict with paragraph 5 of Chapter 1 of the plan.
26. In response to concerns set out in our initial letters the Councils have now, through the *Consolidated Sustainability Appraisal (CSA)*, considered higher jobs targets and related alternative distributions of employment land to that set out in policy 4. However, notably there is no appraisal of alternative distributions of employment land to meet the Council's preferred additional jobs target of 82,500 including, potentially, alternatives to the provision of employment land at SDLs. In the light of this we believe it to be a strong possibility that we would conclude that there is not the evidence to demonstrate that proposed distribution is an appropriate one.
27. Moreover, if we were to conclude that the jobs growth figure should be higher than 82,500, the CSA's consideration of alternative strategies for delivering this would then become a key consideration. Whilst we recognise that planning for housing and employment is intrinsically linked, the approach taken in the CSA of appraising together, as single scenarios, higher

housing and jobs figures than proposed in the plan, means that it is difficult to assess the extent to which the identified positive and negative sustainability effects arise from the housing or employment elements of each scenario. Furthermore, the seeming assumption in this appraisal that provision for more than 82,500 additional jobs would have to be accompanied by higher housing provision than the JSP requirement figure is contrary to the Councils' argument presented in respect of the objectively-assessed need for housing. That was that the plan's housing requirement figure of 102,800 would provide the necessary labour force to accommodate significantly more than 82,500 additional jobs.

28. Furthermore, and fundamentally, we are not convinced that providing for a higher jobs growth figure through employment land allocations at additional SDLs over and above those included in the plan (as is assumed in the *Consolidated Sustainability Appraisal*) is the only or most obvious reasonable alternative. This is particularly so bearing in mind the evidence which demonstrates that there is already more than sufficient employment land to meet the 82,500 jobs figure. In this context there is no convincing evidence to demonstrate why additional jobs could not be accommodated within, or as expansion of, the 13 existing key strategic employment locations. On the face of it such an approach would be seemingly more sustainable than providing for new employment land on greenfield sites at additional SDLs.
29. In summary, whilst we cannot currently reach final conclusions on it, we foresee a strong possibility of us concluding that there are fundamental soundness problems with policy 4 which would require significant change to the plan. This would be likely to require the preparation of a significant amount of justifying evidence and a more thorough appraisal of realistic, reasonable alternatives.
30. At the July hearings we also discussed in some detail two other specific employment-related issues:

Employment Land Provision within the Green Belt

31. Notwithstanding the plan's statement at Chapter 4, paragraph 24 that existing employment land is sufficient to deliver both strategic employment needs and the anticipated jobs growth over the plan period, the plan proposes significant new employment land provision at most of the SDLs. This includes on land currently in the Green Belt at Yate (approximately 30ha), Coalpit Heath (up to 5ha) North Keynsham (around 50,000 sq m of employment floorspace) and Whitchurch (quantum to be determined through the local plan). The Councils' exceptional circumstances justification for the removal of land from the Green Belt for the SDLs relates solely to housing provision and we have seen no written evidence which justifies why there are exceptional circumstances to justify the removal of a significant amount of Green Belt land at these locations to provide for new employment land. Moreover, at the hearings the Councils were unable to provide any meaningful explanation or justification in this particular respect. Whilst we could not reach a final conclusion on this point until we had held hearings in respect of policy 4 and the relevant SDLs, without a clear and convincing exceptional circumstances case being presented, we would be unable to conclude that the employment land elements of these SDLs are sound.

Bristol Port and Bristol Airport

32. Policy 4 identifies Bristol Port and Bristol Airport as key strategic infrastructure employment locations and at the hearings we heard, largely undisputed, evidence of their fundamental importance to the economy of the plan area as a whole and the wider region. However, whilst policy 4 states that the Port and Airport (along with the other key strategic employment locations) will ensure the continued economic growth of the West of England, there is no clear indication of how this should be achieved or what it means in terms of the allocation of land.
33. The Councils explained to us that it would be for the local plans to consider the case for the allocation of land (and, if necessary, the removal of land from the Green Belt) to provide for growth at the strategic employment locations. However, it is a stated aim of the JSP to identify the amount of employment land needed and the most appropriate spatial strategy for this growth. Moreover, the Port and Airport are of fundamental and strategic importance to the whole of the West of England and, consequently, any growth at them would also be likely to have implications for the wider employment strategy for the area. In this context we anticipate it very likely that we would ultimately conclude that it is not a justified and effective approach for the plan to delegate, to a subsequent local plan, decisions on the nature, scale and location of growth at the Port and Airport and the existence or otherwise of exceptional circumstances to remove land from the Green Belt in connection with this. Consequently, we envisage it very likely that we would conclude that, for the plan to be sound in respect of the Port and Airport strategic employment locations, decisions on these matters should be addressed in the JSP. It is also the case that a considerable amount of work would be likely to be necessary to prepare the evidence to make justified decisions about the approach to take.

Objectively-Assessed Need for Housing

34. As indicated at the Matter 3a hearing session we would not be in a position to reach a conclusion on whether the contended objectively-assessed need (OAN) for housing for the plan area of 102,800 (as detailed in the Council's proposed modification to policy 1) is justified until we have held hearings in connection with affordable housing and the employment land requirement. Nonetheless, if we were to conclude that this figure is robust this would not address or ameliorate any of the other problems with the plan we have identified. Alternatively, if we were to conclude that the robust OAN for the West of England is a significantly higher figure (potentially up to the 140,000 dwellings contended by a number of participants to the examination) then clearly a very substantial amount of work to the plan would need to be undertaken to reflect this.

Other Matters

35. The elements of the plan which we have yet to hold hearings on are policy 4 (The Employment Land Requirement) and policies 7.1 – 7.12 (the proposed SDLs) – which we have already touched-on in this letter – and policy 3 (The Affordable Housing Target), policy 5 (Place Shaping Principles) and policy 6 (Strategic Infrastructure Requirements).

36. Based on the representations and written evidence, policy 3 and policy 6 are as controversial as any of the other elements of the plan and we note that significant modification of both policies has already been proposed by the Councils. We are unable to comment further at this stage. However, given this context and based on our experience so far with the policies we have fully examined through hearings, we would be surprised if a substantial amount of further evidence work to justify either the policies as currently proposed by the Council or further modifications to them to make them sound were not to prove to be necessary.
37. Moreover, hearing evidence on these other aspects of the plan would not resolve the fundamental soundness problems we have identified as a result of the hearing sessions so far held.

The Way Forward

38. As previously mentioned the focus of this letter is primarily on the key points which have led us to conclude that there are very substantial soundness problems with the plan. Nonetheless, for the reasons detailed above, we consider that an enormous amount of work in relation to these issues alone is needed to produce a plan for the West of England which is likely to be capable of being found sound.
39. Furthermore and crucially, given our findings detailed above on the additional evidence work already prepared during the examination, the production of yet further work which simply seeks to re-justify the JSP as it currently stands, most particularly with regard to the selection of SDLs and the spatial strategy, is unlikely to be successful in achieving a plan we could find sound. Importantly, such an approach would also be likely to lack credibility amongst many examination participants, some of whom have already commented that they consider that the Sustainability Appraisal work undertaken since the plan was submitted for examination has simply sought to retrospectively justify the JSP strategy. Instead, we believe that the Councils need to return to the plan preparation process and, with open minds, reconsider many fundamental elements of the JSP. These include (but are not necessarily limited to):
- the overall spatial strategy;
 - the process and principles by which SDLs are assessed and selected;
 - the plan's detailed policy requirements in respect of SDLs and/or potential allocation of some/all SDLs;
 - the approach to, and policy steer on, the purpose, amount and distribution of non-strategic growth; and
 - the plan's proposals for overall employment land provision if, as we believe is likely, we were to conclude that policy 4 is not sound, including proposals for, or the policy steer on, growth at Bristol Port and Bristol Airport if, as we believe is likely, we were to conclude that the plan is not currently sound in these particular respects.

40. Additionally, if we were to conclude that the contended OAN of 102,800 is significantly underestimated, there would be a need to provide for a significantly higher objective-assessed need for housing in the plan.
41. Moreover, each of these elements cannot be considered in isolation, as the preferred and justified approach in relation to one is likely to impact on at least some of the others. Furthermore, there would need to be robust justification that there are exceptional circumstances to justify any proposed alterations of the Green Belt boundary for housing or any other purposes. It is also very likely that key policy decisions would need to be taken in respect of most or all of these elements of the plan.
42. Ultimately, we envisage that the work likely to be necessary goes way beyond what could be reasonably addressed by main modifications to the submitted JSP and, in fact, would be tantamount to the preparation of a new plan. The *Planning Practice Guidance* (both in its current and previous versions) makes clear that where the changes recommended by Inspectors would be so extensive as to require the virtual re-writing of the plan, it is likely to be suggested that the local planning authorities withdraw the plan. We anticipate that the changes necessary would amount to the virtual re-writing of the JSP.
43. The key policy decisions which will need to be made are also ones which are most appropriately considered by the Councils themselves, in consultation with the local community and development interests, as part of plan preparation, rather than in the context of an ongoing examination in which changes to an already submitted local plan can only be made by main modifications recommended by us as Inspectors. Indeed, the changes we envisage are necessary to the JSP are so fundamental that, in effect, the examination would have to be run again. It is likely that the necessary main modifications would result in a radically altered plan which would need to be, in its entirety, the subject of full public consultation. This would then need to be followed by the publication of completely new Matters, Issues and Questions for the examination and written statements would need to be invited and hearings held on all aspects of the altered plan.
44. Furthermore, before this process could even begin, it is likely that further hearings and exploratory meetings would need to be held in order for us to reach definitive views on the soundness of key issues such as the OAN for housing and the jobs growth target and to discuss the exact nature and scope of the substantial amount of further work needed to be undertaken. Given that it has taken 16 months to get the examination to the current point, we envisage it would take at least the same amount of time, and probably considerably longer, to ultimately complete it. Continuing with the examination is unlikely to be an effective and efficient means of achieving a sound plan.
45. At the hearings we heard from a number of examination participants who were already confused by the processes of, and multiple rounds of consultation undertaken in, getting the plan to this stage. This was particularly so given the parallel processes of developing and consulting on the emerging local plans for each authority and the *Joint Local Transport Plan 4*. Continuing with the examination along the, undesirable, lines

detailed above would also be likely to be more complicated in consultation and public participation terms than returning to the plan preparation stage, thus potentially hindering the community's ability to comment on and influence the plan.

46. Consequently, whilst we recognise that the Councils' preference might be to continue with the examination if at all possible and, although we will not reach a final decision on the way forward until we have had the opportunity to consider the Councils' response to this letter, we remain of the view that withdrawal of the plan from examination is likely to be the most appropriate option.
47. In reaching these conclusions we have had due regard to the ambition and admirable commitment to joint working of the Councils. Indeed, we wish to reiterate the important point made in our previous letter that our concerns about the JSP should not, in any way, be interpreted as meaning that we consider the preparation of joint plans or strategic planning across local authority boundaries to be fundamentally problematic. Moreover, the key soundness problems with the plan which we have identified do not intrinsically or fundamentally relate to the fact that the plan is a joint one or a high-level strategic document.
48. As with all local plan examinations we have approached our examination of the JSP with both pragmatism and a recognition of the desirability of getting a sound plan in place as soon as possible. In this regard we advised you of our significant concerns about key elements of the plan at an early stage in the examination and then gave you the opportunity to prepare and consult on a large amount of additional evidence. It is unfortunate that this work, and the discussion at the hearings, have not addressed our concerns. We are also of the view that the far-reaching and fundamental nature of the plan's soundness problems are such that they could not be appropriately addressed by a commitment to an early review and update of the plan.
49. In our approach to the examination we have given great weight to the guidance to Inspectors on the examination of local plans in Greg Clark's letter to the Chief Executive of the Planning Inspectorate of 21 July 2015 (as recently restated in James Brokenshire's letter of 18 June 2019). But ultimately we believe that these letters cannot be interpreted as an indication or expectation that a sound plan can be achieved in every local plan examination. Indeed, the recently updated *Procedure Guide for Local Plan Examinations* makes clear (third bullet point of paragraph 8) that one of the three possible outcomes for an examination is that there are soundness problems with a plan which it is not possible to address by main modifications and that, in advance of a formal recommendation of non-adoption, the Councils would be asked to consider withdrawing the plan.
50. At the hearings we also discussed the relationship between the JSP and the forthcoming Spatial Development Strategy (SDS), which the Mayor for the West of England Combined Authority area has both the power and responsibility to produce. We understand that the precise nature of, and timescale for producing, the SDS is yet to be agreed and that work on the JSP commenced long before this power/responsibility was enacted. Nonetheless, it was explained at the hearings that an SDS for the Combined

Authority area of Bath and North East Somerset, Bristol and South Gloucestershire is likely to be prepared at the same time as the statutory five-year review of the JSP, with the reviewed JSP for these three Council areas plus North Somerset remaining in place together with the SDS. On this basis there would be an SDS covering three Council areas, sitting above a JSP for four Council areas (which would need to be in general conformity with the SDS), below which would sit four local plans for each of the Councils which would each need to be consistent with the JSP and (other than in the case of the North Somerset Local Plan) also in general conformity with the SDS.

51. Whilst ultimately this is a matter for the Combined Authority and Councils, it seems to us that the process of preparing and examining this suite of plans and strategies could well be very complex, potentially confusing to the public and unwieldy and would be likely to delay, rather than accelerate, the planning and delivery of new development across the Combined Authority area and North Somerset. With this in mind, now might be an appropriate time for the Councils and Combined Authority to consider whether the currently envisaged approach in respect of the SDS, JSP and local plans continues to be the most appropriate.
52. We recognise that the Councils/Combined Authority may need some time to consider their response to this letter and, therefore, we are setting no deadline for it. However, it would be helpful if you were able to give us a broad indication of the likely timescale for us to receive a full response as soon as possible. We have asked the Programme Officer to post a copy of this letter on the examination website but, as with our previous letter, we are not inviting, nor envisage accepting, comments on it from any other examination participants.
53. Finally, whilst we understand that the Councils and Combined Authority are, understandably, extremely disappointed by our findings, we would like to thank them for their positive approach to, and helpful co-operation and assistance throughout, the examination.

Yours sincerely,

Malcolm Rivett and Steven Lee

INSPECTORS



**Appendix 5 –
Water Environment Assessment, May 2021**

Snow Capel, Matson Water Environment Assessment: Tier 2

Final Report

May 2021

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Revision History

Revision Ref/Date	Amendments	Issued to
15/03/2021	Draft Interim Report	Finlay Jenkins
14/05/2021	Final Report	Finlay Jenkins

Contract/

This report describes work commissioned by Finlay Jenkins, on behalf of Edward Ware Homes Limited, by an email dated November 12th, 2020. Eleanor Williams and Michael McDonald of JBA Consulting carried out this work.

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Purpose

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Executive Summary

This report has been prepared by JBA Consulting, on behalf of Edward Ware Homes and Bromford Developments Ltd and is a Tier 2 water environment assessment of the moat associated with the scheduled monument, Moated site at Sneedham's Green, 220 m north east of Green Farm (Historic England ref. 1019399) located at Land at Snow Capel Farm, Matson, Gloucester in support of a planning application for residential development.

The potential for impacts upon the significance of the scheduled monument have been considered in accordance with Historic England guidance: Preserving Archaeological Remains – Decision-taking for Sites under Development (HE, 2016) and, in particular, adopting the tiered assessment approach set out in Appendix 3 of this document, regarding the moat's water environment.

In summary, the assessment concludes that the proposed residential development could result in a fall in the water level in the moat, potentially resulting in the drying out of the moat and a negative impact upon the significance of the scheduled monument.

The desk-based review, alongside an evaluation of site-specific data, indicates that the moat is supported by a combination of surface water inputs, comprising direct rainfall and rainfall-runoff, and shallow groundwater inputs, most likely comprising near-surface seepage.

The potential for a reduction in water inputs to the moat from the proposed development includes decreased surface water runoff, due to the installation of site drainage such that runoff may no longer reach the moat, and reduced groundwater seepage, due to the excavation of ground surface material, depending on the engineering approach to foundation design. This could result in the drying of the moat water body unless a supplementary water supply is incorporated into the development design which can permit maintenance of current moat water levels.

Nonetheless, given the lack of clear evidence for the current supply of the moat by a groundwater spring source beneath its base, there are no concerns regarding the hydrochemical signature of the water that might be used in future to maintain moat water levels and, therefore, whether the top up source is derived from surface water or groundwater.

In conclusion, the assessment has not identified any reason why potential effects on the moat water level from the proposed development could not be appropriately mitigated to safeguard the continued existence of the moat water body.

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1 Introduction

1.1 Background

Snow Capel comprises a site for a proposed residential development which incorporates a Scheduled Monument, "Moated Site at Sneedham's Green". The monument consists of the extant remains of a medieval moated site which is water filled and may potentially represent a source of waterlogged archaeological deposits. It is a designated heritage asset in planning terms and, therefore, any impacts should be considered in the context of the relevant statutory provisions and as set out in the National Planning Policy Framework (NPPF). This report forms part of the assessment of any potential impacts on the Scheduled Monument and will inform the development proposals for the surrounding area in the future. It should be read alongside the Archaeological and Heritage Assessment (Environmental Dimension Partnership (EDP), 2021¹).

1.2 Aims

Historic England's (HE's) guidance document for sites under development² includes a specific evaluation methodology in relation to water environment assessment techniques in Appendix 3³. This adopts a tiered approach to assessment, the need for which depends on the likely scale and significance of the potential risks involved.

This report constitutes a Tier 2 water environment assessment in accordance with the HE assessment guidance which provides:

"a basic qualitative assessment of water balance to identify groundwater levels, flow directions and identify key potential influences on the groundwater system".

The report first presents the details of the Moated Site (Section 2) and the approach adopted for the HE Tier 2 assessment (Section 3). Baseline data for the Moated Site in terms of the hydrological and hydrogeological setting are given in Section 4. This is supplemented by monitoring from ground investigation data to consider the inputs to and outputs from the groundwater system, and the likely water supply mechanism to the Moated Site. A conceptual understanding of the Moated Site is presented in Section 5 based upon the findings of this investigation, which provides an evaluation in the context of the tiered assessment approach. A summary of this study is provided in Section 6.

¹ EDP, 2021. Lane at Snow Capel Farm, Matson Gloucester. Archaeological and Heritage Assessment. April 2021.

² <https://historicengland.org.uk/images-books/publications/preserving-archaeological-remains/>

³ <https://historicengland.org.uk/images-books/publications/preserving-archaeological-remains/heag100d-appendix3-water-environment-assessment-techniques/>

2 Site Information

2.1 Moat Details

The Moated Site at Sneedham's Green consists of the known extent of a medieval moated site; a sub-rectangular or trapezoidal moat enclosing an island. The northern side and parts of the western and eastern sides of the moat are extant, enclosing an area c. 66 m by 42 m which is open on the south side. The extant moat is c. 14 m at its widest point, c. 8 m at its narrowest (EDP, 2021) and c. 1 m deep. It is water-filled and may contain waterlogged archaeological deposits, potential related to its medieval history and usage.

As a scheduled monument the moated site is of the 'highest significance' in terms of NPPF. A detailed description of the moat and its history is set out in the accompanying Archaeological and Heritage Assessment (EDP, 2021). In terms of the asset's significance the EDP assessment states that:

'The scheduled monument derives its significance primarily from its archaeological interest as defined by the extant moat, the deposits within it and any buried archaeological remains within the scheduled area that are related to the moated site. The monument also has a degree of historic interest as it illustrates the nature and appearance of the medieval landscape in the locality and is associated with the history of the De Sneedham family, the history of settlement at Sneedham and with the general history of the medieval aristocracy of Gloucester.'

Details of the historic and current archaeological mapping for the site are set out in the EDP (2021) report.

Figure 1 - Moated Site at Sneedham's Green



The moat remains lie within a 'bowl' in the landscape formed by placement of material from the construction of the adjacent M5 motorway, and its edges are overgrown with vegetation. Fluctuating water levels have, at times, flooded the surrounding area, and have resulted in a recent drainage ditch being cut west towards the lane-side ditch to alleviate this.

The scheduled area extends beyond the extant part of the monument to the south, encompassing the former entirety of the moat and a 2 metre buffer around it.

The southern extent of the former moated enclosure is located underneath a layer of overburden deposited during the construction of the M5 motorway, although it is understood that this section of the moat had already been incorporated into a later post-medieval field system that crossed the site and which was infilled when the site was cleared prior to the construction of the M5 (EDP, 2021; Figure 4).

Within this area, the archaeological and heritage assessment concludes that there is only a low potential for any well-preserved archaeological remains to survive of the former southern arm of the moat (EDP, 2021), and it is apparent from aerial photography that the monument was disturbed during the motorway's construction. The ground surface was clearly scoured, both within the moated enclosure and around it, which is likely to have impacted upon buried remains. Further detail on the treatment of the moat during the 20th century is given in the Archaeological and Heritage Assessment (EDP, 2021).

This report will form part of a tranche of assessments which will help to inform and enable consideration of the potential for development to impact on the significance of the Scheduled Monument. It will be considered alongside other specific heritage assessments, including archaeological trial trenching, and a comprehensive assessment of the setting of the heritage asset (EDP, 2021).

2.2 Proposed Development

The proposal is for a residential-led scheme with associated access road, landscaping and infrastructure. The proposed site plan is not yet fixed although is being influenced by both this study and the archaeological assessment (EDP, 2021).

3 Historic England Assessment Tiered Approach

3.1 Introduction

This section sets out the main requirements of the HE tiered approach and the responses to the key questions posed by each tier of assessment.

3.2 Tier 1 Assessment

Where the future preservation of the Moated Site is being considered for the long-term sustainability of the retention of the features, the HE Tier 1 Assessment aims to address the following questions:

- "Are the deposits, in which significant waterlogged archaeological remains are located, hydraulically connected to the wider groundwater system?"; and
- "Are these remains likely to be located under the water table or have been so in the past?"

The information which supports this evaluation comprises:

- A review of published maps (geology, heritage boundaries/elevations, watercourse elevations, drainage features) and borehole logs; and
- On-site observations and measurements about channel depths and vegetation growth.

This review enables the completion of an initial conceptual model of the water environment at the Moated Site, including estimation of the local groundwater level. The conceptual model is presented in Section 5 and addresses the questions above.

With regards to the first question above, it is not currently known if there are significant waterlogged archaeological remains in the base of the moat, since no intrusive surveys have been carried out in this area. It is the existence of the moat itself that is of significance, but the risk cannot be taken that significant waterlogged remains do not exist and, therefore, it is important that the current hydrological conditions of the Moated Site are not derogated by the proposed development. Nonetheless, the moat is likely to have been a waterlogged feature for some or most of its history, assuming that a natural water supply mechanism was readily available when the moat was constructed. Recent anecdotal information also indicates that it has been inundated in recent years.

The HE guidance also states:

"To appreciate whether such levels are likely to be sustained, an assessment of annual rainfall versus annual evaporation for the area is needed (data that are available on the Meteorological Office website). This indicates whether an area has a net positive effective rainfall that can infiltrate and feed into the local water system, or is an area of negative effective rainfall, where there is little water available to infiltrate into the local groundwater system"

An assessment of net effective rainfall is made in Section 4.4.

The outcomes of the Tier 1 assessment within this document, below, identified that more, site-specific, data are required, as part of a Tier 2 assessment.

3.3 Tier 2 Assessment

The aim of a Tier 2 assessment is to refine the first conceptual model with site-specific data, and to ask some more detailed assessment questions at minimal cost. The Tier 2 assessment aims to address the following questions:

- "Will the deposits in which significant waterlogged archaeological remains are located be underwater all year?"; and

- *"If not, what variation can be expected and what is influencing the variation (anthropogenic or natural)? And are these variations short-term or long-term / permanent?"*.

Currently, only anecdotal information exists with regards to the first question, because site-specific monitoring data are only available for the Moated Site between December 2020 and April 2021. It is understood from anecdotal evidence that the remains are waterlogged year-round. A full annual cycle of monitoring data would be required to fully satisfy this question.

The monitoring data obtained to date are evaluated in Section 4 to review potential controls on groundwater levels and their variations, although these are limited to short-term data.

In addition, the available data are used to allow estimation of a qualitative review of water inputs for the Moated Site. This evaluation has helped to identify four potential different mechanisms for water supply to the moat, outlined in Section 5.

4 Water Environment Baseline

4.1 Introduction

This section sets out information about the baseline hydrological and hydrogeological conditions at the Moated Site.

4.2 Site Location, Topography and Land Use

The site is located on the southern edge of Gloucester, between Sneedham's Green to the west and the M5 to the south east (Map 1; Appendix A) and is centred on National Grid Reference (NGR) 385116 214169.

The current land use of the site is a pasture field which has also historically been the case according to historic mapping (back to 1888-1913). The biggest change in land use locally was the construction of the M5 motorway in this area in 1969/1970. The current field layout was created following the amalgamation of several fields during the construction of the motorway.

A topographic survey was carried out in January 2021 (Appendix B) by K.J. Hall Surveyors. Spot heights indicate that the moat edge itself lies close to 56.1-56.3 mAOD (above ordnance datum) and the land in the centre of the moat rises to ~56.7 mAOD.

The land is raised around the moat on the north, and southern sides to ~57.7 mAOD and is highest on the eastern side ~61.8 mAOD such that the moat is in a slight hollow. Overall, the site slopes down from the east to ~55.3 mAOD in the northwest, and the land falls away slightly to the northeast in the direction of surface water drainage. To the north west of the site, the land rises up to Robins Wood Hill at 198 mAOD.

An estimate of moat depth of 1.5 m has previously been made from the archaeological interpretation, which indicates that the base of the moat lies at ~54.7 mAOD. In April 2021 a bathymetric survey of the moat was carried out by JBA Consulting (Appendix B), using a dipper approach to survey a number of spot depths across the water body without any disturbance to the moat bed, so as to avoid potential impacts to any unknown archaeological features which may reside at the base of the moat. In summary, the deepest part of the moat occurred in the southwestern arm, at 55.34 mAOD, somewhat shallower than previously speculated. Depths of 55.5 mAOD also occur elsewhere across the moat. Heavy silting and vegetation may disguise the likely original depths.

4.3 Site Catchment and Hydrology

The site lies within the headwaters of the Sud Brook, a lower catchment tributary of the River Severn, which emerges close to the road at Snow Capel Farm, immediately southwest of the moat (Figure 1). This ditch flows northeast around the north (downgradient) side of the moat to join another tributary of the Sud Brook (NGR 385550 215300) before flowing north through Gloucester to join the Severn close to the intersection of the Severn with the Gloucester and Sharpness Canal.

There are numerous other mapped surface water features to the west of the Moated Site, at Sneedham's Green (Figure 1). The Ordnance Survey (OS) 25 Inch (1892-1914) mapping indicates these ponds have existed for many years. However, these lie outwith the surface water catchment for the moat as drainage from these areas is from the north/west of the drainage ditch to the Sud Brook. In addition, catchment delineation data from the Flood Estimation Handbook (FEH) suggests that these Sneedham's Green ponds drain to the west.

The site inspection, undertaken by JBA on February 17th, 2021, followed several weeks of wet winter conditions. The Sneedham's Green ponds contained water close to ground level. Water in the Sud Brook close to the Moated Site was flowing to the north east. In addition, the whole field containing the Moated Site was very wet underfoot, and there was a flow in

the small drainage 'channel' exiting the moat on its west side, which flows to join the roadside drainage ditch of the Sud Brook. This flow was estimated by eye at ~4 l/s.

In the Sud Brook, water levels were noted at 54.85 mAOD in February 2017 (Intégrale, 2017). Recent topographic survey mapping (T&P, 2020) indicates that Sud Brook water levels are similar, at ~55 mAOD, whilst water levels in the moat at the time were ~56.2 mAOD.

The water level within the moat has also been recorded at 56.166 mAOD (T&P, January 2021) and 55.97 mAOD (JBA, April 2021). From GIS analysis, the surface area of the water body is estimated to be ~1,946 m², and the surface water catchment area around the moat is ~25,400 m².

Catchment information has been accessed from the Flood Estimation Handbook (FEH) and, using the most applicable catchment outline for the site, the BFI (Base Flow Index) here is estimated to be 0.356, which indicates that groundwater makes up a modest amount of surface water flow.

River levels near the site are monitored at Bondend Road on the River Twyver, 1.9 km north east of the site⁴ (Figure 1) and at Cheyney Close Level on the Sud Brook⁵ and indicate a rapid, flashy response to rainfall events.

There is no surface water flood risk indicated for the site by the EA flood mapping⁶.

4.4 Climate

The Flood Estimation Handbook (FEH) CD-ROM includes long-term average rainfall data for catchments in the UK. For the catchment comprising the site the Standard Annual Average Rainfall (SAAR) is 697 mm/yr for the period 1961 - 1990 (CEH, 2009).

Average annual rainfall (1961-1990) from a nearby gauging station (Chelt at Slate Mill) is 685 mm⁷. Other climatic data are available online e.g. rainfall data from Gloucester Weather⁸. In 2019, annual rainfall total was 681.4 mm whilst for 2020 was 1126.4 mm. Precipitation levels in January 2021, prior to the site inspection, were particularly wet, at 134.7 mm (roughly 20% of average annual total rainfall).

Values for potential evapotranspiration (PE) for 2009 are given for certain MORECS⁹ squares across the UK. For the square closest to the Moated Site¹⁰, PE was 610-649 mm whilst actual evapotranspiration (AE) was 530-569 mm.

Comparing an approximate long-term average annual rainfall value of ~690 mm and an annual AE rate of ~550 mm, the net effective annual rainfall is ~140 mm. A net positive effective rainfall is therefore indicated, although it should be considered that this balance may not be positive in prolonged dry weather, or drought years.

4.5 Site Geology

The bedrock geology¹¹ underlying the Moated Site comprises strata of the Jurassic age Lias Group (Charmouth Formation), which consists of dark grey laminated shales, and dark,

⁴ <https://riverlevels.uk/gloucestershire-upton-st-leonards-bond-end-road-lvl#.X6pfzGc3bcc>

⁵ <https://www.gaugemap.co.uk/#!Map/Summary/16545/12273>

⁶ <https://flood-map-for-planning.service.gov.uk/confirm-location?easting=383697&northing=218521&placeOrPostcode=gloucester>

⁷ <https://nrfa.ceh.ac.uk/data/station/spatial/54026>

⁸ <https://www.glosweather.com/climate>

⁹ <https://www.metoffice.gov.uk/services/industry/data/specialist-datasets>

¹⁰ http://nora.nerc.ac.uk/id/eprint/6357/1/Hydrological_Review_2006.pdf

¹¹ <http://mapapps2.bgs.ac.uk/geoindex/home.html>

pale and bluish grey mudstones. There are no mapped geological faults close to the Moated Site. There are also no mapped superficial geological deposits at the Moated Site. Geology mapped for the Moated Site is illustrated in the Groundsure report (Intégrale, 2017).

To the north west of the site, on Robins Wood Hill, the conical-shaped hill comprises strata of the Whitby Mudstone Formation, Marlstone Rock Formation and the Dyrham Formation. To the south of the site, and east of the M5, lies limestone, argillaceous rocks and subordinate sandstones of the Lias Group and Inferior Oolite Group.

Soils at the Moated Site are mapped as slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils with impeded drainage and are of the Martock Association (GSB Propection Ltd, 2017).

The nearest online borehole record (SO81SE20) is east of the site and is associated with the M5 motorway¹² and indicates 0.3 m of Made Ground (gravelly sandy clay and limestone gravel), overlying a silty clay, above the bedrock mudstone at 0.4 m below ground level (mbgl). Further along the M5 to the south west, another borehole log¹³ indicates a much thicker extent of Made Ground, up to 10 m deep, comprising concrete clasts and limestone gravel.

An aerial photograph taken in 1970 (during the motorway construction works) shows the extent of disturbance, illustrating that the entire site area, including the area of the scheduled monument, was disturbed (EPD, 2017). The M5 works resulted in the infilling of part of the former moat (that had been incorporated into a post-medieval field boundary) and also associated earthworks. Some of the remains are likely to be capped by this modern overburden. It is therefore noted that, whilst these deposits are referred to as Made Ground, they are largely re-worked overburden of predominantly natural clay materials.

Other boreholes from previous ground investigations on the site (Appendix C) indicate the presence of 1-3.5 m thick gravelly clay Made Ground, localised soft clayey Alluvium, and a continuous stratum of variably weathered soft through to stiff to very stiff Lower Lias clay (Intégrale, 2017¹⁴). The Made Ground appears to thicken to the south of the Moated Site, in line with the understanding that additional material was placed here during the construction of the M5.

Additional boreholes were installed in 2018 (T&P, 2018) (Figure 2). WS101 south of the moat indicates that Made Ground exists to 2.4 mbgl (55.46 mAOD), and WS102 shows 3.1 m thickness of Made Ground (also to 55.46 mAOD). To the northeast of the moat, WS8 indicates 1.6 m thickness of Made Ground, down to 55.90 mAOD.

A more recent site ground investigation (December, 2020) (T&P) indicates similar thickness and composition of Made Ground, with the Mudstone Bedrock encountered below clay-dominated Made Ground, with rock head occurring in some boreholes, typically 56 mAOD south of the moat (WS203, WS206 and WS207), 54.6 mAOD north of the moat and 55 mAOD west of the moat. The boreholes are completed with a cap within the piezometer and a cap flush to the ground surface.

Two further boreholes have more recently been drilled on the south and east sides of the moat (March, 2021; T&P), where Made Ground deposits are at their thickest. They indicate that, here, rock head is at ~57.5 mAOD.

¹² http://scans.bgs.ac.uk/sobi_scans/boreholes/19329370/images/19328817.html

¹³ https://webservices.bgs.ac.uk/GWBV/viewborehole?loca_id=2020020409474538549

¹⁴ Intégrale, 2017. Geotechnical and Phase II Contamination Report. Proposed Development Snow Capel.

Overall, although unmapped, the presence of Made Ground (associated with the motorway construction and typically comprising re-worked cohesive soils) at and surrounding the Moated Site is persistent.

The archaeological trial trenching report (Headland Archaeology, 2021¹⁵) identifies in more detail evidence for buried topsoil, which was possibly removed in some areas prior to deposition of the Made Ground. Nonetheless, due to the reworking and similarity in lithology between natural deposits and redeposited material as Made Ground, it is difficult to discern between the two across the Moated Site and, indeed between the superficial deposits and the top of the weathered upper part of the bedrock.

4.6 Hydrogeology

4.6.1 Aquifer Classification

The geological strata have been assessed for their hydrogeological properties. The Lias Group bedrock strata underlying the site are classified as a Secondary undifferentiated aquifer. As rocks with essentially no groundwater, the BGS mapping describes the Lias group as comprising a largely mudstone sequence with limestone and marlstone Rock forming local aquifers, yielding small supplies. The Dyrham Formation to the north west is classified as a Secondary A aquifer, whilst the oolite strata to the south of the site is a Principal Aquifer.

4.6.2 Groundwater Levels and Flows

Given the clayey nature of both the superficial and bedrock strata underlying the Moated Site, it is unlikely that there is hydraulic continuity between the groundwater and the local surface water drainage features.

Topographical control on the groundwater flow direction is likely and is, therefore, anticipated to be in the direction SE to NW locally within the Moated Site, and more broadly towards the north, following the direction of surface water drainage from the site.

This is supported by spot observations of groundwater levels on the Moated Site. From previous ground investigations, groundwater stands at 1.5-2.5 mbgl locally where old drainage ditches or the Moat occur (Intégrale, 2017). It is likely that this groundwater comprises a perched groundwater table within the Made Ground whilst the bedrock groundwater table may occur at some depth (e.g. 5-10 mbgl).

Groundwater was not encountered during drilling by T&P in 2018. Groundwater dip levels were subsequently recorded during gas monitoring visits between 54.8 and 61.9 mAOD. Saturated ground was encountered during several monitoring visits, with surface water also observed within the moat area. This included some of the monitoring wells being flooded from surface water.

Similarly, groundwater was not encountered during drilling the T&P in December 2020-January 2021. Interim spot water levels are given in Table 1.

¹⁵ Headland, 2021. Snow Capel, Matson, Gloucestershire: Archaeological Trial Trenching.

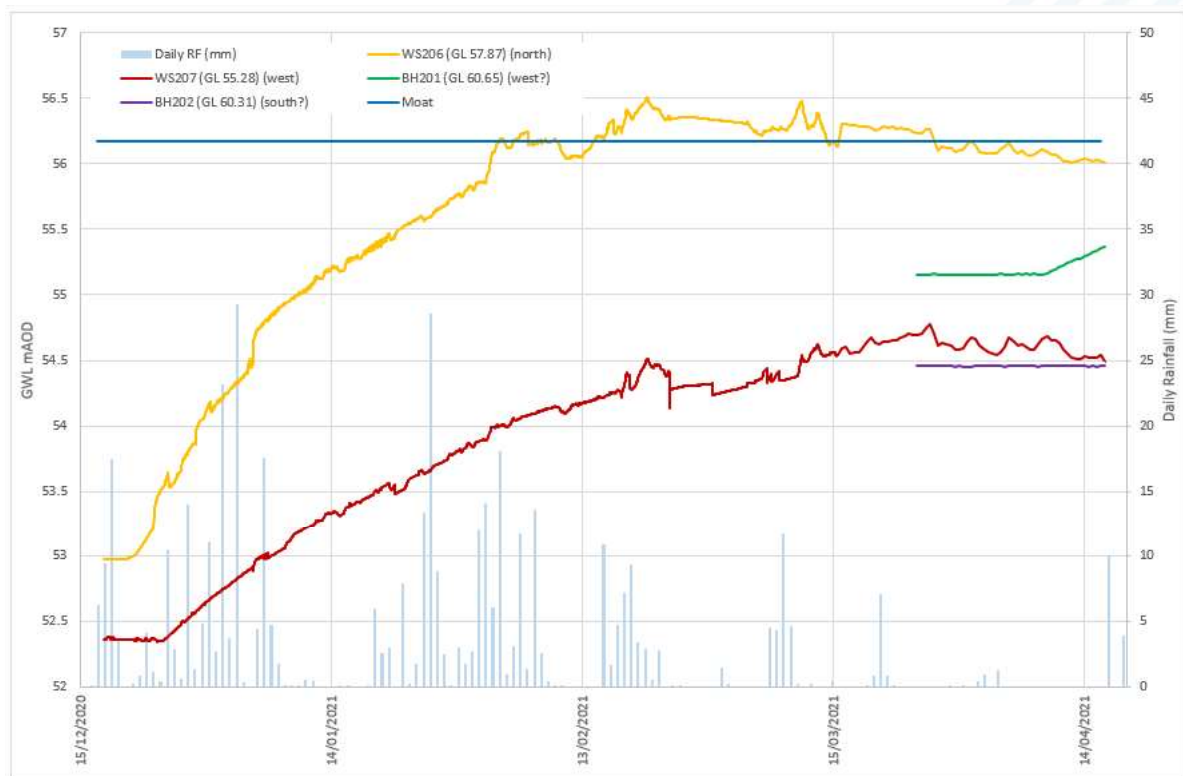
Table 1 - Groundwater Level Monitoring

BH ID	GL mAOD	Depth m	Monitoring	GWL mAOD 21/01/21	GWL mAOD 17/02/21
WS201	58.03	3	MG	55.59	56.03
WS202	58.22	3	MG	57.44	58.02
WS203	58.78	3	MG/bedrock	58.74	58.76
WS204	59.05	3	MG	58.05	58.25
WS205	58.57	3	MG	57.69	57.59
WS206	57.87	5	MG/bedrock	55.32	56.04
WS207	55.28	3	bedrock	54.45	54.48

Boreholes WS201-WS205 are all close together on the south side of the moat and indicate a water level range of 2.73 m even in such close proximity, with a gradient falling from east to west. The highest water level occurs in the borehole which has been completed into the top of bedrock. Water levels fall to the north and west and are lowest in the area to the west of the moat, in the area of lowest elevations. In some cases, the groundwater level is extremely close to the ground surface and there is potential, given the boreholes did not encounter groundwater at the time of drilling, that the water within the boreholes is rainwater fill. In the latest boreholes, BH201 and BH202, groundwater was also not encountered during drilling.

Continuous data are available for boreholes WS206, WS207, BH201 and BH202, and for the moat. For the moat, WS206 and WS207, data extend from December 17th 2020 to April 16th 2021. For BH201 and BH202, data extend from March 25th to April 16th. The data provided by T&P are provided in Appendix D and are summarised for comparison in Figure 2.

Figure 2 - Groundwater Level Continuous Monitoring Data



Data from the Gloucester rain gauge record¹⁶ are also included. All borehole records show an initially steady water level. However, in the shallow boreholes (WS206/WS207), levels rise over time following wet winter weather. Although the dataset for the newer boreholes is shorter, there is less evidence for water level rise of the same order of magnitude, and less variability in the steady water levels observed compared to those in WS206/WS207.

It is possible that the water level variability in boreholes WS206 and WS207 reflect ingress of rainfall/runoff directly into the piezometer tubing, given that the boreholes are completed flush to ground level, while the long-term trend is likely indicative of the water table within the clay.

There are no nearby regional groundwater monitoring boreholes available^{17,18}. A licenced groundwater abstraction well is noted within the southern corner of the Moated Site (18/54/20/0193, issued 1966 for general farming and domestic use; Intégrale, 2017). It is not known whether this abstraction is currently operational, and its existence was not evident during the site inspection.

4.7 Moat Water Quality

To explore the source of water to the moat, seven water samples were collected from a range of locations across the moat, and a further sample from the nearest other pond at Sneedham's Green for comparison on April 26th 2021 by JBA Consulting. The aim of the analysis was to investigate whether there was evidence for a groundwater signature within the water chemistry. Given that the M5 lies upgradient of the site, the selected determinands also aimed to detect whether runoff from the M5 motorway makes its way along any potential groundwater pathways e.g. between the base of the Made Ground and/or within the top weathered surface of the mudstone bedrock.

The presence of elements such as metals and polycyclic aromatic hydrocarbons (PAH) would help to determine whether a groundwater pathway exists between the adjacent motorway runoff, through the Made Ground to the base of the moat. The samples were analysed at an accredited environmental laboratory for a range of parameters, including major ions (Na, Ca, Mg, HCO₃, Cl, SO₄, NO₃, heavy metals (Cd, Cu, Zn and Pb) and PAH compounds). Given the 2021 winter conditions and likelihood of salts within the motorway runoff, it is considered that evidence of such parameters should be likely to be observed if indeed a pathway exists.

By spreading the samples across the moat, any spatial variability may provide an indication into the location where a spring source may be entering.

The results are presented in Appendix E. Overall, the composition of the moat appears fairly consistent with no obvious spatial variability indicating a spring source location which would have been evidenced by being strongly mineralised e.g. strongly sulphate signal. The most notable features are elevated chromium in the south-east sample, and presence of naphthalene in the north west sample, both of which could be associated with motorway run-off, although are not persistent across all samples. Zinc in all samples could also be linked to motorway run-off, although the low values are well below environmental quality standards (EQS)¹⁹, and do not provide clear cut evidence in themselves.

¹⁶ <https://www.glosweather.com/climate>

¹⁷ <https://www.gaugemap.co.uk/#!Map>

¹⁸ <https://eip.ceh.ac.uk/hydrology/water-resources/>

¹⁹ <https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit>

Overall, a similar chemical signature to the moat is seen at Sneedham's Pond. As such, in light of the above observations, a definitive groundwater signal is not observed in the moat from the water quality sampling.

4.8 Moat Water Balance

In order to provide further evaluation of the source of water to the moat, a preliminary water balance can be used to determine the likelihood of the ability of the surface water catchment to support moat water volumes through direct rainfall and rainfall-runoff. By estimating the volume of water in the moat and comparing this to an estimate of the volume of rainfall-runoff generated within the surface water catchment to the moat, an assessment can be made as to whether the moat can likely be supported by surface water inputs alone.

The annual volume of water required to support the moat at its current water level can be estimated from the approximate surface area (1,946 m²) and the evaporative losses, which are estimated at 0.55 m (determined in the earlier review of climate data). On this basis, the water volume required is ~1,070 m³/year.

From the earlier review of climate data, the effective annual rainfall is 140 mm. From a review of the site topographic data, the surface water catchment to the moat is ~25,400 m² extending to the east of the moat. On this basis, the available water volume from rainfall and surface runoff which could support the moat is ~3,560 m³/y. This is likely to be a conservative figure as it does not account for rapid runoff to the moat during heavy rainfall/flood events that would bypass some evapotranspiration accounted for in the effective rainfall calculation across the catchment. This suggests that the surface water catchment area is sufficient to top up the moat and overcome evaporative losses of ~1,070 m³/y. A proportion of the rainfall within this catchment will likely reach the moat as groundwater flow/baseflow where water can infiltrate to the water table. The groundwater flow is likely to mimic surface flow routes due to the topography. There may be some leakage from the moat to the west, downgradient of the moat. This is likely to be minimal due to the low permeability nature of the surrounding clay soils but would require hydraulic testing of the surrounding clay to ascertain groundwater flow rates from the moat.

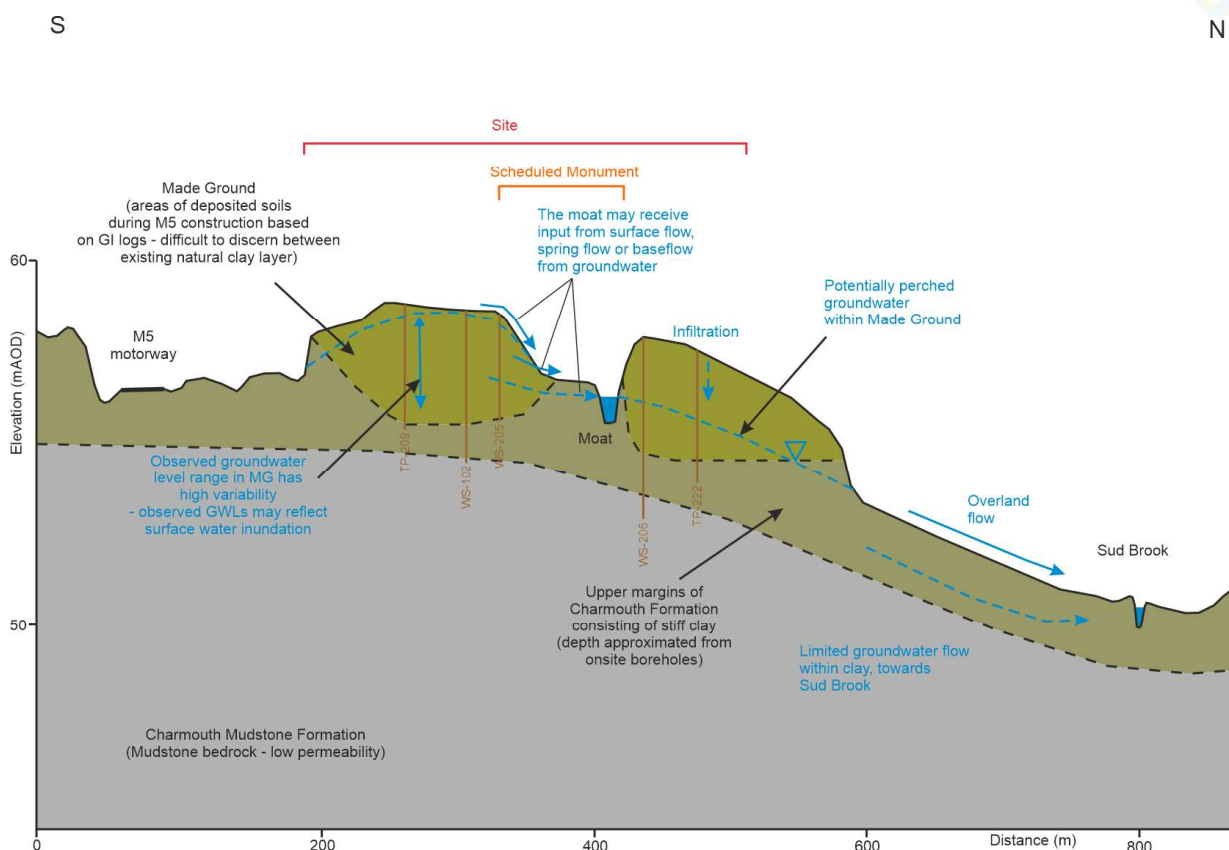
The above estimates have made several assumptions, including that the only water losses of the moat are through evaporation, and that no losses occur through the moat bed to ground. In addition, some of the rainfall on the surface water catchment area may also be lost to ground. In addition, the effective rainfall may be higher for open water than the estimate value, and so more water than indicated may be required to support the current moat water levels.

5 Hydrogeological Conceptual Model

The EA defines a conceptual model as "a description of how a hydrogeological system is believed to behave" and its development as "an iterative or cyclical process of development and testing in which new observations are used to evaluate and improve the model."

A preliminary conceptual model for the Moated Site and surrounding environment has been developed based on the information available, and is outlined in Figure 3, which has been constructed based upon the topography for the Moated Site and the site-specific data regarding depth of Made Ground and water levels.

Figure 3 - Conceptual Cross Section



The conceptual understanding is described as follows:

- The Lias Group mudstone bedrock, a low permeability formation, is largely unconfined at and near the Moated Site, with the outcrop recharge area occurring at the highest elevations of Robins Wood Hill to the north west of the site (up to ~198 mAOD). The upper surface of the bedrock illustrates evidence for weathering;
- Across part of the Moated Site are Made Ground deposits, located as a result of the construction of the adjacent M5 motorway. The deposits comprise slightly gravelly, slightly silty clays, and are relocated natural deposits. It is therefore difficult to differentiate between existing site material and that artificially placed here, such that the available site investigation data may overestimate the depth of the reworked soils. Nonetheless, it is anticipated that the natural material is likely to comprise the lower part of the subsoil profile;
- Observed groundwater levels at the Moated Site are between ~54 and ~59 mAOD within Made Ground deposits, and are locally variable although

largely emulating topography. Groundwater levels are likely to be perched within the generally low permeability deposits, targeting zones of higher permeability material lenses. However, there is potential that the observed water levels in fact reflect rainwater ingress and not a true groundwater level. Water level in the underlying bedrock are limited, but it does not appear that the moat is intrinsically hydraulically connected to the wider groundwater system. Furthermore, these remains are not likely to be located under a regional water table, or have been so in the past;

- Water levels in the closest surface watercourse, the Sud Brook to the west of the Moated Site, may not be in hydraulic connectivity with those in the moat. Those in the moat are ~1 m higher, although precise contemporaneous survey data for the ditch, nearest borehole (WS207) and the moat are not yet available;
- At this site, it does not seem likely that groundwater levels would be impacted by abstractions due to their absence locally;
- There are several options considered with regards to the likely water supply mechanism for the moat. The first is that groundwater is perched within the gravelly clay deposits and seeps laterally into the sides of the hollow in which the moat sits. Nonetheless, given that the boreholes were dry when drilled and only subsequently have an observed water level, it is possible that water supply to the moat is instead largely from direct rainfall input and surface runoff;
- The water supply mechanism to the moat may to be different now to when it was constructed, and different again since the construction of the motorway. A further water supply mechanism is that the construction of the motorway, and any associated drainage measures, has increased surface runoff rates locally, and that this water finds its way through the Made Ground, or at rockhead, towards the moat. However, water quality analysis has not indicated that this is the primary source of water to the moat;
- One further consideration is that anecdotal information from the local farmer indicates that the moat is thought to be fed by a spring. Evidence for this is that the moat never truly dries out during prolonged dry weather, in contrast to dry conditions observed at the Sneedham's Green ponds. Due to the age of the moat (Medieval), all the historic mapping available illustrates the existence of the moat and does not, therefore, afford the opportunity to observe if a spring was previously mapped, although it is possible that the existence of a spring prompted the selection of the site for the moat. There is no surface evidence of a spring emerging at the site. If a spring supply is the primary mechanism for maintaining water within the moat then it is more likely that the spring is sourced within the underlying low permeability bedrock. However, water quality analysis has not indicated that this is the case. It is likely that any spring that may have previously existed could have been since silted up and no longer functioning as it once did; and
- If local hydrological conditions have altered since the moat was constructed, it is useful to consider the likely conditions under which the moat was installed. With the exception of the deposition of Made Ground at the Moated Site during construction of the M5 the inherent geological conditions at the Moated Site are unlikely to have changed. As such, a lack of mapped permeable superficial deposits overlying a low permeability bedrock would suggest that water in the moat is sustained by runoff, perhaps from the historic southern ditch, unless a shallow groundwater source within weathered bedrock happened to persist at this location. It is possible that, prior to development of the area, that some runoff could have been derived from Robin's Wood Hill area, but this would seem unlikely at the present day meaning that the moat would be more vulnerable to

drying out in drier periods. This study has indicated that there is potential for some water to be supplied by near-surface seepage of shallow groundwater.

In summary, following an evaluation of the available information, it is concluded that the most likely water supply mechanism to the moat is a combination of direct rainfall, surface runoff, and shallow groundwater seepage/interflow.

6 Conclusions

An initial understanding of the water environment at the site has been developed with respect to the moat, in determining the likely water supply mechanisms to the site. Available site-specific datasets have been analysed to address the questions posed by the HE Tier 2 water environment assessment requirements. In summary, the most likely water supply mechanism to the site appears to be a combination of surface water run-off and shallow groundwater inputs.

In summary, the assessment concludes that the proposed residential development could result in a fall in the water level in the moat, potentially resulting in the drying out of archaeological deposits and a negative impact upon the significance of the scheduled monument, for the reasons below.

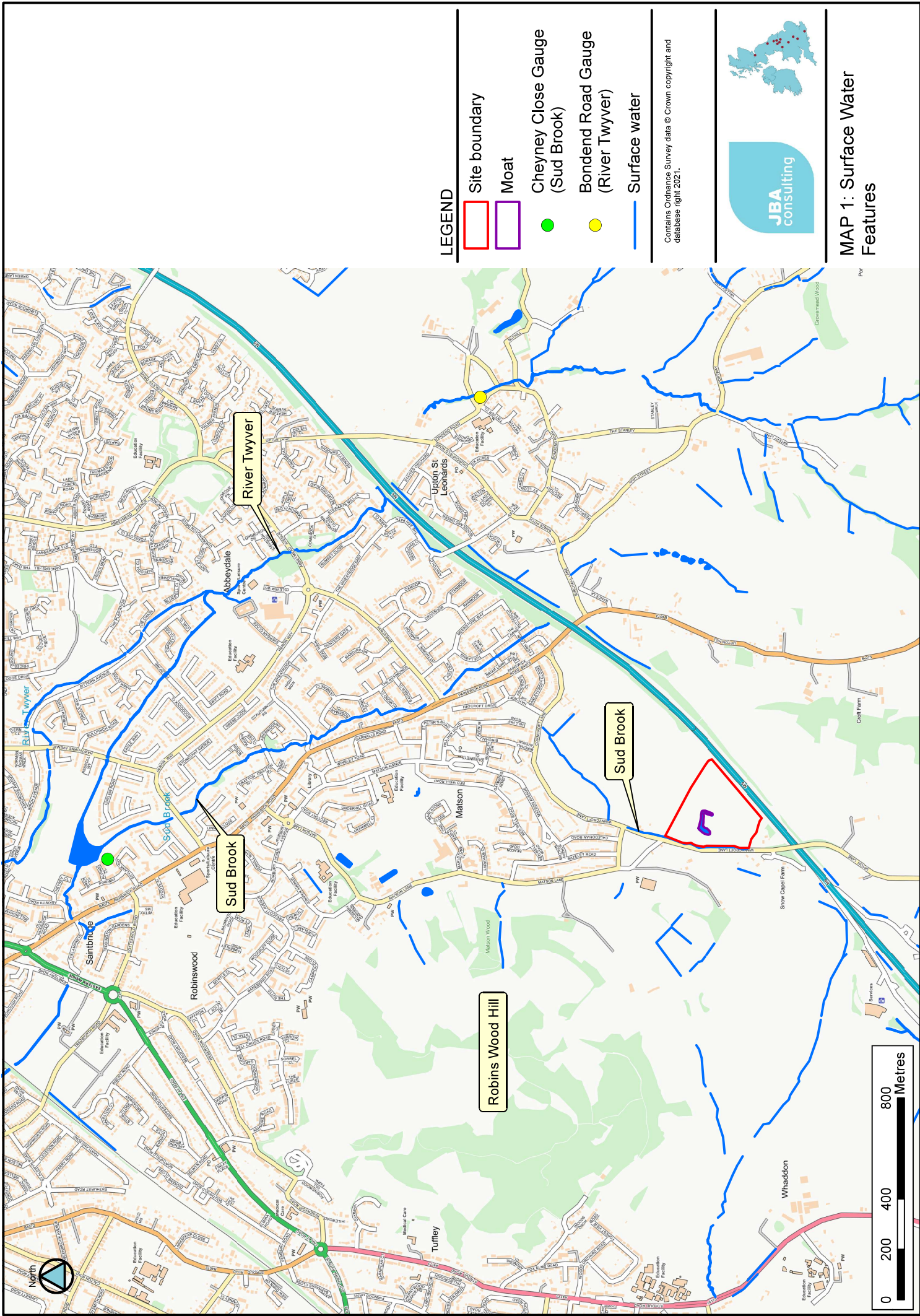
The potential for a reduction in water inputs to the moat from the proposed development includes decreased surface water runoff, due to installation of site drainage which might no longer reach the moat, and reduced groundwater seepage, due to excavation of ground surface material depending on the engineering approach to foundation design. This could result in the drying of the moat water body unless a supplementary water supply is incorporated into the development design which can permit maintenance of current moat water levels.

Nonetheless, given the lack of clear or indirect evidence for the current supply of the moat from a deeper groundwater spring source beneath its base, there are no concerns regarding the hydrochemical signature of the water used in future to maintain moat water levels and, therefore, whether the top up source is derived from surface water or groundwater.

As such, ongoing monitoring of the moat water levels prior to, during and post construction would be recommended alongside development of an appropriate drainage strategy to support the long-term preservation of the moat water body. Further monitoring would be not be considered to impact the timing of a planning application submission.

In conclusion, the assessment has not identified any reason why potential effects on the moat water level from the proposed development could not be appropriately mitigated to safeguard the continued existence of the moat water body.

A Appendices
Maps



LEGEND

- Site boundary
- Moat
- Cheyney Close Gauge (Sud Brook)
- Bondend Road Gauge (River Twyver)
- Surface water

Contains Ordnance Survey data © Crown copyright and database right 2021.



MAP 1: Surface Water Features

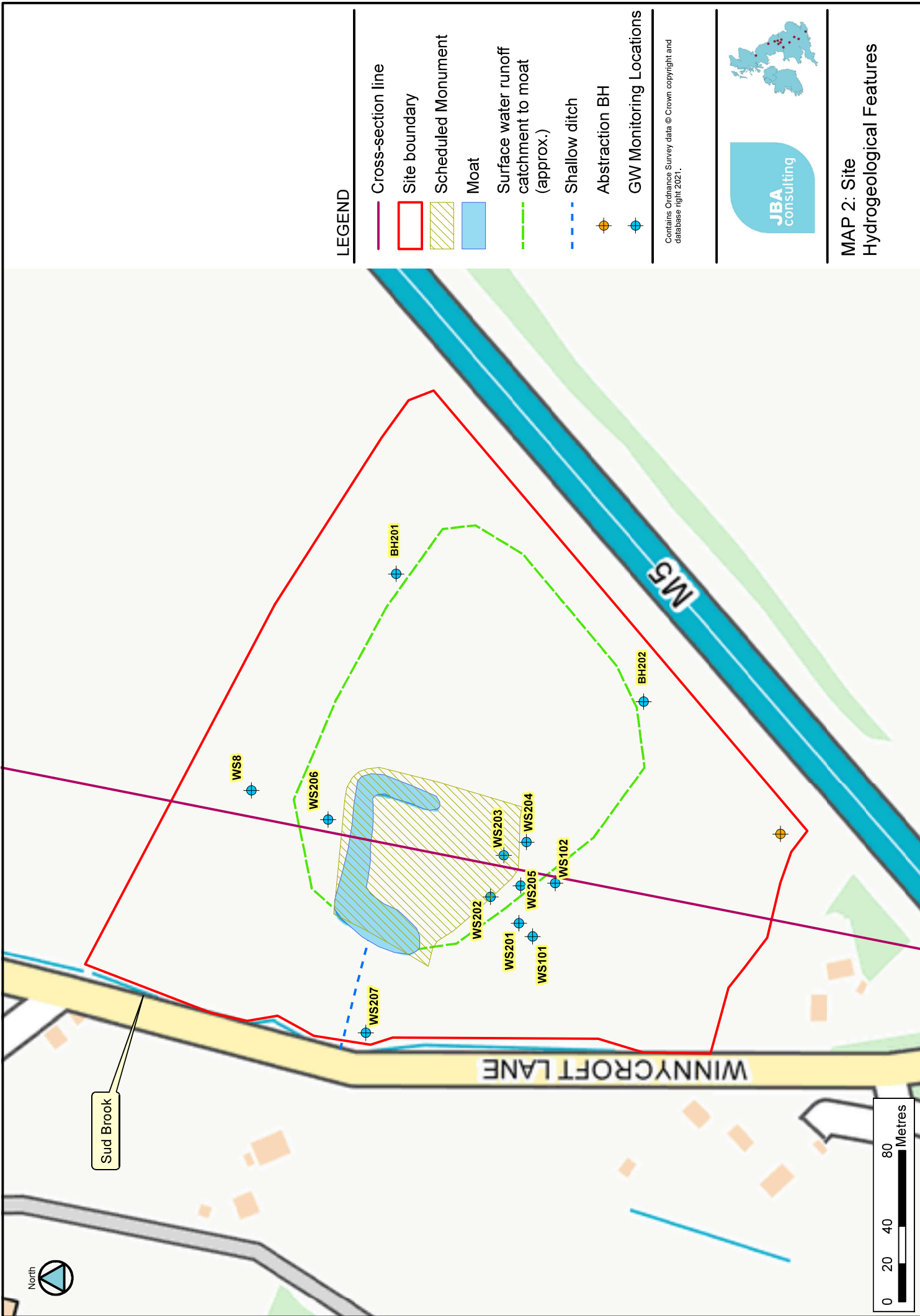
Robins Wood Hill

Sud Brook

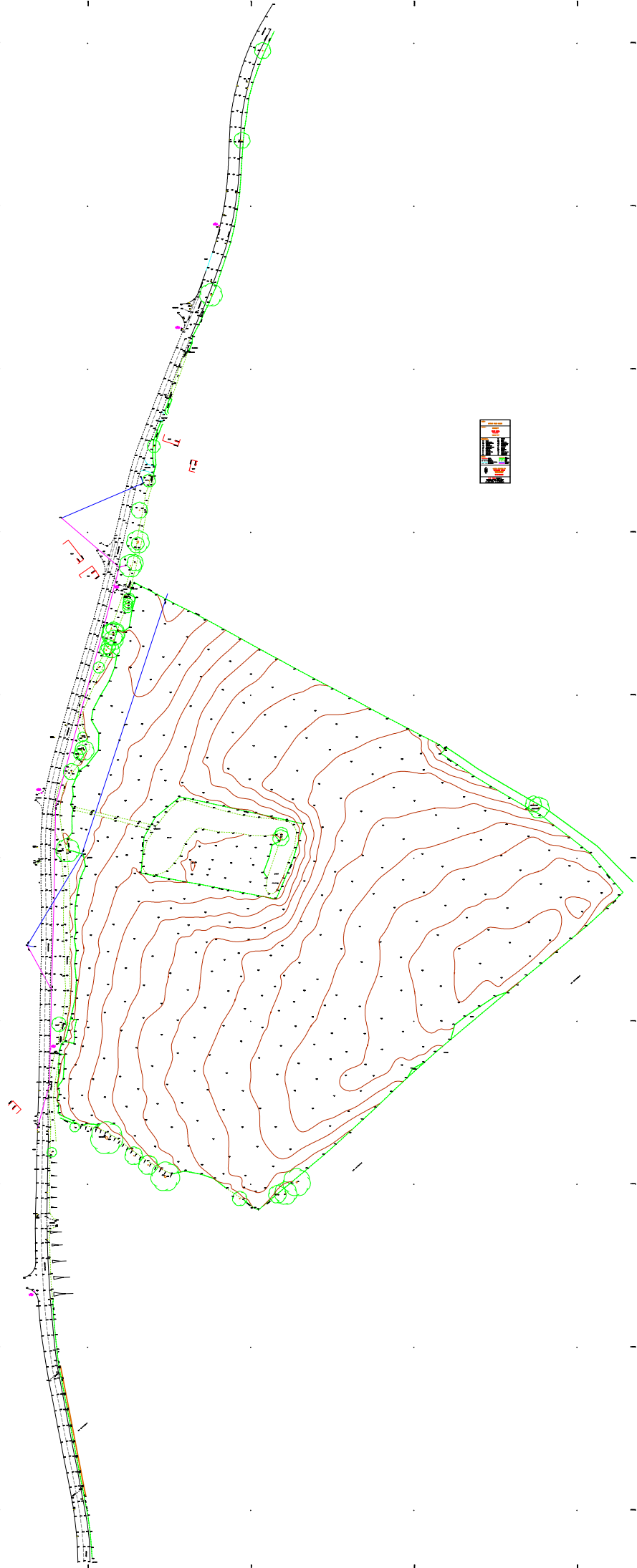
River Twyver

Sud Brook





B Site Topography and Moat Depths



C Borehole Logs



www.tandpregeneration.co.uk

Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS201
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 385051.65	Northing: 214139.61	Ground Level: 58.03mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
0.00 - 1.00 = 100%				57.93	0.10		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
0.50 - 0.60	ES1						MADE GROUND: Orangish brown mottled grey slightly gravelly silty CLAY. Gravel is subrounded fine and medium of limestone and rare brick.		
1.00 - 2.00 = 100%					(2.40)			1	
1.50 - 1.60	D2								
2.00 - 3.00 = 100%								2	
2.50 - 2.60	ES3			55.53	2.50		MADE GROUND: Dark grey silty CLAY.		
2.80 - 3.00	D4			55.38	2.65		MADE GROUND: Light grey mottled brown slightly gravelly CLAY with rare oraganic content and wood fragments. Gravel is subrounded fine and medium of limestone.		
				55.03	3.00		End of Borehole at 3.00m	3	
								4	
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	3.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS202
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 385065.17	Northing: 214153.38	Ground Level: 58.22mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
0.50 - 0.60	ES1	0.00 - 1.00 = 100%		58.12	0.10		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
1.20	D2	1.00 - 2.00 = 100%		56.72	1.50		MADE GROUND: Orangish brown mottled grey slightly gravelly silty CLAY. Gravel is subrounded fine and medium of limestone and rare brick.	1	
2.60 - 2.70	ES3	2.00 - 3.00 = 100%		55.72	2.50		MADE GROUND: Dark grey silty CLAY.	2	
				55.22	3.00		MADE GROUND: Light grey mottled brown slightly gravelly CLAY with rare organic content and wood fragments. Gravel is subrounded fine and medium of limestone.	3	
							End of Borehole at 3.00m	4	
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	3.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS203
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 385087.81	Northing: 214146.92	Ground Level: 58.78mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
		0.00 - 1.00 = 100%		58.68	0.10		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
		1.00 - 2.00 = 100%			(2.60)		MADE GROUND: Dark grey mottled orangish brown slightly gravelly silty CLAY. Gravel is subrounded fine to medium of limestone and rare brick.	1	
		2.00 - 3.00 = 100%						2	
				56.08	2.70				
				55.98	2.80		MADE GROUND: Dark greyish brown slightly sandy slightly gravelly silty CLAY. Gravel is subrounded fine to medium of limestone and rare brick.		
				55.78	3.00		Stiff orangish brown mottled grey silty CLAY. (CHARMOUTH MUDSTONE FORMATION)		
							End of Borehole at 3.00m	3	
								4	
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	3.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS204
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 385094.75	Northing: 214134.12	Ground Level: 59.05mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
		0.00 - 1.00 = 80%		58.95	0.10		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
		1.00 - 2.00 = 100%			(2.40)		MADE GROUND: Grey mottled brown slightly gravelly silty CLAY. Gravel is subrounded fine to medium of limestone and rare brick.	1	
		2.00 - 3.00 = 100%		56.55	2.50		MADE GROUND: Dark brown slightly gravelly silty CLAY with a high organic content including wood fragments. Gravel is subrounded fine to medium of limestone.		
				56.45	2.60		MADE GROUND: Dark grey slightly gravelly silty CLAY with rare wood fragments and rootlets. Gravel is subrounded fine to medium of limestone.		
				56.05	3.00		End of Borehole at 3.00m	3	
								4	
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	3.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS205
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 385071.59	Northing: 214137.59	Ground Level: 58.57mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
		0.00 - 1.00 = 100%		58.42	0.15		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
		1.00 - 2.00 = 100%			(2.05)		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology and rare brick.	1	
		2.00 - 3.00 = 100%		56.37	2.20		MADE GROUND: Orangish brown mottled grey slightly gravelly silty CLAY with rare wood fragments. Gravel is subrounded and rounded fine to medium of mixed lithology.	2	
				55.57	3.00		End of Borehole at 3.00m	3	
								4	
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	3.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS206
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 385106.17	Northing: 214239.91	Ground Level: 57.87mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
0.00 - 0.10	ES1	0.00 - 1.00 = 90%		57.72	0.15		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
0.40 - 0.50	ES2						MADE GROUND: Greyish brown mottled grey slightly gravelly silty CLAY with rare wood fragments. Gravel is subrounded and rounded fine to medium of mixed lithology.		
		1.00 - 2.00 = 90%						1	
1.50 - 1.60	D3				(2.85)				
		2.00 - 3.00 = 100%						2	
				54.87	3.00		MADE GROUND: Brown slightly sandy slightly gravelly CLAY. Gravel is subrounded fine to coarse of limestone.		
		3.00 - 4.00 = 100%			(0.30)			3	
				54.57	3.30		Stiff orangish brown mottled grey silty CLAY. (CHARMOUTH MUDSTONE FORMATION)		
					(0.90)				
3.80 - 4.00	D4								
		4.00 - 5.00 = 100%						4	
				53.67	4.20		Very stiff orangish brown mottled grey silty CLAY. (CHARMOUTH MUDSTONE FORMATION)		
					(0.80)				
4.80 - 5.00	D5								
				52.87	5.00		End of Borehole at 5.00m		
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	5.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: WS207
Contract Number: CS-J-0828	Date Started: 14/12/2020	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting: 384993.13	Northing: 214219.77	Ground Level: 55.28mOD	Plant Used: Competitor Dart		Scale: 1:25

Weather: Overcast

Termination: Engineer instructed

Samples & In Situ Testing				Strata Details				Groundwater	
Depth	Sample ID	Windowless Sample Recovery	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
0.00 - 0.10	ES1	0.00 - 1.00 = 100%		55.08	0.20		Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to medium of mixed lithology. (TOPSOIL)		
0.40 - 0.50	ES2			54.88	0.40		Orangish brown friable slightly gravelly silty CLAY. Gravel is subrounded and rounded fine and medium of mixed lithology.		
0.80 - 1.00	D3	1.00 - 2.00 = 100%			(1.20)		Firm orangish brown mottled grey silty CLAY. (CHARMOUTH MUDSTONE FORMATION)	1	
1.80 - 2.00	D4	2.00 - 3.00 = 100%		53.68	1.60		Stiff dark grey silty CLAY. (CHARMOUTH MUDSTONE FORMATION)	2	
				52.58	2.70		Very stiff dark grey silty CLAY. (CHARMOUTH MUDSTONE FORMATION)		
				52.28	3.00		End of Borehole at 3.00m	3	
								4	
								5	

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)	
									Groundwater not encountered.
Water Strikes					Installation				
Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks	Top (m)	Base (m)	Type	Dia (mm)
						0.00	1.00	PLAIN	50
						1.00	3.00	SLOTTED	50



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: BH202
Contract Number: CS-J-0828	Date Started: 23/03/2021	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting:	Northing:	Ground Level:	Plant Used: Dando 4000	Scale: 1:50	

Weather: Clear Termination: Driving refusal SPT Hammer: N/R, Energy Ratio: N/R

Samples & In Situ Testing			Strata Details				Groundwater	
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation
				0.10		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to coarse of mixed lithology. MADE GROUND: Brown mottled grey slightly gravelly silty CLAY. Gravel is subrounded fine to medium of mixed lithology.		
1.20	D1	SPT(S) 1.20m, N=7 (1,2/1,2,2,2)		(2.90)				
2.00	D2	SPT(S) 2.00m, N=7 (1,1/1,2,2,2)						
3.00	D3	SPT(S) 3.00m, N=10 (1,2/2,2,3,3)		3.00		Stiff orangish brown mottled dark grey friable silty CLAY. (CHARMOUTH MUDSTONE FORMATION)		
4.00	D4	SPT(S) 4.00m, N=11 (1,1/2,2,3,4)		(3.00)				
5.00	D5	SPT(S) 5.00m, N=31 (3,4/6,7,8,10)						
6.00	D6			6.00		Extremely weak residual MUDSTONE. (CHARMOUTH MUDSTONE FORMATION)		
7.00	D7	SPT(C) 6.50m, N=38 (5,6/8,9,10,11)		(3.00)				
8.00	D8	SPT(C) 8.00m, N=51 (5,10/10,12,14,15)						
9.00	D9	SPT(C) 9.00m, 50 (5,10/50 for 225mm)		9.00		End of Borehole at 9.00m		

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations				Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)
23-03-2021	12:30	0.00						
23-03-2021	16:00	9.00	1.50					

Chiselling				Installation				Water Strikes					
From (m)	To (m)	Duration	Remarks	Top (m)	Base (m)	Type	Dia (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
8.50	9.00	01:00		0.00	1.00	PLAIN	50						
				1.00	6.00	SLOTTED	50						



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Contract Name: Snow Capel		Client: Edward Ware Homes			Borehole ID: BH201
Contract Number: CS-J-0828	Date Started: 23/03/2021	Logged By: SH	Checked By:	Status: DRAFT	Sheet 1 of 1
Easting:	Northing:	Ground Level:	Plant Used: Dando 4000	Scale: 1:50	

Weather: Clear Termination: Driving refusal SPT Hammer: N/R, Energy Ratio: N/R

Samples & In Situ Testing			Strata Details					Groundwater	
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill / Installation	
				0.10		MADE GROUND: Brown slightly gravelly silty CLAY. Gravel is subrounded and rounded fine to coarse of mixed lithology. MADE GROUND: Brown mottled grey slightly gravelly silty CLAY. Gravel is subrounded fine to medium of mixed lithology.			
1.20	D1	SPT(S) 1.20m, N=6 (1,1/1,1,2,2)		(2.90)					
2.00	D2	SPT(S) 2.00m, N=7 (1,1/2,1,2,2)							
3.00	D3	SPT(S) 3.00m, N=8 (1,1/2,2,2,2)		3.00		Stiff orangish brown mottled dark grey friable silty CLAY. (CHARMOUTH MUDSTONE FORMATION)			
4.00	D4	SPT(S) 4.00m, N=17 (1,2/3,3,4,7)		(2.00)					
5.00	D5	SPT(S) 5.00m, 50 (5,7/50 for 225mm)		5.00		Extremely weak residual MUDSTONE. (CHARMOUTH MUDSTONE FORMATION)			
6.00	D6								
7.00	D7	SPT(C) 6.50m, N=50 (5,10/11,12,15,12)		(3.00)					
8.00	D8	SPT(C) 8.00m, N=50 (4,9/10,15,20,5)		8.00		End of Borehole at 8.00m			

Sample Key: B = Bulk Disturbed D = Small Disturbed U = Undisturbed Open-Drive W = Water G = Gas ES = Environmental Soil EW = Environmental Water

Start & End of Shift Observations				Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth	Dia (mm)
23-03-2021	11:30	0.00						
23-03-2021	12:00	8.00	1.50					

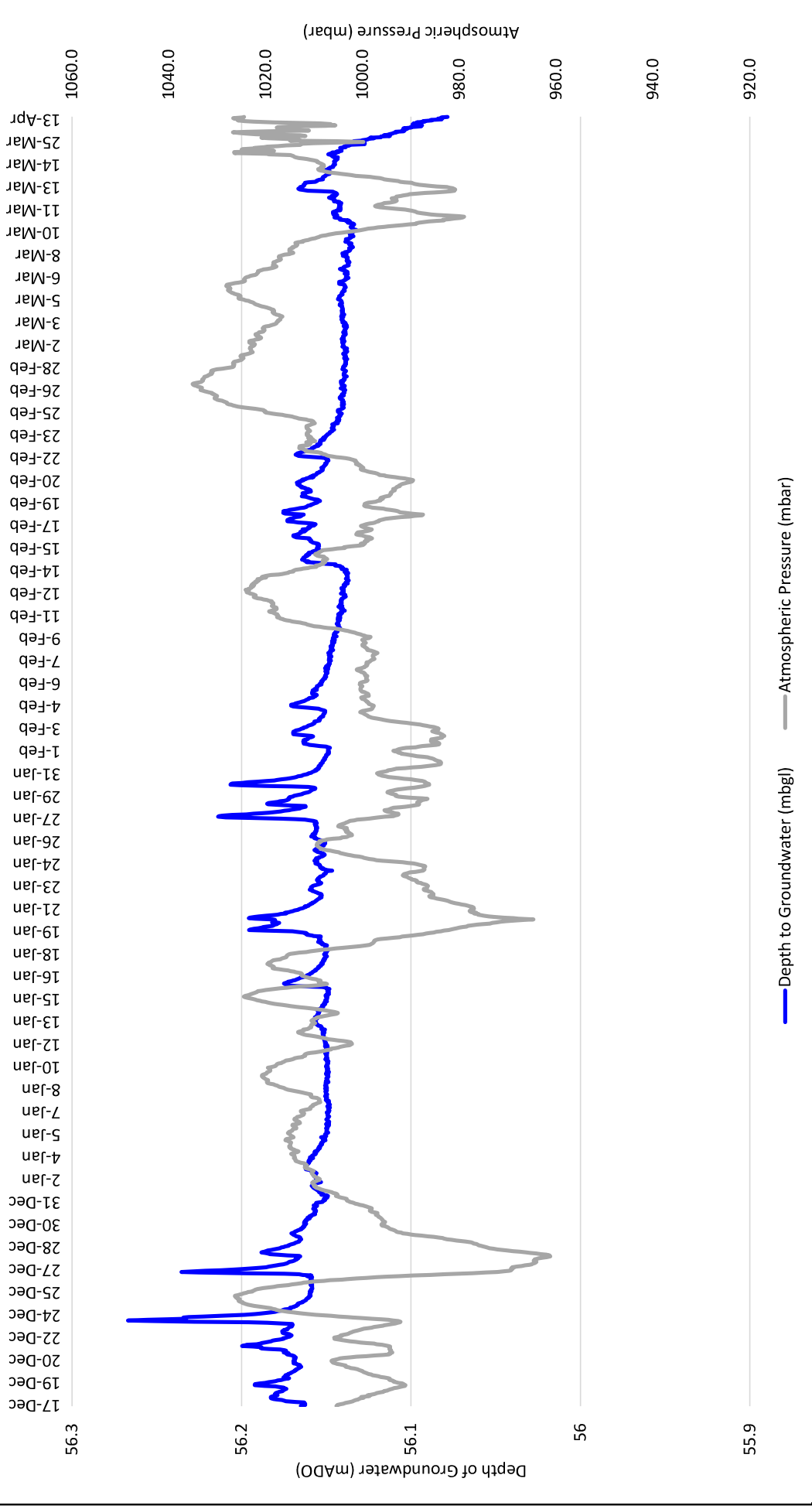
Chiselling				Installation				Water Strikes					
From (m)	To (m)	Duration	Remarks	Top (m)	Base (m)	Type	Dia (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
7.50	8.00	01:00		0.00	1.00	PLAIN	50						
				1.00	6.00	SLOTTED	50						

D Site Groundwater Levels



Groundwater Monitoring Results

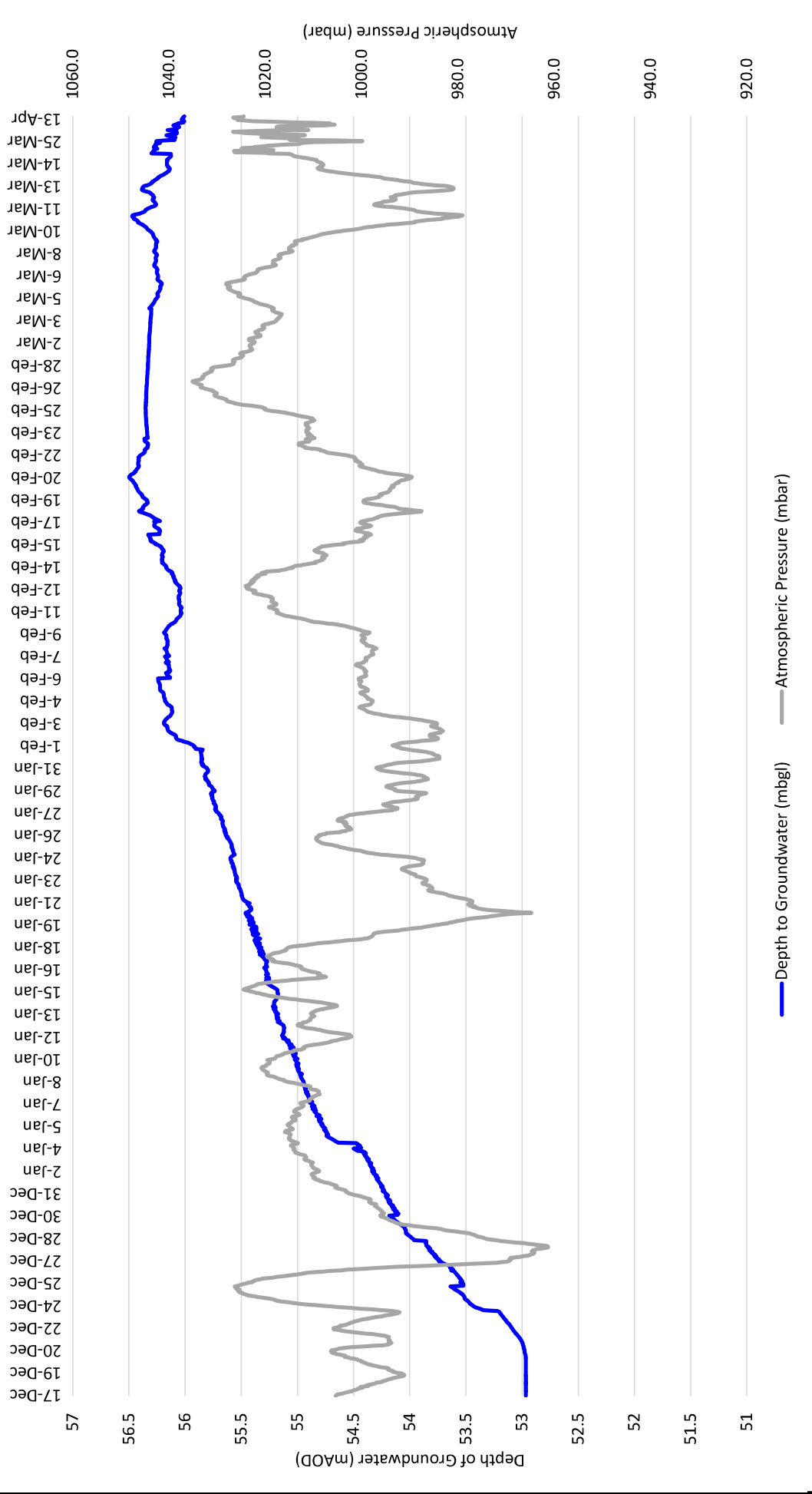
Site Address:	CS-J-0916	Base of Installation (mbgl)	N/A
Site ID:	Snow Capel	Ground level (mAOD)	56.17
Hole ID:	Moat	Depth of Probe (mbgl)	0.39
		Run Time (Days)	120
		Min. Atm' Pres' (mB)	961.2
		Max. Atm' Pres' (mB)	1035.1
		Min. GW Level (mbgl)	-0.10
		Max. GW Level (mAOD)	56.08
		Min. GW Level (mB)	0.09
		Max. GW Level (mAOD)	56.27
		Run Time Period	17/12/2020 - 16/04/2021





Groundwater Monitoring Results

Site Address:	CS-J-0916	Base of Installation (mbgl)	N/A	Min. GW Level (mbgl)	1:37
		Ground level (mAOD)	57.87	Min. GW Level (mAOD)	52.97
Site ID:	Snow Capel	Depth of Probe (mbgl)	4.90	Max. GW Level (mbgl)	4.90
Hole ID:	WS206	Run Time (Days)	120	Max. GW Level (mAOD)	56.50
		Run Time Period	17/12/2020	Min. Atm' Pres' (mB)	961.2
			16/04/2021	Max. Atm' Pres' (mB)	1035.1

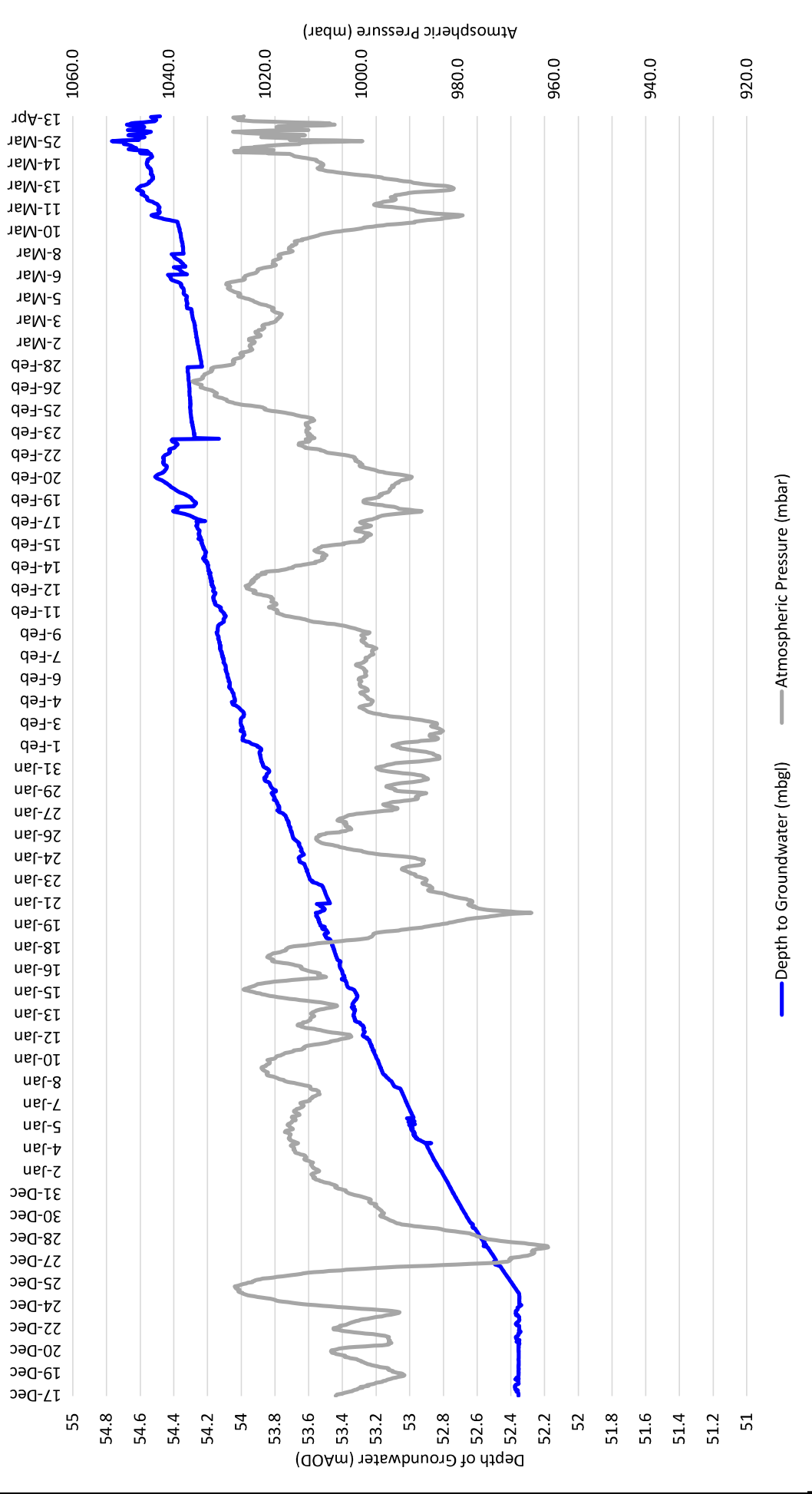


— Depth to Groundwater (mbgl) — Atmospheric Pressure (mbar)



Groundwater Monitoring Results

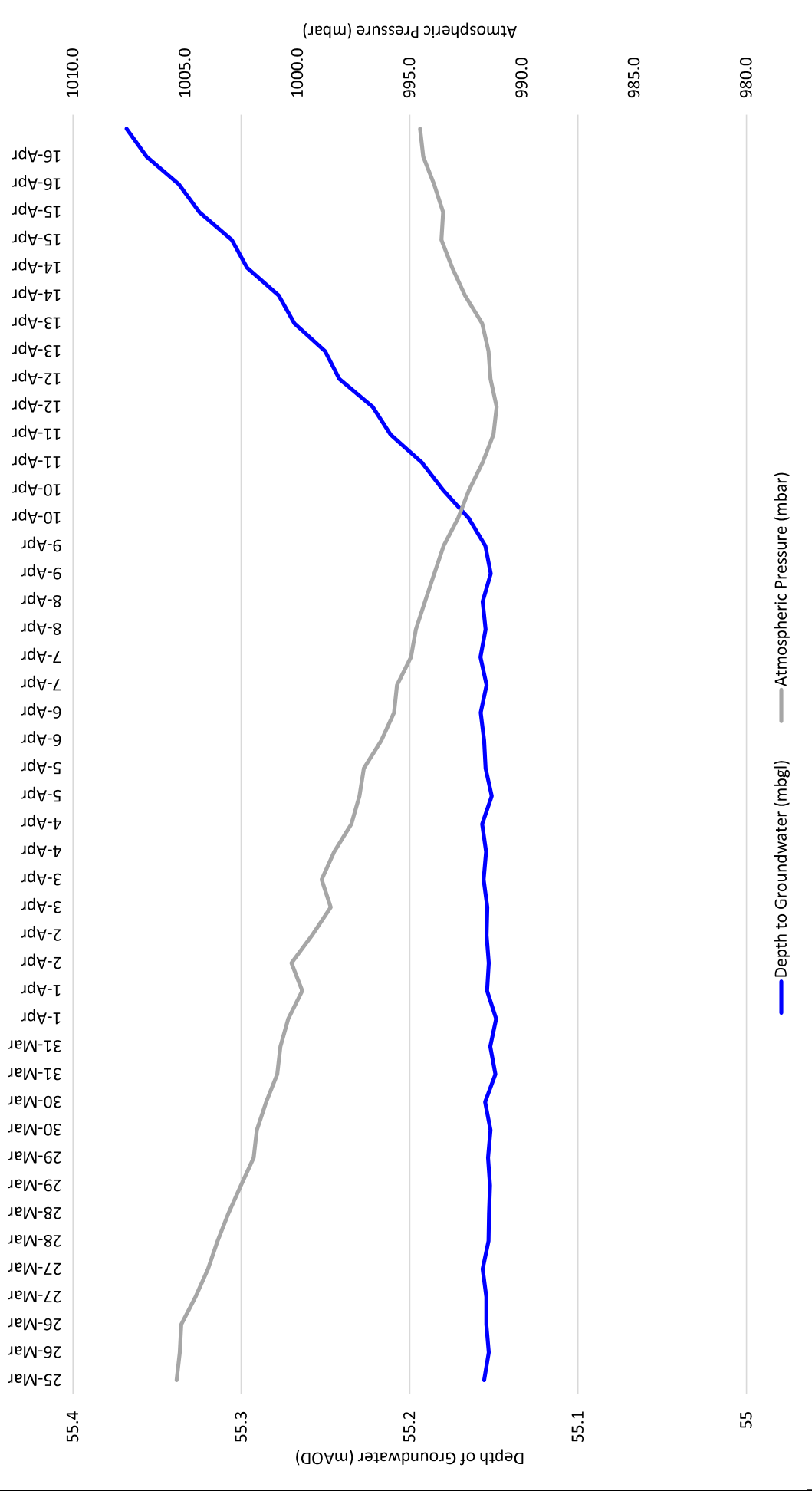
Site Address: CS-J-0916	Base of Installation (mbgl)	3.00	Min. GW Level (mbgl)	0.51
	Ground level (mAOD)	55.28	Min. GW Level (mAOD)	52.34
Site ID: Snow Capel	Depth of Probe (mbgl)	2.93	Max. GW Level (mbgl)	2.94
	Run Time (Days)	120	Max. GW Level (mAOD)	54.77
Hole ID: WS207	Run Time (Days)	16/04/2021	Min. Atm' Pres' (mB)	961.2
	Run Time Period	17/12/2020	Max. Atm' Pres' (mB)	1035.1





Groundwater Monitoring Results

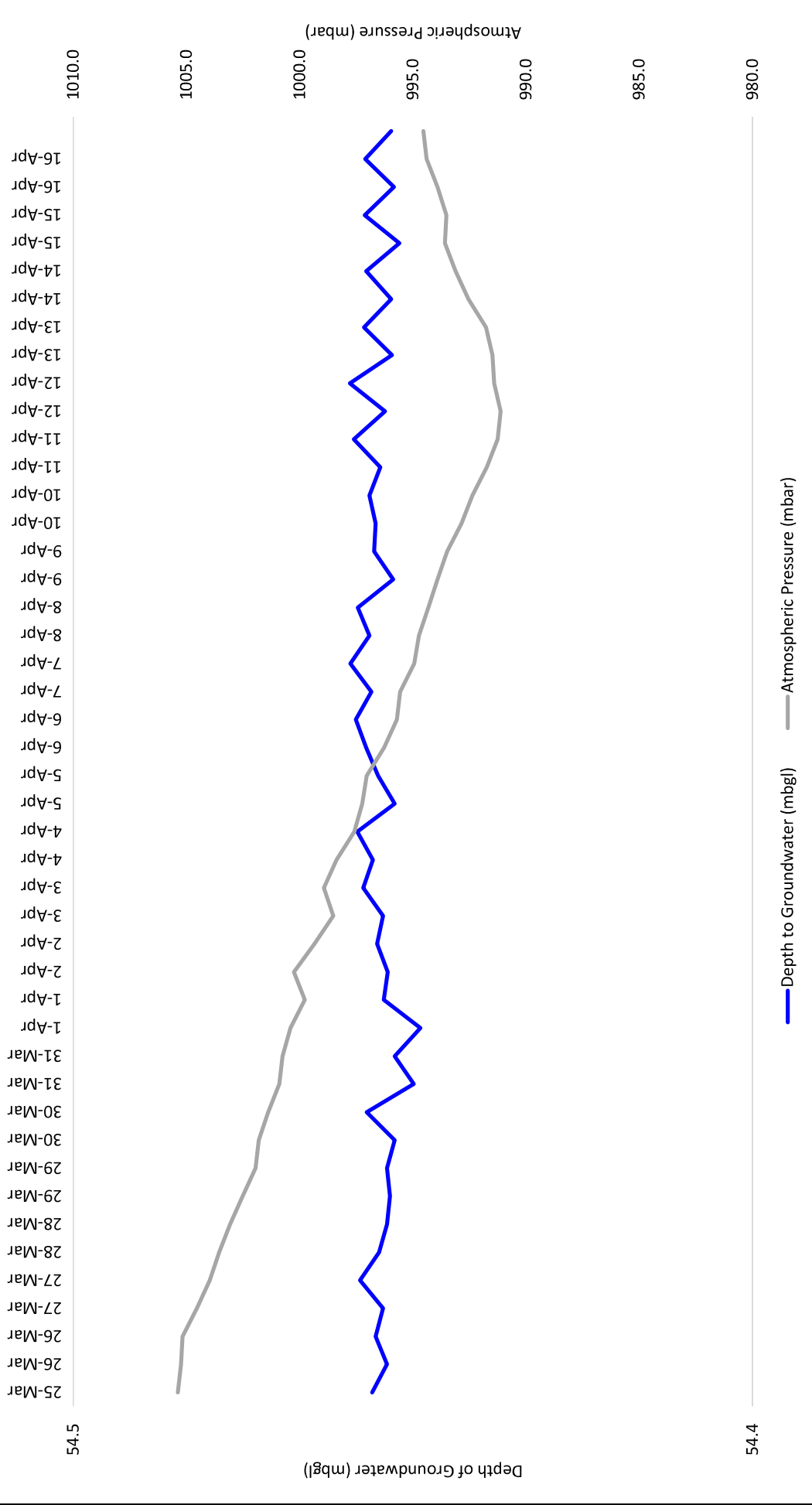
Site Address:	CS-J-0916	Base of Installation (mbgl)	5.64	Min. GW Level (mbgl)	5.28
		Ground level (mAOD)	60.65	Min. GW Level (mAOD)	55.15
		Depth of Probe (mbgl)	5.50	Max. GW Level (mbgl)	5.50
Site ID:	Snow Capel	Run Time (Days)	23	Max. GW Level (mAOD)	55.37
Hole ID:	BH201	Run Time Period	25/03/2021 - 16/04/2021	Min. Atm' Pres' (mB)	991.1
				Max. Atm' Pres' (mB)	1005.4





Groundwater Monitoring Results

		Base of Installation (mbgl)	6.07	Min. GW Level (mbgl)	5.85
Site Address:	CS-J-0916	Ground level (mAOD)	60.31	Min. GW Level (mAOD)	54.45
Site ID:	Snow Capel	Depth of Probe (mbgl)	5.85	Max. GW Level (mbgl)	5.86
Hole ID:	BH202	Run Time (Days)	23	Max. GW Level (mAOD)	54.46
		Run Time Period	25/03/2021	Min. Atm' Pres' (mB)	991.1
			16/04/2021	Max. Atm' Pres' (mB)	1005.4



E Moat Water Quality

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 21/04524
Issue Number: 1
Date: 05 May, 2021

Client: JBA Consulting (Saltaire)
Salts mill
Victoria Road
Saltaire
Shipley
BD18 3LF

Project Manager: Katherine Prosser
Project Name: Snow Capel
Project Ref: 2020s1556
Order No: TBC
Date Samples Received: 28/04/21
Date Instructions Received: 28/04/21
Date Analysis Completed: 05/05/21

Prepared by:


Melanie Marshall
Laboratory Coordinator

Approved by:


Sophie France
Client Service Manager

Envirolab Job Number: 21/04524

Client Project Name: Snow Capel

Client Project Ref: 2020s1556

Lab Sample ID	21/04524/1	21/04524/2	21/04524/3	21/04524/4	21/04524/5	21/04524/6	21/04524/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Moat North	Moat NW	Moat NE	Moat East	Moat SE	Moat SW	Moat West			
Depth to Top										
Depth To Bottom										
Date Sampled	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Alkalinity by titration (carbonate) (w) _A	<15	<15	<15	<15	<15	<15	<15	mg/l Ca CO ₃	15	Titration w
Chloride (w) _A [#]	13	12	14	14	17	11	13	mg/l	1	A-T-026w
Nitrate (w) _A [#]	<0.1	<0.1	0.8	<0.1	<0.1	<0.1	<0.1	mg/l	0.1	A-T-026w
Sulphate (w) _A [#]	75	63	107	113	79	47	51	mg/l	1	A-T-026w
Arsenic (dissolved) _A [#]	-	1	1	-	2	2	-	µg/l	1	A-T-025w
Boron (dissolved) _A [#]	-	26	63	-	66	50	-	µg/l	10	A-T-025w
Cadmium (dissolved) _A [#]	-	<0.2	<0.2	-	<0.2	<0.2	-	µg/l	0.2	A-T-025w
Calcium (dissolved) _A [#]	102	105	99	93	111	98	106	mg/l	1	A-T-049w
Copper (dissolved) _A [#]	-	<1	<1	-	<1	<1	-	µg/l	1	A-T-025w
Chromium (dissolved) _A [#]	-	<1	<1	-	24	<1	-	µg/l	1	A-T-025w
Lead (dissolved) _A [#]	-	<1	<1	-	<1	<1	-	µg/l	1	A-T-025w
Magnesium (dissolved) _A [#]	14	14	15	16	16	14	14	mg/l	1	A-T-049w
Mercury (dissolved) _A [#]	-	<0.1	<0.1	-	<0.1	<0.1	-	µg/l	0.1	A-T-025w
Nickel (dissolved) _A [#]	-	1	3	-	2	2	-	µg/l	1	A-T-025w
Potassium (dissolved) _A [#]	4	4	3	3	4	3	4	mg/l	1.2	A-T-049w
Selenium (dissolved) _A [#]	-	<1	<1	-	<1	<1	-	µg/l	1	A-T-025w
Sodium (dissolved) _A [#]	21	20	22	23	27	20	20	mg/l	1	A-T-049w
Zinc (dissolved) _A [#]	-	2	1	-	4	2	-	µg/l	1	A-T-025w

Envirolab Job Number: 21/04524

Client Project Name: Snow Capel

Client Project Ref: 2020s1556

Lab Sample ID	21/04524/1	21/04524/2	21/04524/3	21/04524/4	21/04524/5	21/04524/6	21/04524/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Moat North	Moat NW	Moat NE	Moat East	Moat SE	Moat SW	Moat West			
Depth to Top										
Depth To Bottom										
Date Sampled	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21	26-Apr-21			
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW			
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
PAH 16MS (w)										
Acenaphthene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Acenaphthylene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Anthracene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Benzo(a)anthracene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Benzo(a)pyrene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Chrysene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Fluoranthene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Fluorene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Naphthalene (w) _A [#]	-	0.25	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Phenanthrene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Pyrene (w) _A [#]	-	<0.01	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w
Total PAH 16MS (w)_A[#]	-	0.25	<0.01	-	<0.01	<0.01	-	µg/l	0.01	A-T-019w

Envirolab Job Number: 21/04524

Client Project Name: Snow Capel

Client Project Ref: 2020s1556

Lab Sample ID	21/04524/8							Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	Sneedhams Pond									
Depth to Top										
Depth To Bottom										
Date Sampled	26-Apr-21									
Sample Type	Water - EW									
Sample Matrix Code	N/A									
Alkalinity by titration (carbonate) (w) _A	<15									
Chloride (w) _A [#]	36							mg/l	1	A-T-026w
Nitrate (w) _A [#]	<0.1							mg/l	0.1	A-T-026w
Sulphate (w) _A [#]	95							mg/l	1	A-T-026w
Calcium (dissolved) _A [#]	122							mg/l	1	A-T-049w
Magnesium (dissolved) _A [#]	19							mg/l	1	A-T-049w
Potassium (dissolved) _A [#]	3							mg/l	1.2	A-T-049w
Sodium (dissolved) _A [#]	37							mg/l	1	A-T-049w

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921
email. ask@envirolab.co.uk

Client: JBA Consulting (Saltaire), Salts mill, Victoria Road, Saltaire, Shipley, BD18 3LF **Project No:** 21/04524
Project: Snow Capel
Clients Project No: 2020s1556 **Date Received:** 28/04/2021 (am)
Cool Box Temperatures (°C): 11.9

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

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Appendix 6 –

Heritage and Archaeology Assessment, May 2021



**Land at Snow
Capel Farm,
Matson,
Gloucester**

**Archaeological
and Heritage
Assessment**

Prepared by:
**The Environmental
Dimension
Partnership Ltd**

On behalf of:
**Edward Ware
Homes and
Bromford
Developments Ltd**

May 2021
Report Reference:
edp3736_r005a

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Plan EDP 4 LiDAR Data
(edp3746_d014a 14 May 2021 MH/RS)

Plan EDP 5 Aerial photographs
(edp3746_d015a 14 May 2021 MH/RS)

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	Report Ref: edp3746_r005			
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005_DRAFT	RS	FD	EO	-
005a	RS	-	-	FJ 140521

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Non-technical Summary

- S1 This report has been prepared by The Environmental Dimension Partnership Ltd (EDP), on behalf of Edward Ware Homes and Bromford Developments Ltd and is an archaeological and heritage assessment of land at Land at Snow Capel Farm, Matson, Gloucester in support of a planning application for residential development.
- S2 The assessment concludes that there will be no direct effects on any designated heritage assets as a result of the proposed development proceeding. This includes potential impacts on waterlogged archaeological remains located within the scheduled moat located within the site due to a reduction in water levels. The results of a Water Environment Assessment indicate that water levels within the moat can be successfully maintained through drainage design.
- S3 Potential impacts upon the settings of designated heritage assets have been considered in accordance with Historic England guidance: *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets* (HE 2017 Second Edition) concluding that the site only forms a part of the setting of the scheduled monument, *Moated site at Sneedham's Green, 220m north east of Green Farm (1019399)* which is located within the site, and no other heritage assets.
- S4 In summary, the assessment concludes that the proposed development, in its current iteration, will change the setting of the monument resulting in both negative and positive effects and identifies, overall, only a very low degree of harm to its significance. This harm would be at the lower end of the spectrum of 'less than substantial harm' and, in accordance with Paragraph 196 of National Planning Policy Framework (NPPF, DCLG, 2019), should be '*weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.*'
- S5 There is considered to be a moderate potential for a small part of the site to contain buried archaeological remains of low or moderate significance dating to the Late Iron Age or Roman period remains and the medieval period. However, the desk-based assessment, geotechnical data, geophysical survey and trial trenching has identified that, in the late 1960s early 1970s, the ground surface across at least c. 90% of the site, including the scheduled monument, was disturbed during the construction of the M5.
- S6 This activity destroyed any upstanding archaeological features in the site and probably also resulted in at least the partial destruction of any previously unrecorded buried archaeological remains, in all but perhaps the north-western edge of the site. As such, it is considered that there is only a low potential for any well-preserved archaeological remains to survive in the site.
- S7 The potential for impacts upon archaeological remains is deferred to a later iteration of this report, once the engineering approach to foundation design is fully established.

S8 In conclusion, the assessment has not identified any reason why the development as proposed would conflict with historic environment legislation or planning policy and it is anticipated that the proposals will be looked upon favourably regarding the historic environment.

Section 1

Introduction

- 1.1 This report has been prepared by the Environmental Dimension Partnership Ltd (EDP), on behalf of Edward Ware Homes and Bromford Developments Ltd, to inform planning proposals for a residential development on land at Snow Capel Farm, Matson, Gloucester.
- 1.2 The first aim of this assessment is to consider the available historical and archaeological resources for the site and to establish its likely potential in accordance with the requirements of the NPPF and local planning policy.
- 1.3 The second aim of this assessment is to identify and assess possible changes to the settings of designated heritage assets as a result of the proposed development, and to determine whether, and to what extent, those changes will affect their heritage significance.
- 1.4 In accordance good practice and guidance, desktop sources have been augmented through the completion of walkover surveys, undertaken in February 2017 and December 2020.

Location, Boundaries and Current Land Use

- 1.5 The application site is located on the southern outskirts of the city of Gloucester, the centre of which lies c. 4km to the north-west. The settlement at Matson is located c. 1km to the north. The site measures c. 8 hectares (ha) in area and is centred on National Grid Reference (NGR) 385116 214169 (**Plan EDP 1**).
- 1.6 The site boundaries are defined by the M5 motorway to the south-east, farmland to the north-east and by a hedgerow and stream, The Sud Brook, beyond which is small settlement of the edge of a grassed common at Sneedham's Green to the west. The site consists of a single field of pasture is enclosed by dense mature hedgerows on the south, west and east sides and a thin hedgerow on the north side.
- 1.7 The site's boundary to the north-east is against a single adjacent rectangular field and further farmland that is a consented development site, Land South of Winneycroft Farm (with reserved matters consented in October 2018; 18/01141/REM). The rectangular field comprises grassed agricultural land and, whilst presently occupied by further agricultural fields, the Winneycroft Farm site will become a housing development with the part adjacent to the site being converted to sports pitches with related infrastructure.
- 1.8 The whole site consists of a single field of pasture currently in use for grazing animals. Located roughly west of centre is a fenced off area containing a large C-shaped pond and related scrub vegetation. This pond, and the area partly enclosed by it, is part of a former moat related to the Scheduled Monument *Moated site at Sneedham's Green, 220m*

north east of Green Farm (NHLE **1019399**). The boundary of the scheduled monument is illustrated on **Plan EDP 1**.

Topography and Geology

- 1.9 The land at the site slopes gently to the west, with a high point of c. 60m above Ordnance Datum (aOD) on the eastern boundary and a low point of c. 55m aOD in the north-west corner.
- 1.10 The British Geological Survey records the underlying solid geology at the application site as being mudstone of the Blue Lias Formation and Charmouth Formation.
- 1.11 No superficial deposits are recorded across the site; however much of the site is covered by a layer of made ground deposited during the construction of the M5 motorway.
- 1.12 Whilst the presence of the made ground layer at the site is apparent from aerial photographs, LiDAR data, topographic survey and observations made during the site visit (which are discussed in **Section 4**), geotechnical evidence for the made ground is apparent in borehole records.
- 1.13 Boreholes have been dug at the site as part of the geotechnical investigations. This has comprised two phases, in May 2017 (Integrale) and November 2017 (T and P) which also included some trial pits. Further boreholes were dug in March 2021.
- 1.14 The borehole records indicate a layer of made ground across all parts of the site that were subject to borehole survey. The layer is situated beneath topsoil and generally comprises two deposits of re-deposited natural soils comprising firm to stiff, bluish grey, mottled, orangish brown gravelly clay layered above soft, firm and stiff dark grey clay with organic material. The material varies in its basal depth between 0.3 and 4.6 m Below ground Level (BGL). The records (and the appearance of the landform) indicates that the deposit is thickest towards the eastern end of the site and tapers out to the west, with the least deposit in the north-west corner.
- 1.15 The site has been subject to a limited archaeological evaluation (Headland Archaeology, 2020 - details in **Section 4** below). This comprised three trenches all of which also identified made ground deposits equivalent to those identified in the geotechnical work.
- 1.16 The geotechnical work also identified a possible buried topsoil deposit comprising dark brown and black clay in some of the boreholes. This deposit was also located in some of the trial trenches, the evidence suggesting that this layer, if representing a buried topsoil remnant, is only present in patches across the site, suggesting partial removal of topsoil when the M5 was constructed.

- 1.17 The geotechnical works and trial trenches indicate that the ground surface (topsoil) at the site was probably partially removed during the construction of the M5 motorway including the loss of surface features such as earthworks and field boundaries. The trenching targeted a former field boundary ditch finding only a disturbed, dark-brown area of clay and part of a tree in its location, suggesting that the ditch and boundary had been graded and backfilled as part of this operation, as others across the site are likely to have been. The majority of the site was then used for soil deposition which probably comprises arisings from the adjacent section of the motorway. It is possible that the scouring of the ground surface and partial removal of topsoil resulted from the use of bulldozers to grade and then form and compact the surface of this material creating the present landform at the site.
- 1.18 The made ground within the site and the impact of the M5 works is discussed below in **Section 4** in relation to the site's archaeological potential.

Proposed Development

- 1.19 The proposed development is for a residential led scheme with associated access road, landscaping and infrastructure. The Proposed Site Plan is not yet fixed with the current indicative concept plan included at **Appendix EDP 1**.
- 1.20 The design has been influenced by the archaeological assessment and settings assessment presented in this current report as well as the results of the Water Environment Assessment (JBA, 2021). The proposal includes an open area around the Scheduled Monument with the moated remains at the centre of this area. This area is open to the west to maintain a visual link with the historically related Sneedham's Green.

Consultation

- 1.21 As an aspect of work carried out to promote the site for inclusion within the Joint Core Strategy (JCS; coordinated by Gloucester City Council in tandem with Tewkesbury Borough Council and Cheltenham Borough Council and adopted on 11 December 2017), EDP consulted with Historic England regarding the appropriate approach to be employed in respect of the scheduled monument located within the site. The monument was highlighted by the Council's evidence base for the JCS as warranting and needing improved management but, that the presence of the monument means that the site is inappropriate to allocate for development.
- 1.22 The consultation process took place in two phases (spring-summer 2017 and autumn 2017) and the most relevant correspondence from the second phase of consultation with Historic England (HE) is reproduced here at **Appendix EDP 2**. This comprises an exchange of emails and letters with Melanie Barge, Inspector of Ancient Monuments at Historic England, between 05 September and 24 November 2017 and where the contribution that the existing setting of the scheduled monument makes to its heritage significance was the main area of debate. In this respect, HE expressed that '*housing*

close to and surrounding the moated area would in our opinion cause harm to the significance of the monument, by removing the connection with its rural landscape and setting'. In this respect, HE stated that they would not support the proposal in its iteration at that time.

- 1.23 A meeting was held with Andrew Armstrong, the Gloucester City Archaeologist, in September 2020. At this meeting it was requested that any application would have to be accompanied by a Water Environment Assessment in accordance with Historic England's guidance *Preserving Archaeological Remains Appendix 3 – Water Environment Assessment Techniques* (2016). An archaeological evaluation of the site was also requested as well as evidence to demonstrate that the site no longer contains any archaeological earthworks. A limited evaluation was carried out in December 2020 which tested the site's disturbance as well as the thickness of made ground (detailed in **Section 4**).
- 1.24 Later correspondence with Andrew Armstrong and Melanie Barge after the submission of the evaluation report resulted in a further request for *'profiles across the site using geotechnical and evaluation results which show us the depth of over burden across the site and at least infers/predict the depth of overburden with the scheduled area'*.

Section 2 Legislation and Planning Guidance

- 2.1 The following section summarises the key legislative and planning policy context, relating to the proposed development of the site, at both national and local levels.

Current Legislation

- 2.2 In terms of '*effects on the historic environment*', the following paragraphs summarise the principal legislative instruments and planning policy framework.
- 2.3 The relevant legislation concerning the treatment of scheduled monuments is the *Ancient Monuments and Archaeological Areas Act 1979* (HMSO 1979). This act details the designation, care, and management of scheduled monuments, as well as detailing the procedures needed to obtain permission for works which would directly impact upon their preservation. The act does not confer any statutory protection on the setting of scheduled monuments although this is considered as a policy matter in Paragraph 193 of the NPPF.
- 2.4 Sections 66(1) and 72(1) of the *Planning (Listed Buildings and Conservation Areas) Act 1990* set out the duties of Local Planning Authorities in respect of the treatment of listed buildings and conservation areas through the planning process.
- 2.5 Section 66(1) of the 1990 Act sets out the statutory duty of the decision-maker, where proposed development would affect a listed building or its setting.
- 2.6 The '*special regard*' duty of the 1990 Act has been tested in the Courts and confirmed to require that '*considerable importance and weight*' is afforded by the decision maker to the desirability of preserving a listed building along with its setting. The relevant judgement is referenced as *Barnwell Manor Wind Energy Ltd v East Northants DC, English Heritage and National Trust [2014] EWCA Civ 137*.
- 2.7 However, it must be recognised that Section 66(1) of the 1990 Act does not identify that the local authority or the Secretary of State *must* preserve a listed building or its setting; and neither does it indicate that a development that does not preserve them is unacceptable and should therefore be refused.
- 2.8 This point is made very clearly in Paragraph 54 of the High Court judgement in respect of *Forest of Dean DC v Secretary of State for Communities and Local Government [2013] EWHC 4052 (Admin)*, which sets out that:

'...Section 66 (1) did not oblige the inspector to reject the proposal because he found it would cause some harm to the setting of the listed buildings. The duty is directed to 'the desirability of preserving' the setting of listed buildings. One sees there the basic purpose of the 'special regard' duty. It does not rule out acceptable change. It gives the decision-maker an extra task to perform, which is to judge whether the change proposed is

acceptable. But it does not prescribe the outcome. It does not dictate the refusal of planning permission if the proposed development is found likely to alter or even to harm the setting of a listed building.'

- 2.9 In other words, it is up to the decision maker (such as a local authority) to assess whether the proposal which is before them would result in 'acceptable change'. However, whilst this is the case, the decision maker does need to give 'considerable importance and weight' to the desirability of preserving a listed building or its setting (as per the Barnwell Manor judgement outlined above).
- 2.10 Paragraph 194 of the NPPF transposes Section 66(1) and Section 72(1) of the 1990 Act into national planning policy.
- 2.11 The balancing exercise to be performed – between the harm arising from a proposal and the benefits which would accrue from its implementation – is then subsequently presented in Paragraphs 195 and 196 of the NPPF.

National Planning Policy

- 2.12 The NPPF was revised in February 2019. Section 16 sets out the government's approach to the conservation and management of the historic environment, including both listed buildings and conservation areas, through the planning process. The opening paragraph, 184, recognises that heritage assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.
- 2.13 Paragraph 189 concerns planning applications, stating that:

'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'

- 2.14 Paragraph 193 considers the weighting given within the planning decision with regard to impacts on designated heritage assets, stating that:

'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of

whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.'

- 2.15 Paragraph 194 considers the level of harmful effects on designated heritage assets and states that:

'Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:

- a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional; and*
- b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.'*

- 2.16 With regard to the decision making process, paragraphs 195 and 196 are of relevance. Paragraph 195 states that:

'Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- a) the nature of the heritage asset prevents all reasonable uses of the site;*
- b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation;*
- c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and*
- d) the harm or loss is outweighed by the benefit of bringing the site back into use.'*

- 2.17 Paragraph 196 states that: *'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use'.*

- 2.18 The threshold between substantial and less than substantial harm has been clarified in the courts. Whilst the judgement relates specifically to the impact of development proposals on a listed building, Paragraphs 24 and 25 of *Bedford BC v Secretary of State for Communities and Local Government [2013] EWHC 2847* remain of relevance here in the way they outline the assessment of 'harm' for heritage assets:

'What the inspector was saying was that for harm to be substantial, the impact on significance was required to be serious such that very much, if not all, of the significance was drained away.'

Plainly in the context of physical harm, this would apply in the case of demolition or destruction, being a case of total loss. It would also apply to a case of serious damage to the structure of the building. In the context of non-physical or indirect harm, the yardstick was effectively the same. One was looking for an impact which would have such a serious impact on the significance of the asset that its significance was either vitiated altogether [i.e. destroyed] or very much reduced.'

2.19 In other words, for the 'harm' to be 'substantial' – and therefore require consideration against the more stringent requirements of Paragraph 195 of the NPPF compared with Paragraph 196; the proposal would need to result in the asset's significance either being 'vitiating altogether or very much reduced'. Quite evidently, this represents a very high threshold to be reached.

2.20 With regard to non-designated heritage assets, Paragraph 197 states that:

'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.'

Local Planning Policy

2.21 Local planning policy within Gloucester City comprises the adopted Local Plan made up of the Joint Core Strategy (adopted in 2017 between Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council) and the saved policies of the Gloucester Local Plan (1983). Local planning decision making also refers to the Second Stage Deposit Local Plan 2002 which was adopted for development control purposes in 2002. The policies of the Second Stage Deposit Local Plan have been reviewed following the adoption of the Joint Core Strategy and the NPPF with certain policies deemed relevant and other partially relevant.

2.22 This document will be replaced by the emerging Gloucester City Plan. The City Plan was submitted to the Planning Inspectorate in November 2020 and is not yet adopted.

2.23 The historic environment is considered in *Chapter 4 – Built Environment*, within the Second Stage Deposit Local Plan. However, none of these policies are listed as relevant or partially relevant.

2.24 Policy SD8 of the Joint Core Strategy is concerned with the historic environment, within the three areas covered by the Plan. It states:

Policy SD8: Historic Environment

- ‘1. The built, natural and cultural heritage of Gloucester City, Cheltenham town, Tewkesbury town, smaller historic settlements and the wider countryside will continue to be valued and promoted for their important contribution to local identity, quality of life and the economy;*
 - 2. Development should make a positive contribution to local character and distinctiveness, having regard to valued and distinctive elements of the historic environment;*
 - 3. Designated and undesignated heritage assets and their settings will be conserved and enhanced as appropriate to their significance, and for their important contribution to local character, distinctiveness and sense of place. Consideration will also be given to the contribution made by heritage assets to supporting sustainable communities and the local economy. Development should aim to sustain and enhance the significance of heritage assets and put them to viable uses consistent with their conservation whilst improving accessibility where appropriate;*
 - 4. Proposals that will secure the future conservation and maintenance of heritage assets and their settings that are at risk through neglect, decay or other threats will be encouraged. Proposals that will bring vacant or derelict heritage assets back into appropriate use will also be encouraged; and*
 - 5. Development proposals at Strategic Allocations must have regard to the findings and recommendations of the JCS Historic Environment Assessment (or any subsequent revision) demonstrating that the potential impacts on heritage assets and appropriate mitigation measures have been addressed.’*
- 2.25 Within the emerging City Plan, in its current draft section E is concerned with the historic environment. Of relevance to the current application are Policies E1 and E2 although at present the City Plan is not adopted and these policies carry no formal weight.

‘Policy E1: Historic environment development management

The City Council will support development that conserves the significance of designated and non-designated heritage assets including archaeological remains and locally listed buildings.

Great weight will be given to the conservation of the City’s heritage assets. New development affecting a designated or non-designated heritage asset or its setting, including alterations and additions, will be expected to make a positive contribution to its character, appearance and significance.

Proposals affecting designated and undesignated heritage assets and their settings should demonstrate that they meet the following guidance:

- *The use of traditional, local materials and adherence to local building techniques and details, where appropriate;*
- *The conservation of features and elements that contribute to the special interest of a heritage asset, including structures forming part of the curtilage, in particular the structural integrity and historic plan-form of listed buildings and historic building groups;*
- *Appropriate use of the heritage asset that is compatible with the conservation of its significance;*
- *The location, form, scale, massing, density, height, layout, roofscape, landscaping, use and external appearance of developments within conservation areas should conserve and enhance the special historic and architectural interest of the conservation area;*
- *Development involving substantial harm to or loss of designated heritage assets will only be granted in exceptional circumstances (wholly exceptional circumstances for designated assets of the highest significance);*
- *Proposals affecting a non-designated heritage asset (including where identified through the planning process) should not harm its special interest and development involving substantial harm will be resisted unless significant public benefit has been clearly and convincingly demonstrated in accordance with the requirements of the NPPF;*
- *When determining applications, nationally important archaeological remains which are currently non-designated will be considered subject to polices applying to Scheduled Monuments;*
- *The condition of an historic building resulting from deliberate damage and neglect will not -be taken into account in any decision; and*
- *The City Council will support applications that make provision for the preservation in situ of archaeological remains.*

Policy E2: Recording and advancing understanding of heritage assets

Where development will result in the loss (wholly or in part) of a heritage asset, the City Council will require developers to record and advance understanding of the significance of that asset prior to or during development. The appropriate form of mitigation employed will be dependent on the nature of the impact but may include:

- *Historic building recording;*
- *Archaeological watching brief;*

- *Archaeological evaluation;*
- *Archaeological excavation; and*
- *Preservation in situ by design.'*

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Section 3 Methodology

Assessment and Data Collection Methodology

- 3.1 This report has been produced in accordance with the *Standard and Guidance for Historic Environment Desk-Based Assessment* issued by the Chartered Institute for Archaeologists (CIfA, 2020). These guidelines provide a national standard for the completion of desk-based assessments.
- 3.2 The assessment involved consultation of readily available archaeological and historical information from documentary and cartographic sources. The major repositories of information comprised:
- Information held by the Gloucester City Historic Environment Record (HER) on known archaeological sites, monuments and findspots, within 500m of the site;
 - Maps and documents held online;
 - The National Heritage List for England curated by Historic England;
 - LiDAR data acquired from the Environment Agency (data.gov.uk);
 - Aerial photographs held by the Historic England Archive (HEA); and
 - Records made during site visits in February 2017 and December 2020.
- 3.3 Under normal circumstances the report would have also considered any relevant documentary sources (such as historic maps) held by the Gloucestershire Archives. However, for the duration of the more recent phase of research the archive has been closed due to Covid-19 restrictions and therefore has not been accessible. If necessary, or possible, it is envisaged that this archive could be consulted in the future when it reopens.
- 3.4 This report provides a synthesis of relevant information for the site derived from a search area extending up to 500m from its boundary, hereafter known as the 'study area', to allow for additional contextual information regarding its archaeological interest and/or potential to be gathered.
- 3.5 The information gathered from the repositories and sources identified above was checked and augmented through the completion of two site walkovers. The walkovers considered the nature and significance of known and/or potential archaeological assets within the site, identified visible historic features and assessed possible factors which may affect the survival or condition of known or potential assets.

- 3.6 This report thereafter concludes with an assessment of the site's likely archaeological potential, made with regard to current best practice guidelines.

Setting Assessment

- 3.7 In addition, this report also considers the nature and significance of any effects arising beyond the boundary of the site, i.e. in terms of the settings of heritage assets, as defined in Annex 2 of the NPPF.
- 3.8 In that regard, the site walkover considered, where appropriate, the contribution (if any) made by the land within the site to the settings of heritage assets situated within its wider zone of influence.
- 3.9 The setting assessment process employed current Historic England guidance which is set out in: *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets* (HE 2017 Second Edition). This provides best practice guidance for the identification and assessment of potential setting issues in the historic environment.
- 3.10 When assessing the impact of proposals on heritage assets, it is not a question of whether there would be a direct physical impact on that asset, but instead whether change within its 'setting' would lead to a loss of 'significance'.
- 3.11 In simple terms, setting is defined as '*the surroundings in which a heritage asset is experienced*'. It must be recognised from the outset that 'setting' is not a heritage asset and cannot itself be harmed. Its importance relates to the contribution it makes to the significance of the designated heritage asset.
- 3.12 Historic England guidance identifies that '*change to heritage assets is inevitable, but it is only harmful when significance is damaged*' (HE, 2017).
- 3.13 In that regard, 'significance' is defined in Annex 2 of the NPPF as '*the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic*'.
- 3.14 As such, when assessing the impact of proposals on heritage assets beyond the boundary of a development site, it is not a question of whether setting would be affected, but rather a question of whether change within an asset's 'setting' would lead to a loss of 'significance' based on the above 'heritage interest' as defined in the NPPF.
- 3.15 Set within this context, where the objective is to determine the impact of proposals on heritage assets beyond the boundary of a development site, it is necessary to first define the significance of the asset in question - and the contribution made to that significance by its 'setting', in order to establish whether there would be a loss, and therefore harm. The guidance identifies that change within a heritage asset's setting need not necessarily cause harm to that asset - it can be positive, negative or neutral.

3.16 In light of the above, the assessment of potential setting effects, arising from the proposed scheme, has followed the guidance set out in *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets* published by Historic England in 2017. This guidance observes that: *'The NPPF makes it clear that the extent of the setting of a heritage asset 'is not fixed and may change as the asset and its surroundings evolve', and that 'Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate the significance or may be neutral' (HE, 2017).*

3.17 The guidance states that the importance of setting *'lies in what it contributes to the significance of the heritage asset or to the ability to appreciate that significance'*.

3.18 It goes on to note:

'All heritage assets have significance, some of which have particular significance and are designated. The contribution made by their setting to their significance also varies. Although many settings may be enhanced by development, not all settings have the same capacity to accommodate change without harm to the significance of the heritage asset or the ability to appreciate it.'

3.19 Whilst identifying that elements of an asset's setting can make an important contribution to its significance, the guidance states that: *'Setting is not itself a heritage asset, nor a heritage designation, although land comprising a setting may itself be designated'*. It continues by adding that: *'Conserving or enhancing heritage assets by taking their settings into account need not prevent change; indeed change may be positive...'*

3.20 On a practical level, the HE guidance (2017) identifies an approach to assessing setting in relation to development management which is based on a five-step procedure; i.e.:

- **Step 1:** Identify which heritage assets and their settings are affected;
- **Step 2:** Assess the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
- **Step 3:** Assess the effects of the proposed development, whether beneficial or harmful, on that significance or the ability to appreciate it;
- **Step 4:** Explore ways of maximising enhancement and avoid or minimise harm; and
- **Step 5:** Make and document the decision and monitor outcomes.

3.21 As far as Step 2 is concerned, the guidance makes the following observations:

'The second stage of any analysis is to assess whether the setting of a heritage asset makes a contribution to its significance and the extent and/or nature of that

contribution...this assessment should first address the key attributes of the heritage asset itself and then consider:

- *The physical surroundings of the asset, including its relationship with other heritage assets;*
- *The asset's intangible associations with its surroundings, and patterns of use;*
- *The contribution made by noises, smells, etc to significance; and*
- *The way views allow the significance of the asset to be appreciated.'*

3.22 Thereafter, the guidance notes that: *'This assessment of the contribution to significance made by setting will provide the baseline for establishing the effects of a proposed development on significance, as set out in 'Step 3' below'.*

3.23 Having established the baseline, the following guidance is provided in respect of an assessment of the effect upon 'setting'; i.e.:

'In general...the assessment should address the attributes of the proposed development in terms of its:

- *Location and siting;*
- *Form and appearance;*
- *Wider effects; and*
- *Permanence.'*

3.24 In light of the above, the assessment of potential setting effects, employed in the preparation of this baseline report, focused on Steps 1, 2 and 3. The assessment therefore concentrated on the following three main areas:

- Identifying those heritage assets that could potentially be affected by the proposed scheme (Step 1);
- Defining the degree to which the settings of these heritage assets make a contribution to their significance or allow their significance to be appreciated (Step 2);
- Assessing whether the site forms a part of their setting, and if so, whether it also contributes to their significance (part of Step 2); and

- Assessing whether the site's development as proposed is likely to result in a change to that contribution, such that the development is either beneficial or harmful to the significance of the asset in question (Step 3).

3.25 Step 4 is considered in so much as the proposed development includes built-in design mitigation intended to respond to the setting of heritage assets and thus reduce or negate any harmful impact upon them.

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Section 4 Existing Information

Introduction

- 4.1 The application site contains a scheduled monument, *Moated site at Sneedham's Green, 220m north east of Green Farm* (shown on **Plan EDP 1**). Planning policy dictates that there would be a presumption in favour of the physical retention or preservation *in situ* of the monument's designated area and against development of the land that it occupies within the site. The monument is described below.
- 4.2 The site does not contain any listed buildings, historic parks and gardens or registered battlefields and, apart from the scheduled monument noted above, there are no designated heritage assets of any kind within the 500m study area.
- 4.3 The Gloucester HER contains three records within the site (one of which refers to the moated site). Numerous records are located within the 500m study area, which are discussed in context within the period-based sections in the section below. All HER records within the site and study area are shown on **Plan EDP 2**.

Designated Heritage Assets

Scheduled Monument: Moated site at Sneedham's Green, 220m north east of Green Farm (1019399)

- 4.4 The monument consists of the known extent of a moated site dating from the medieval period; a sub-rectangular or trapezoidal moat enclosing an island. Only the northern side and parts of the western and eastern sides of the moat are extant, enclosing an area c. 66m by 42m that is open on the south side (**Images EDP 1 and 2**).
- 4.5 The scheduling extends beyond the extant part of the monument to the south, encompassing the former entirety of the moat and a 2m buffer around it. Evidence derived from historic mapping and aerial photographs (discussed fully in the relevant sections below) suggests that the original site measured approximately 66m by 80m with a causewayed entrance on the east side and possibly another entrance on the west side. Historic maps (i.e. **Plan EDP 3**) illustrate that prior to 1960s the southern arm of the moat was incorporated into a field boundary ditch which crossed the site from east to west. This ditch was probably a later feature of the post-medieval agricultural landscape.
- 4.6 The above-ground, field boundary bank and ditch/former moat of the southern extent of the monument were covered over with redeposited spoil and probably damaged during the construction of the M5 motorway in the late 1960s/early 1970s. It is possible that this work also affected and disturbed the moated site's interior. The 2020 trial trenching demonstrated that the remains of the field boundary ditch to the immediate west of the scheduled monument have been heavily disturbed by this activity with a total loss of the

- cut form of the feature, and with its fill deposits mixed into the surrounding subsoils and redeposited soils that were laid down across it. This level of disturbance suggests that the southern ditch of the moat and any associated archaeological remains, that are now buried, were probably equally damaged.
- 4.7 The extant moat is c. 14m at its widest point, c. 8m at its narrowest and, at present is up to 0.9m deep (as measured in a depth survey carried out by JBA in 2021). It is water-filled and may represent a source of waterlogged archaeological deposits. Waterlogged deposits have the potential to include materials that would otherwise have decayed such as wood or textiles and therefore potentially have a high degree of archaeological significance.
- 4.8 A Water Environment Assessment has been conducted in line with Historic England Guidance (Preserving Archaeological Remains – Appendix 3 Water Environment Assessment techniques, HE, 2016). This study produced a Water Environment Baseline for the moat concluding that the most likely water supply mechanism to the moat is a combination of direct rainfall, surface runoff, and shallow groundwater seepage/interflow. Anecdotal evidence suggests that the moat is water filled all year although the Water Environment Assessment did not identify conclusive evidence for the moat to be fed by a spring and its constituent water is demonstrably partly comprised of run-off from the surrounding fields. As such, whilst the moat may well contain unrecorded waterlogged archaeological remains there is no evidence that its water levels are truly perennial, and it is possible that at times in its history it may have dried out. Episodes of drying would reduce the potential for the moat to contain well-preserved waterlogged material of high archaeological significance.
- 4.9 Notwithstanding the likelihood for 20th century disturbance, the archaeological potential of the interior of the moat is not known although the HER records stonework within it, suggesting the presence of buried building remains. A 19th century antiquarian author suggests that the moated site was the site of a manor house of the De Snedham family who are mentioned in the records of St Peter's Abbey, Gloucester in the 12th and 13th centuries AD (Bazeley, 1878) as well as in other medieval documents. It is presumed that the family gave their name to the nearby Sneedham's Green settlement to the west, a small hamlet on the edge of an area of Common land that may have originated as grazing land associated with the manor. The settlement is discussed further in the 'Medieval' section below.
- 4.10 The monument is located within the site and represents its greatest source of known archaeological potential. It is possible that additional archaeological remains might exist within the site, outside of the scheduled area, which are related to the moated site, such as extra-mural buildings, or other buried features. Evidence for such remains is potentially derived from aerial photographs and is discussed below.
- 4.11 The scheduled monument derives its significance primarily from its archaeological interest as defined by the extant moat, the deposits within it and any buried archaeological remains within the scheduled area that are related to the moated site. The monument also has a degree of historic interest as it illustrates the nature and

appearance of the medieval landscape in the locality and is associated with the history of the De Sneedham family, the history of settlement at Sneedham and with the general history of the medieval aristocracy of Gloucester.

- 4.12 In accordance with Step 1 of the Historic England Settings Assessment Methodology (HE, 2015a), it is deemed likely that development of the site would result in change to the setting of the scheduled monument. As such the asset is identified for detailed setting assessment (Steps 2 – 4 of the Historic England methodology) which is discussed in **Section 5**.

Listed Buildings

- 4.13 There are no listed buildings located within 500m of the site boundary. The nearest listed building is the Grade II listed Thatch Cottage (NHLE: **1155001**), located c. 520m to the east. Another group of listed buildings are located at Winneycroft Farm, c. 600m to the north-east (NHLE: **1245086, 1245087, 1245088**).
- 4.14 All of these listed buildings are separated from the site by intervening fields bounded by hedgerows with Thatch Cottage also separated from the site by the M5 motorway and its tree-covered verges. Furthermore, following the development of Land at Winneycroft Farm the site would be separated from the listed building at the farm by modern houses. As such there is no visual link between the land at the site and any of these assets, and the site is not experienced from them or in conjunction with them.
- 4.15 The land at the site was historically part of the landholding associated with Snow Capel Farm, which lies to the south-west and so has no historical association with Winneycroft Farm or with any other listed buildings. Consequently, the land at the site makes no contribution to the significance of any listed buildings located within the wider countryside and these are not considered any further within this assessment.

Non-designated Heritage Assets

Records within the site

- 4.16 As noted above, one of the HER records within the site (HER: **425**) refers to the moated site that is a Scheduled Monument and described above.
- 4.17 One of the records refers to part of a wider record that records the survival of ridge and furrow earthworks across part of the locality including part of the site and adjacent fields (HER: **51203**). The record was derived from the analysis of aerial photography and LiDAR data. Such earthworks represent the remnants of field drainage systems that may date from the use of the land in the medieval period for open-field arable agriculture. Where preserved, it is because the land later reverted to pastoral use and the earthworks were preserved within grassed fields.

- 4.18 According to the HER record, formerly such earthworks were recorded within the site both to the north-west and south of the moated site and may have been contemporary with the monument, reflecting its location within arable agricultural land in the hinterland of Gloucester. The earthworks were destroyed when the land was scoured, and spoil deposited across it during the construction of the M5 motorway in the late 1960s/early 1970s. The appearance of the earthworks and the later appearance of the field after their loss is illustrated in aerial photographs which are described in the relevant section below.
- 4.19 The third HER record relates to the extent of the geophysical survey that was carried out across the site in 2017 (GSB). The results of this survey are described in the relevant section below.

Paleolithic – Bronze Age (c. 1,000,000 – 800 BC)

- 4.20 There are no Palaeolithic–Bronze Age records on the Gloucester City HER within the site. A single record is located within the wider 500m radius study area.
- 4.21 In June 2014 an archaeological evaluation at Winneycroft Farm, Gloucester recorded a single piece of worked flint (HER **751**) found in an unstratified context. This find was undated and, on its own does not indicate the presence of an archaeological site.
- 4.22 Although it is likely that the locality was populated to a degree during these periods, the general lack of evidence suggests that either remains have not survived, have escaped detection or that populations were of a low density, and activity infrequent. Although the presence of remains from these periods occurring within the site cannot be ruled out, the lack of evidence in the study area suggests that the potential for remains is very low.

Iron Age - Roman (800BC – AD 410)

- 4.23 There are no Iron Age or Roman period records on the Gloucester City HER within the site, although a number of records have been recorded within the wider 500m radius study area.
- 4.24 A ‘small quantity’ of abraded Roman pot sherds were recorded from immediately adjacent to the site to the south-east at the foot of St Edmund’s Hill (HER: **3822**). The pottery was found during the construction of the M5 motorway, and lead to an examination of the hillside above for any trace of settlement. This investigation did not identify any archaeological sites.
- 4.25 In June 2014 an archaeological evaluation at Winneycroft Farm (HER: **751**), across land to the immediate north-east of the site, recorded a series of buried infilled ditches and pits containing pottery dating from the Late Iron Age and Roman periods. The archaeological features corresponded to a series of circular and rectangular anomalies previously identified by geophysical survey and have been interpreted as a small rural

settlement site of the 1st and 2nd centuries AD consisting of a group of roundhouses associated with agricultural enclosures (HER: **752**). The settlement remains are located c. 40m from the north-eastern edge of the site.

- 4.26 The date range of the recorded pottery suggests that the settlement was contemporary with an increasingly large group of farmsteads known from the hinterland of Gloucester all of which were active in the 1st to 2nd centuries AD. However, based on pottery analysis, it remains undetermined whether the site was occupied from the late pre-Roman Iron Age or whether it was newly established in the immediate post-conquest period.
- 4.27 Residual Roman pottery was also recorded within the ditch fills of a group of medieval features (HER: 12908) recorded during an archaeological evaluation on land at Winneycroft Farm. Although part of the evaluated area is within the study area, the archaeological features were at the north end, c.640m from the site.
- 4.28 Roman period archaeological remains are common in the hinterland of Gloucester, which was a Roman *Colonia*. Given the frequency of finds in the locality and the recorded remains located 40m to the north-east, there is considered a moderate potential for Late Iron Age or Roman period remains to be present, as buried deposits within the site. Such remains would be most likely to consist of buried infilled ditches or pits, associated with agriculture, and would potentially be related to the farmstead identified to the north. Remains of this nature would be of low or moderate significance.
- 4.29 It should be considered that such remains, if present, would be buried beneath the deep deposit of made ground known to cover most of the site. It is also possible that archaeological features would have been disturbed by the scouring of the site that occurred when the land was degraded during the construction of the M5. Features found at Winneycroft Farm were between 0.2m and 0.5m BGL beneath topsoil and subsoil. Evidence from geotechnical work and trial trenching suggests that topsoil within the site is only partially preserved and therefore in areas where it was removed archaeological features, especially those at a shallow depth may have been disturbed or destroyed.

Early Medieval (AD 410-1066)

- 4.30 There are no early medieval records on the Gloucester City HER within the site or within the 500m radius study area.
- 4.31 The site was situated within the medieval manor of Sneedham. Sneedham was located within a complex boundary area between the parishes of Upton St Leonard and Matson. Neither Sneedham or Matson are mentioned in documentary sources before the 12th and 13th centuries and so are likely to have been established after the Norman Conquest. Upton St Leonards however was mentioned in the Domesday Survey, suggesting that the parish, as a territory, dated from the Anglo-Saxon period.
- 4.32 It is not known what the land at the site would have been used for during the early-medieval period. There is no evidence that it was in the immediate hinterland of any

settlement and it may have been waste or woodland prior to the establishment of the Sneedham manor in the medieval period. Given the lack of evidence for archaeological remains from the early medieval period in the study area there is a very low possibility of remains being present within the site.

Medieval (AD 1066-1485)

- 4.33 There are two records from the medieval period recorded on the Gloucester City HER within the site, and five of this date are recorded within the 500m radius study area.
- 4.34 The moat and former ridge and furrow earthworks located within the site have been discussed above.
- 4.35 As previously noted, the moated site is thought to have been occupied by a manor house, from the 12th and 13th centuries with documentary evidence suggesting that it was the residence of the Norman nobles the 'De Sneedhams' who gave their name of the manor of Sneedham. Based on sources considered in this assessment, the history of the manor is not well understood. It probably included the present common land at Sneedham's Green, located to the west of the site.
- 4.36 Whilst the Green is not of a definitive medieval origin it is depicted on the Tithe Map of Upton St Leonard's Parish dating from 1840 (**Plan EDP 3**) with several farms and other dwellings set around it and on 'island' of land at its centre, comprising the small manorial hamlet of Sneedham's Green. The Green appears to have formed at the confluence of four local routes between villages and was probably used for grazing animals being driven along these routes, forming a central feature with the small settlement.
- 4.37 The moated manor house is adjacent to the Green and it is likely that the settlement developed in the vicinity of the manor, probably as a group of farmsteads and cottages that served it and farmed the land around it. It is probable therefore that the 19th century settlement pattern of scattered dwellings around the edge of the Green, with the former manor house to the east, evolved from a similar settlement pattern established in the medieval period, albeit within a more open landscape defined by broad open agricultural fields. It is not currently known whether there are medieval remains located at or around the Green and the area has not be subject to archaeological investigation.
- 4.38 The two archaeological trenched evaluations at Winneycroft Farm, as mentioned above, both recorded buried remains of a medieval date. The evaluation trenches to the immediate north of the site (HER **751**) recorded buried infilled furrows, evidence of medieval arable agriculture across this area.
- 4.39 The evaluation trenches carried out across the north part of Winneycroft Farm recorded, at the northern end of the evaluated area, buried infilled ditches and pits thought to represent the remains of a small medieval settlement (HER: **796**) c. 640m to the north-east from the site, reflecting a pre-cursor to the later farm at Winneycroft. The features

contained pottery, animal bone and nails and were dated through the analysis of these finds to the medieval period.

- 4.40 Another archaeological evaluation at Gloucester Golf Club, c. 320m to the north-west of the site recorded buried archaeological remains related to a ditched enclosure (HER: **12647**), dated to the medieval period, within a former extent of ridge and furrow earthworks (HER **50559**).
- 4.41 Part of a medieval trackway is located within the study area that was possibly aligned on the settlement remains at Winneycroft Farm (HER: **48535**). The track has been partially obscured by the M5 motorway but traces of it are present as archaeological earthworks in a field to the east of the motorway. There is no indication that the track crossed the site or related to any other track across the site.
- 4.42 Cutting across the far eastern extent of the study area are the remains of a medieval road (HER: **9665**). The road is projected between Gloucester and Cirencester and in places consists of an extant hollow way, although much of its route is obscured by modern roads. The section within the study area follows the route of a modern road.
- 4.43 The HER also maps extensive areas of former ridge and furrow earthworks across much of the landscape surrounding the site (HER: **50112**, **51203** and **50559**). These areas are based on evidence (where available) from archaeological investigation as well as historic aerial photographs. In only a few areas are ridge and furrow earthworks still extent features within fields. The presence of these remains suggests that the site was located within an area that was, in the medieval period, dominated by arable agriculture within large open fields.
- 4.44 Due to the presence of the moated manor and, due to evidence for the site having formerly contained ridge and furrow earthworks, there is a moderate potential that the site contains related, unrecorded buried medieval archaeological features. Such remains would almost certainly relate to medieval agricultural activity and possibly remains of settlement activity associated with the manor. These could potentially be of moderate significance, although are most likely to comprise agricultural remains (such as infilled furrows) of low or very low significance.
- 4.45 As for Iron Age and Roman archaeology, medieval archaeological remains, if present, would be buried beneath the deep deposit of made ground known to cover most of the site. They would also be likely to have been subject to disturbance when the site was scoured during the construction of the M5 motorway and archaeological features, especially those at a shallow depth may have been disturbed or destroyed.

Post-Medieval (AD 1485 – 1837)

- 4.46 There are no records from the post-medieval period on the Gloucester City HER within the site. Within the wider study area is a single post-medieval asset, a post-medieval ditch recorded during the 2014 evaluation at Winneycroft Farm (HER **751**).

- 4.47 The buried infilled ditch was located c.220m north of the site and was found to correlate with a ditch shown on the 1841 Tithe Map of Upton St Leonards.
- 4.48 During the post-medieval period, it is not known when the moated site went out of use, although it is apparent that this happened before the mid-19th century as it is not depicted on the 1840 tithe map, with the southern part of the moat incorporated into a field boundary. Likewise, it is not known if the settlement at Sneedham contracted or expanded during this period. It is assumed that, as there are no deserted settlement remains recorded at Sneedham, that the settlement remained of a similar size to that as depicted on the earliest maps dating from the mid-19th century, with a dispersed pattern of farms and cottages set around the green.
- 4.49 The site is known to contain the buried remains of ditched boundaries, that are apparent on historic maps. The archaeological evaluation targeted one of these known to have been adjoined to the southern part of the moat. As detailed below, it was found to be entirely disturbed and to have lost all of its cut form as an archaeological feature. It is expected that other post-medieval boundary ditches within the site are also similarly disturbed, having been infilled when the site was scoured prior to spoil deposition when the M5 was built. Such features would possess no remaining archaeological interest.

Victorian and Modern (AD 1837 - present)

- 4.50 There are no records from these two periods on the Gloucester City HER within the site. Within the 500m study area four assets are recorded that date from the modern period.
- 4.51 The study area appears relatively unchanged throughout the Victorian period, remaining predominantly agricultural and seemingly unaffected by industrialisation. The section below on Cartographic Sources describes the site and its hinterland with reference to historic maps produced during this period.
- 4.52 All of the records on the HER relate to the early – mid 20th century and are military in character. The earliest is a record of an early 20th century rifle range, The Gloucester Rifle Range, located c. 170 m to the south of the site (HER: **46617**). The range was operational between 1920 and 1926.
- 4.53 Three HER records relate to Second World War military activity. A military depot was located at Sneedham's Green (HER: **48391**). The depot occupied two sites, either side of Homestead Farm (which occupies the central 'island' on the green). Both sites were of a similar size and were occupied by Nissen type huts. The depots were thought to have been used as a dispersal or overflow site for either of two nearby military camps, RAF Quedgley or an army camp on Robin Wood Hill. Remains of the huts are notable, seen on aerial photographs as cropmarks on the green.
- 4.54 The other Second World War sites are both related to the defence of the city of Gloucester, which would have been a target for German bombing. A search light battery

was located at Sneedham's Green, adjacent to Snow Capel Farm, c. 110 m south-west from the site (HER: **27069**).

- 4.55 The battery (no. 349 CLO8 B2) is likely to have comprised a small ring-ditch to provide the crew with shelter during an air raid, a predictor emplacement for calculating the height and range of targets, a light anti-aircraft machine gun pit, a generator and hutted accommodation for the crew. The HER notes the earthwork remains of a circular ditch and a hut platform although these remains are now thought to have since been ploughed and probably no longer exist.
- 4.56 The final record relates to a Heavy Anti-Aircraft battery located on land at Croft Farm, c.450m to the south-east of the site, of which only a small part is located within the study area (HER: **43040**). The battery was a fairly large installation with a command centre (the extant remains of which are a Grade II listed building), a camp housing 400 troops and four, gun emplacements. The listed structure is located outside of the study area, c. 700 m from the site and would not be sensitive to the proposed development.
- 4.57 Although Second World War remains are present near the site there is no evidence to suggest that any of this activity extend to within it. As such there is very little potential for buried remain or other remains from this period occurring within the site.

Previous Archaeological Investigation

- 4.58 The following paragraphs provide a summary of the previous archaeological investigations recorded by the HER within the study area. HER Event records are reproduced on **Plan EDP 2**.
- 4.59 Of all of the HER records, 19 relate to archaeological events. Of these, 14 relate to either geophysical survey or intrusive archaeological investigations that might provide information relevant to the assessment of the site's archaeological potential. The other records all relate to non-intrusive activity such as desk-based assessment, building survey, field survey or conservation reports and thus are of little relevance to understanding the site's archaeological potential. These types of records are not considered any further.
- 4.60 The record located within the site (HER: **1274**), that relates to geophysical survey has been discussed already above.
- 4.61 Four of the records (HER: **751, 745, 742** and **10264**) relate to geophysical survey and two phases of archaeological evaluation that took place on land around Winneycroft Farm to the immediate north-east of the site. The aspects of this work that identified archaeological remains have been discussed within the period sections above.
- 4.62 Likewise, archaeological evaluation at Gloucester Golf Club (HER: **12646**), which identified medieval remains has also been discussed above.

- 4.63 Three of the records (HER: **33928**, **34284** and **50109**) relate to geophysical survey, archaeological evaluation and excavation that took place on land to the north and south of the M5 motorway as part of the Gloucester Gateway project. The area of investigation was at its closest point c. 490m to the south-west of the site. the excavations identified two rectilinear enclosure ditches and a trackway, all of Roman period date.
- 4.64 Four of the records relate to small scale archaeological works that did not record any archaeological remains. For example, a single trench evaluation (HER: **878**) carried out at Bazeley road in Matson, Watching briefs (HER **1232** and **1233**) at Hillview Cottage and The Villa, both at Sneedham's Green and, an archaeological evaluation (HER: **1234**) carried out at a small site on Matson Lane, c. 500m to the north-west of the site.
- 4.65 The archaeological work in the study area supports the assessment above that the site has a moderate potential to contain Roman period and medieval archaeological remains. As noted previously, it is possible that such remains might not survive given the treatment of the site when the M5 was constructed in the 1960s/1970s.

Cartographic Sources

- 4.66 The earliest available map to depict the site is the Tithe Map of Upton St Leonard's parish dated to 1840 (**Plan EDP 3**). The map shows the land at the site situated across three large, irregular fields. The moated site is not illustrated although, as part of the field boundary, the ditch that follows its southern part is. The field name of the field in the northern part of the site is given in the Tithe Apportionment that accompanies the map as 'Day House Mead' a possible indication of the former manor house that would have once been in the field.
- 4.67 The fields are irregular with some curved and right-angled boundaries. Coupled with the evidence for former ridge and furrow earthworks at the site, this suggests that the boundaries enclosed furlongs within a medieval open field.
- 4.68 The site is next depicted on the First Edition Ordnance Survey map of 1884 (**Plan EDP 3**). This map shows a similar field layout to the tithe map. It also shows the moated site in full, with an indication of an earthwork aspect to the southern return that is incorporated into the field boundary.
- 4.69 Later Ordnance Survey maps show a similar layout with little change at the site until the late 1960s/early 1970s when the M5 motorway was built. This period in the site's history is better documented by aerial photographs which are discussed below.
- 4.70 The historic maps consulted do not indicate the potential for any archaeological remains not otherwise known about from other sources.

Aerial Photographs and LiDAR

- 4.71 A total of 44 vertical and 7 oblique aerial photographs, covering the site and its immediate environs, were identified within the collection maintained by the Historic England Archive in Swindon. Extracts from two of these images are reproduced at **Plan EDP 6**.
- 4.72 The available images span the period from April 1946 to June 2008 and add detail to the land use and development sequence shown on historic maps.
- 4.73 The images from 1946 (**Plan EDP 6**) were taken with low light levels and pick out clearly earthwork features within the site that have since been destroyed. Ridge and furrow earthworks are clearly visible to the north, north-east and possibly to the west of the moat. The land to the south and east of the moat does not appear to have such earthworks although drainage ditches are present that do not have the same form and are probably much later.
- 4.74 Field boundary ditches are also present, some of which are lined with hedgerows and trees although some, to the north-east of the moat only survive at this time as ditches. Within the enclosure of the moat, although obscured by shadows appear to be other narrow linear ditches. These are likely to be drainage features and it is doubted that they had any relevance to the moat's medieval archaeology. These ditches are no longer present in the area enclosed by the moat.
- 4.75 Later aerial photographs do not illustrate archaeological earthwork features quite so clearly. An image from 1955 (An extract is at **Figure EDP 1**) shows well the water bodies associated with the moat. The northern part (which is extant) is slightly larger than at present with an extended part at its north-west corner. It may be that originally the moat was at this width along its entire northern return but had since silted up and reduced in width. The southern part of the moat is represented by a widening of the field boundary ditch which runs into the former moat from the east. To the west, this wider ditch then remains broad until it meets the brook that runs along the western edge of the site. This difference in character between the ditch to the west and those to the east of the moated site may suggest that this western ditch could have been established at a different time and it may have been associated with the function of the original moat, draining its water to the west into the brook.

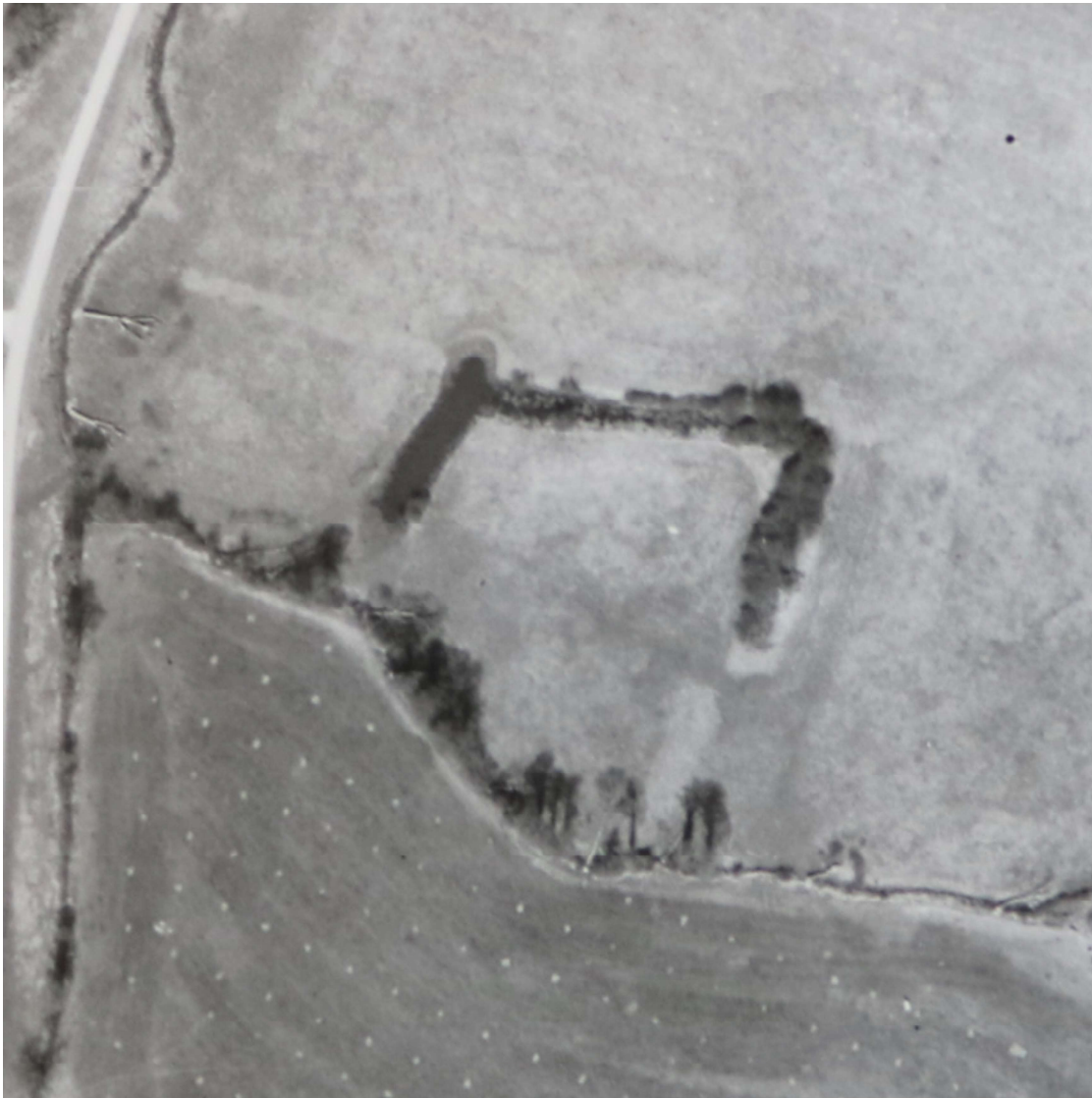


Figure EDP 1: Extract from aerial photograph taken 15 April 1955 (RAF/82/1152) showing a close up of the moated site.

- 4.76 On the western side of the moat, at the point where the southern and northern parts of the moat almost meet, the southern part is wider, protruding to the north, towards the south-western end of the western return. This may suggest that the two terminal ends once met at this point or, it may be that a narrow causeway between the two ends was always present, representing a western entrance to the enclosure. An entrance on this side would have allowed direct access to the Green, its road network and any settlement that might have once been located there.
- 4.77 The image also shows a light-coloured cropmark that relates to the eastern part of the southern return of the moat where its former course diverged northwards from the later field boundary. Evidently this part had been infilled by 1955. The image clearly shows a causeway between the two terminal ends of the moat on this side that was probably an entrance on the eastern side the moat. An entrance on this side of the moat may have linked, via a track, to the medieval road, c. 650m to the east that is recorded by the HER

- (HER: 9665) running between Gloucester and Cirencester, allowing direct access to the road from the manor.
- 4.78 Another light colour cropmark is present as a straight, linear mark running from the north-western corner of the moat west to the brook. It is likely that this may have been a ditch (of uncertain date) designed to drain the northern part of the moat that had been infilled by this time. Remains related to this ditch and any tracks leading from the moat might be expected to be buried within the site although, as for any unrecorded archaeological remains, they are likely to have been disturbed when the M5 was constructed.
- 4.79 The 1955 image also has vague, dark marks within the moated enclosure that might reflect cropmarks of its former buildings. However, these are indistinct and cannot be taken as evidence of buried archaeological remains.
- 4.80 An image from 1970 (**Plan EDP 6**) presents clear evidence for the site's disturbance during the construction of the M5 motorway. The image shows the motorway under construction with direct entrances from the site to the strip in which the motorway is being built. The images appear to show the site and the small field to the north-west scraped and scoured across its entirety including the interior of the moated enclosure. This action clearly removed all of the earthworks present within the site that are detailed in the 1946 image including the field boundaries. Only a strip on the north-west edge of the site appears to be relatively undisturbed. It is presumed that this action was to prepare the ground for the deposition of spoil which evidently then occurred.
- 4.81 LiDAR data was processed, and a multiple-hill shades model was deemed the best for appraising the site. The LiDAR image (**Plan EDP 5**) shows quite clearly an even and smoothly finished, flat mound of earth across most of the site (and the small field to the north-west) that makes the land at the site stand out against the lower ground surface of surrounding land. There is strong contrast between the well-preserved ridge and furrow earthworks present across the land to the north-east and the land at the site that is devoid of such features. The remains of the moat are illustrated set within a dip in the landscape, having been spared the infill and deposition that occurred across the southern part of the moat remains.
- 4.82 The aerial photographs and LiDAR data document well the history of the site, and of the moated site within it, over the course of the second half of the 20th century. It is clear that the site has lost a considerable amount of its archaeological interest and that its landscape character was altered when it was used for spoil deposition during the construction of the M5 motorway. Prior to this episode, the site contained ridge and furrow earthworks, and the remains of the southern part of the moat, that reflected its medieval history. Its later post-medieval development was preserved in the field boundaries that crossed it and which evidently related to the form of the medieval landscape in which they were created, incorporating part of the moat.
- 4.83 All of this historic character and its evidential archaeological interest was removed when the site's upstanding features were levelled and graded, and the site used for spoil

storage, during the construction of the M5 motorway, which raised its ground surface by up to 4.6m in the eastern part of the site. Only the northern part of the moat remains as a remnant of this historic landscape albeit now located in an artificial setting within a basin within the spoil tip. The influence of this setting on the significance of the moat is discussed further in **Section 5**.

Site Walkover

- 4.84 The site was visited in in February 2017 and December 2020 to assess the current ground conditions and topography within it, as well as to confirm the continuing survival of any known archaeological remains and to identify any hitherto unknown remains of significance.
- 4.85 No evidence for archaeological remains was noted within the site and it was observed that the site is clearly capped across most of its area by made ground. No previously unrecorded archaeological earthworks were noted.

Geophysical Survey

- 4.86 A geophysical survey (magnetometry) was carried out across the whole site including the interior of the moat enclosure (GSB, 2017; **Appendix EDP 3**).
- 4.87 The survey did not record any anomalies of definite archaeological origins. It did record the former field boundary ditch that is illustrated on historic maps and was infilled when the M5 was constructed. It also recorded some uncertain curvilinear forms and ferrous responses.
- 4.88 As it picked up the former boundary, it is evident that the survey was able to detect responses from below the deposit of spoil that lies across the site, at least for substantial features such as the former boundary ditch/moat. The ferrous and other uncertain magnetic responses are probably due to modern materials within that spoil. If archaeological remains are still present within the site, they are evidently not magnetically responsive enough to be picked up by the geophysical survey being beneath the layer of spoil which is several metres thick in places.
- 4.89 Given ground conditions at the site, the survey results are therefore inconclusive demonstrating only the existence of the buried remains of a former boundary ditch and no other archaeological features.

Trial Trenching

- 4.90 Following discussion with Andrew Armstrong of GCC it was agreed to undertake a limited archaeological evaluation of the site. The objectives of this work were set out in a Written Scheme of Investigation (WSI: Headland Archaeology, 2020). It was agreed to dig three

exploratory trenches that would be positioned so as to assess the extent of made ground (spoil) deposited across the site and the level of disturbance that occurred during the construction of the M5.

- 4.91 Two of the trenches (Trenches 2 and 3) were positioned to test the presence of made ground on the north-western side of the site. A third (Trench 1) was positioned across the former boundary ditch to the west of the moat in order to test the state of preservation of this feature and, if possible to sample its deposits which might be expected to be directly related to the southern side of the former moat.
- 4.92 The results of the trial trench evaluation are in a report at **Appendix EDP 4** (Headland Archaeology, 2021). In summary the trenching concluded:
- No features of archaeological interest were identified;
 - In all of the areas trenched there was a layer of overburden (from the construction of the M5) at between 1 and 2m in thickness. Trench 3 could not extend to the edge of the overburden (which is anticipated to be in the north-west corner of the site) due to the presence of a buried service;
 - Trench 1 was targeted on the ditch to the west of the moat but only identified this feature as a dark mass of redeposited clay and part of a buried tree. The cut of the ditch was not found and, it was concluded that feature had been dug out and backfilled during the M5 construction works; and
 - A possible buried topsoil layer was identified in some locations however it was not present in all the trenches suggesting a patchy survival across the site by which parts of the topsoil had been removed. This is consistent with the 1970 aerial image (**Plan EDP 6**) which shows the site scoured but with dark patches (that are probably topsoil).
- 4.93 In conclusion, the trial trenches confirmed the likely treatment of the site suggested by the geotechnical data and aerial imagery in the late 1960s early 1970s when the ground surface was disturbed during the construction of the M5. This disturbance evidently resulted in the levelling of upstanding features, the backfill of former field boundary ditches and the partial removal of topsoil (presumably by bulldozers levelling and grading the land surface to prepare it for spoil deposition). Subsequently a deposit of spoil (upcast from the motorway cutting) was made across most of the site (although possibly not the far north-western side).
- 4.94 This activity certainly destroyed any understanding features in the site including the remains of the southern part of the moat, which are likely to have been treated in the same way as the ditch that was evaluated and have probably lost much if not all of their archaeological, evidential interest. It probably also resulted in some truncation and partial destruction (at least) of any buried archaeological remains, in all but perhaps the north-western edge of the site, particularly those located at shallow depths.

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Section 5 Assessment

- 5.1 Current proposals are not fixed, and the following provides an assessment for both physical (direct) impacts and effects on the settings of heritage assets based on the current iteration. The current masterplan is included at **Appendix EDP 1**.

Physical (Direct) Impact Assessment

Designated Heritage Assets

- 5.2 The proposals would not result in any direct physical impacts upon the Scheduled Monument *Moated site at Sneedham's Green, 220m north east of Green Farm (1019399)*.
- 5.3 The Water Environment Assessment (JBA, 2021) has identified potential for the development of the site to result in a reduction in water inputs to the moat. These could potentially occur due to decreased surface water runoff, due to installation of site drainage, and reduced groundwater seepage, due to the excavation of surface material as part of the foundation design.
- 5.4 Whilst this could result in the drying of the moat water body, the Water Environment Assessment found no evidence for the current supply of the moat by a groundwater spring source beneath its base and thus no concerns were identified regarding the hydrochemical signature of the water, which indicates that it is mostly derived from surface run-off. As such, a supplementary water supply could be incorporated into the development's drainage design which can facilitate the maintenance of a continuous water level in much the same way as surface run-off presently does.
- 5.5 The Water Environment Assessment recommends the ongoing monitoring of the moat water levels prior to, during and post construction alongside development of an appropriate drainage strategy to support the long-term preservation of the moat water body. With such safeguards in place, it is assessed that the development would have no direct impact upon any waterlogged archaeological remains that may be present within the moat with such deposits, if present being preserved.

Non-Designated Heritage Assets

- 5.6 The impact of development on non-designated heritage assets would be restricted to impacts on below ground archaeological remains within the footprint of the development. Whilst such remains are considered likely to be disturbed to some degree, this aspect of the assessment would be entirely dependent on the engineering approach to foundation design. As such the assessment of such impacts is deferred to a later iteration of this report, once the engineering approach is fully understood.

Settings Assessment

- 5.7 In accordance with Paragraph 189 of the NPPF, this section describes the significance of those heritage assets deemed to be capable of being affected by the development, including any contribution made by their setting.
- 5.8 Having identified heritage assets with the potential for their settings to be affected by the site's development, Step 2 of the HE settings assessment process examines these assets in greater detail, defining their settings, and identifying the degree to which these settings make a contribution to the significance of the assets, or allow their significance to be appreciated.
- 5.9 This includes an understanding of whether the site forms a part of the asset's setting, and if it does, whether and to what degree it contributes to the significance of the asset in question.
- 5.10 Step 3 then assesses whether the development as proposed (see **Section 1** for description) would be likely to result in a change to that contribution, such that the development is either beneficial or harmful to the significance of the asset in question.

Designated Heritage Assets

- 5.11 With reference to the baseline position as presented in **Section 4**, only a single heritage asset is considered as being sensitive to effects on its setting from the proposed development. All other assets have been scoped out of the assessment.

Scheduled Monument, Moated site at Sneedham's Green, 220m north east of Green Farm (1019399)

Description

- 5.12 The scheduled monument, its significance and its historic development has been described at **Section 4** above and is not repeated here.

Setting and Contribution made to Significance

- 5.13 Whilst the majority of the monument's significance is derived from its physical remains, a smaller proportion is derived from its setting.
- 5.14 The remains of the Moated site at Sneedham's Green are located within a fenced enclosure roughly at the centre of a field of pasture utilised for grazing livestock (**Images EDP 1 and 2**). Being as setting is defined as 'the surroundings in which a heritage asset is experienced', the primary experience of the monument is as a linear pond, lined with and containing reeds and with scrub vegetation and trees at its eastern end located within a grassed field.

- 5.15 As described already, the field in its current form originated in the late 1960s/early 1970s, following the amalgamation of several fields, and loss of former boundaries during the construction of the M5 motorway. The fields that were amalgamated originated in the post-medieval period, as enclosures of agricultural land, with their form based on the prior medieval agricultural pattern.
- 5.16 A considerable proportion of the field (c. 90%), excluding a strip on its north-west side, and extending across most of it, is covered by a levelled and graded 'cap' of spoil deposited during the construction of the M5. The spoil causes the field's ground level to rise to the east and, adjacent to the monument, the edge of this layer is apparent as a gentle scarp looping around the moat, which then appears to sit within a shallow basin that is open to the west. This edge is clearly visible on LiDAR visualisation (**Plan EDP 6; Images EDP 2 and 3**).
- 5.17 The wider surroundings, beyond the site consist mainly of farmland defined by hedgerows, although the southern extent of the Gloucester conurbation at Matson is located only c. 180m to the north and houses at the urban edge as well as a light industrial building can be seen from the monument (**Images EDP 4 and 5**). The consented development, Land South of Winneycroft Farm, (part of the *Strategic Allocation A6 – Winneycroft* in the JCS), will result in the loss of most of the farmland to the north and north-east of the site with housing c. 80m to the north-east, as well as sports pitches across the field to the immediate north-east of the site. In this respect the monument's setting to the north will lose its rurality and the site will adjoin the southern edge of Gloucester at Matson once the residential development of the former Winneycroft Farm site is completed.
- 5.18 This change to the monument's setting was acknowledged in Gloucester City Council's evidence base for the JCS Examination which related how the moat's setting is no longer 'rural' and is now better described as 'urban edge' (**Image EDP 5**).
- 5.19 To the west is a field boundary and the Sud Brook, beyond which is the road Winneycroft Lane, and the open grassed land and adjacent houses at Sneedham's Green. As noted previously, the Green is an area of common land consisting of open, marshy grassland. Several dwellings are located on the edge of the green including some within an 'island' plot located within the centre of the green most of which is occupied by Homesteads Farm.
- 5.20 To the south-west of the site are the farmsteads, fields and outbuildings of Green Farm and Snow Capel Farm which are separated from the site by hedgerows. The field's south-east boundary is defined by the M5 motorway which is set within a cutting. The sound of traffic on the motorway is present across the site.
- 5.21 Topographically, the moated site is situated within a gap between two steep sided hills, Robins Wood Hill to the north-west and Cud Hill to the south-east. Both hillsides are visible from the site, with their wooded slopes, fields and scattered dwellings adding to the rural aspect of the scene.

- 5.22 In understanding how the setting of the monument contributes to its significance it should be considered that HE previously stated that *'The setting of moated sites consists of their rural location; most were supported by the rich farmland around them. That link to the countryside provides a substantial part of the monument's significance.'*
- 5.23 Given the encroachment of the urban edge of the town from the north and the imposition of the M5 motorway, and the changes to the landform around and across the monument that accompanied the motorway, there is little remaining within the setting of the moat that reflects its historic setting of rich farmland, and thus has a historical or functional association with it. However, the landscape does contain features that do retain an historical association with it.
- 5.24 As described previously, the levelling that occurred during the construction of the M5 and the subsequent deposition of spoil around the moat removed earthworks, ditches and field boundaries from the field around the monument that had an association with it. With these features gone, there are no remaining earthworks or hedgerows within the field that reflect the character and appearance of the monument's historic setting. Ridge and furrow earthworks are preserved in the fields to the north-east which reflect remnants of the medieval agricultural landscape within which the moat was built. These will also be removed by the consented development on Land South of Winneycroft Farm, along with any contribution that they make to the monument's significance.
- 5.25 A key survival in the landscape which does retain an historic association with the moated site is the settlement and open land at Sneedham's Green, along with the brook that runs along the site's western boundary. The brook appears on historic maps and may once have taken water from the moat. As described in **Section 4**, the settlement is likely to have been associated with the manor house enclosed by the moat, developing around a Green at the junction of several roads. A possible, causewayed entrance on the western side of the moat may have been designed for access between the manor house and the settlement.
- 5.26 Nowadays, the settlement at Sneedham's Green does not contain any medieval dwellings, indeed its northern edge is defined by modern development but, on account of its status as common land the Green has retained its historic form and its openness (**Image EDP 6**). The Green is not easily experienced from the remains of the moat, with views for the most part screened by the hedgerow that separates the Green from the site (**Image EDP 7**). As such, the association is not readily experienced and is of a historic and spatial nature, rather than because of any direct visual relationship. Consequently, the presence of the Green and the historic settlement pattern that it reflects, makes only a low contribution to the significance of the moat.
- 5.27 The field in which the monument lies (the site) has lost its historical earthworks and boundary features and the changes to its topography from 20th century spoil deposition damaged the moated monument and have resulted in the remains of the moat being located within a depression. This topographic situation gives a false impression of the monument's setting, given that, historically the surrounding field was at a different ground level. The open grassed aspect of the field is the only aspect that has any positive relation

to the moat, simply on account of the openness allowing for the monument to be seen from a grassed space, reminiscent of the pastoral nature of the field before its modification. Nevertheless, this experience, although facilitated by the field's openness is of the monument, now only partial, within a setting in which the ground levels have been artificially raised and so bears little relevance to its history and historic function.

- 5.28 On this account the surrounding field in which the remains of the monument are located and seen from are neutral in terms of its significance, neither harming it, as the monument remains can still be appreciated, but not enhancing it, as the experience gives a false impression of its historic setting and reflects none of its historic function.
- 5.29 Beyond the field surrounding the monument, due to the hedgerows which bound the site, the monument is not readily experienced and the main aspects of the wider landscape that contribute positively to its significance are those elements that have a demonstrable historic association with the monument, and therefore contribute to its historic interest, such as the Sneedham's Green settlement.
- 5.30 As noted above, the moated site was built within a rural location. Aspects of the wider landscape reflect that rurality, such as the site's hedgerow boundaries, the Sud Brook, the farm buildings and farmland at and around Snow Capel and Green Farm to the south-east and the countryside backdrop provided by the adjacent hillsides. All are aspects of the monument's setting that are experienced in views across it, and with it, and which retain a degree of countryside character in the monument's setting.
- 5.31 However, these features are the products of the post-medieval and modern period and reflect little of the monument's original, medieval countryside setting which would have mostly comprised open fields defined by ridge and furrow with the settlement at Sneedham's Green to the west. The moated manor was probably linked to the surrounding landscape with tracks to the west and to the Gloucester-Cirencester road to the east however these have been entirely lost and the monument is now isolated in a landscape that overwhelmingly reflects later periods in its character. As such, these post-medieval and modern 'rural' elements of the moated site's setting contribute to its significance to only a very low degree.
- 5.32 Modern elements of the wider landscape are generally negative in their influence on the monument's significance. The encroachment of the urban edge to the north, which will be increased when the Land South of Winneycroft Farm site is developed, has resulted in the degradation of the monument's rural setting to the north, including the loss of ridge and furrow earthworks in its wider setting. This 'urbanisation' has caused a low degree of harm to the monument's significance.
- 5.33 The M5 motorway is also considered to represent a negative aspect of the monument's setting. Although set within a cutting, and thus not visible from the monument, the presence of the motorway is apparent from across the site as traffic using it creates a constant noise that disrupts the tranquillity of the countryside in this area. This noise further degrades the 'rural' quality of the monument's setting, distracting from any impression of the monument as being set within an undisturbed countryside setting. The

presence of the motorway detracts from the monument's significance to a moderate degree.

Impact of the Proposed development

- 5.34 The proposed development would result in change to the setting of the scheduled monument.
- 5.35 With reference to the indicative concept plan at **Appendix EDP 1**, the monument would be located within a green, open space with the moat remains at its centre. Houses would be located on the northern, eastern and southern side of the site, approximately 45m from the moat itself. The scheduled monument boundary would, at its closest point, be c. 5m from the houses at its southern tip; a part of the monument that is underneath the spoil cap.
- 5.36 The houses would be set on cul de sacs with access to Winneycroft Lane at the north-western edges of the site and an emergency access to the south-west. Those positioned on the inner edges would face towards the monument. These would be fronted by a walking route around the perimeter of the open space. A walking route would also be created running along the western edge of the site.
- 5.37 The open space would include ponds in the western part of the site. The hedgerow on the site's western boundary would be thinned out to provide glimpsed views to the west towards Sneedham's Green from the site's interior.
- 5.38 As noted above the monument is already located close to the urban edge, a process that is set to increase with the development of neighbouring land. Following the site's development, the monument would be within this urban environment, all be it still close to the edge of the conurbation.
- 5.39 Nonetheless, with the site's development, the proposed houses and related infrastructure would not result in the loss of any upstanding remains related to the monument and would be constructed across a 'false' land surface that is already demonstrably out of character with the moated site's original setting. A degree of the field's present quality of openness would be retained around the monument, which would be perceptible in the field and occupy a prominent position at its centre. The monument would continue to be experienced within a grassed open space but with a backdrop to the north, east and south defined by the presence of houses.
- 5.40 In order to accentuate the historic connection in the landscape between the monument and the settlement at Sneedham's Green to the west, the western aspect of the monument would remain open and, it is proposed to reduce the density of the field boundary hedgerow on the western edge of the site in order to open up views between the monument and the Green. This appreciation would be particularly apparent from the walking route that would run along the site's western edge, from which both the monument and Green would be experienced together. It is anticipated that an

interpretation panel could be provided along the route so as to further the strength of the historic association.

- 5.41 Further opportunities for interpretation could be provided on the route around the inner edge of the housing development. An additional benefit for the monument would be the provision of a comprehensive Management Plan in order to protect and conserve its remaining fabric moving forwards, including its water levels.
- 5.42 Whilst the presence of houses in the monument's setting would reduce the degree to which it is experienced within a countryside setting, it is apparent that this present setting contains very little quality in this regard and the surrounding field does not contain any features or is part of a landscape that relates closely to the monument's historic setting or historic function. The field in which it lies, in its current form and appearance, is largely a product of changes made in the 20th century when the M5 was constructed.
- 5.43 The development would also seek to strengthen the spatial and visual connection between the monument and Sneedham's Green which is the key, surviving tangible feature of the surrounding landscape with which the monument has a historic association. This association is currently hard to appreciate and it is the development's intention to create a more visible connection between the monument and its historic neighbour, which would be presented through interpretation measures. The interpretation would highlight the location, history and importance of the monument where, presently, a lay visitor might not be able to appreciate what they are seeing.
- 5.44 As such, whilst the monument's setting would lose some elements that reflect a countryside character, resulting in a loss of significance, the loss would be of post medieval and modern elements of its setting that contribute little to its significance anyway and, given the offset from the houses, the monument's above ground remains would continue to be appreciable within an open space. Notwithstanding this effect, the development will increase the strength of the contribution made to the monument's significance by the adjacent Green, enhancing its historic value through a better illustration of the association between the two features that both originated in the medieval landscape. As such, this benefit would temper the adverse effect of the change in character to the monument's wider setting and, overall, only a very low degree of harm to its significance is assessed.

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Section 6 Conclusions

- 6.1 This archaeological and heritage assessment concludes that there will be no direct effects on any designated heritage assets or known non-designated heritage assets as a result of the proposed development proceeding. This includes potential impacts on waterlogged archaeological remains located within the scheduled moat located within the site due to a reduction in water levels. The results of a Water Environment Assessment indicate that water levels within the moat can be successfully managed and maintained through drainage design.
- 6.2 Potential impacts upon the settings of designated heritage assets have been considered in accordance with Historic England guidance: *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets* (HE 2017 Second Edition). All designated heritage assets located within the site's wider zone of influence were assessed in order to understand whether their settings have potential to be changed by the site's development.
- 6.3 The assessment concludes that the site only forms a part of the setting of the scheduled monument, *Moated site at Sneedham's Green, 220m north east of Green Farm (1019399)* which is located within the site, and no other heritage assets, either designated or non-designated.
- 6.4 Whilst the land at the site is a grassed open space from where the monument can be experienced, the field's form, appearance and ground levels are a result of modification carried out when the M5 motorway was constructed in the late 1960s/early 1970s and therefore is not representative of the monument's historic setting. Equally, whilst the monument is experienced in a location with elements that convey a 'rural' character, this character is being increasingly eroded by the southward expansion of the conurbation of Gloucester, a process set to expand with the development of the adjacent site, Land South of Winneycroft Farm. In this respect, and in line with observation made by the Council, the site is now better described as at the 'urban edge' than in the countryside.
- 6.5 The field in which the monument lies (the site) is neutral in terms of its contribution to its significance, neither harming it, as the monument remains can still be appreciated, but not enhancing it, as the experience gives a false impression of its historic setting and has little relevance to its historic function. Whilst most historically related elements of the surrounding landscape have been lost, there remains a historic association between the monument and the adjacent brook and common land at Sneedham's Green to the west. However, due to the intervening hedgerow, this relationship is not easily appreciated visually from the monument or Green.
- 6.6 The proposed development, in its current iteration, will change the setting of the monument which will lose some of its remaining countryside setting. However, the monument will remain within an open area of grassed land and so will still be appreciable. The connection between it and Sneedham's Green is reflected in the

proposals, with the monument's setting open to the west and a reduction in the hedgerow density to the west, which will allow a stronger visual connection between the site, monument and the Green. Walking routes around the space in which the monument lies will allow for an appreciation of it and interpretation panels will serve to identify the monument, illustrate its history and make the connection with the historic settlement at the Green. Presently the monument has no interpretative aspect nor is it under a management plan. Development will change this situation in allowing the monument to be better appreciated by the public and its conservation will be governed by the development of a management plan.

- 6.7 Overall, given the respect for the surviving historic connection in the landscape with Sneedham's Green and, as the surrounding post-medieval and modern countryside elements only make a limited contribution to the monument's significance, the assessment identifies overall only a very low degree of harm to its significance. This harm would be at the far lower end of the spectrum of 'less than substantial harm' and, in accordance with Paragraph 196 of NPPF, should be *'weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.'*
- 6.8 In terms of the site's archaeology, whilst there is considered to be a moderate potential for the site to contain buried remains of low or moderate significance dating to the Late Iron Age or Roman period remains and the medieval period, the desk-based assessment, geotechnical data, geophysical survey and trial trenching has identified that, in the late 1960s early 1970s the ground surface across at least c. 90% of the site, including the scheduled monument, was disturbed during the construction of the M5.
- 6.9 This disturbance comprised the levelling of upstanding earthwork features such as ridge and furrow, the backfill of former field boundary ditches and the partial removal of topsoil. Subsequently a deposit of spoil (upcast from the motorway cutting) was made across most of the site raising the ground level by up to 4.6m at its highest, eastern side but possibly excluding the far north-western side (which is otherwise crossed by services).
- 6.10 This activity destroyed any upstanding archaeological features in the site including the remains of the southern part of the moat, which are likely to have been graded and infilled, losing most if not all of their archaeological, evidential interest. It probably also resulted in some truncation and partial destruction (at least) of any previously unrecorded buried archaeological remains, in all but perhaps the north-western edge of the site, particularly those located at shallow depths. As such, it is considered that there is only a low potential for any well-preserved archaeological remains to survive in the site, and such remains would be buried beneath redeposited spoil up to 4.6m in depth.
- 6.11 The potential for impacts upon archaeological remains would depend on the nature of foundations proposed and is presently undefined. As such, the assessment of such impacts is deferred to a later iteration of this report, once the engineering approach is fully understood.
- 6.12 In conclusion, the assessment has not identified any reason why the development as proposed would conflict with historic environment legislation or planning policy and it is

anticipated that the proposals will be looked upon favourably regarding the historic environment.

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1884 First Edition Ordnance Survey Map

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List of aerial photographs referenced in the text

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Appendix EDP 1
Proposed Site Plan

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Appendix EDP 2

Consultation with Historic England

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From: Barge, Melanie <Melanie.Barge@HistoricEngland.org.uk>
Sent: 19 September 2017 16:16
To: Andrew Crutchley
Subject: RE: Land at Snow Caple, Matson (Gloucester)

Dear Andrew

Thank you for your e-mail and hope you are well too.

We have now changed our pre-application advice process, as Hugh told you, but it is still a formal process. Previously an applicant was given 15 hours free before we charged for our services. We have now replaced this with a free cycle of advice: to cover a meeting/ site visit, assessment of proposal, discussion and a single letter. After that we will charge for any additional or extended advice. An application will be logged on to our system and then allocated to the relevant Inspector.

I am not as familiar with the Gloucester City Evidence base as you are and so I am not clear as to where the quote you provide comes from. Please can you provide a reference so I can locate it.

I am more familiar with the conclusions of the JCS Examination (JCS Summary Comments, pp2-3) which states that:

There was also discussion around an omission site to the south of the Winnycroft allocation. The site is the location of a Scheduled Monument (SM) and other potential heritage assets. The JCS authorities view is that the presence of the SM represents a significant constraint to development and it would therefore be inappropriate to allocate the site for development. (JCS Summary Comments, pp2-3). <http://www.gct-jcs.org/Documents/New-Evidence-Base-and-Associated-Documents/Main-Modifications-Examination-Document-Library/MM35-JCS-ExaminationSummary-Note-10082017.pdf>

From this statement it is clear that the Joint Authorities feel the site is inappropriate for development.

However if you can provide me with a master plan proposal for the site I would be happy to provide formal comments on the proposal. We have a minimum requirement for information to allow us to log and then respond to a pre-application inquiry. For us to provide advice we do need to see plans of the proposed development. This allows us to properly assess any impacts and respond accordingly. I understand there is a draft master plan already prepared and this can form the basis of any formal comments I make on development at this site. Once you have sent a master plan the application can be logged and I can provide a considered response.

I am very familiar with the site and do not feel a meeting at this stage will be useful.

I look forward to hearing from you.

Mel Barge (Ms)
Inspector of Ancient Monuments
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29 Queen Square, Bristol, BS1 4ND
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From: Andrew Crutchley [mailto:andrewc@edp-uk.co.uk]

Sent: 05 September 2017 12:01

To: Barge, Melanie

Subject: Land at Snow Caple, Matson (Gloucester)

Melanie

Snow Caple, Matson

Good morning, I hope you are well. I understand that my colleague, Rob Skinner, exchanged emails with you in the spring/summer regarding the above site and the presence of the *Moated Site at Sneedham's Green Scheduled Monument* [Ref. 1019399], in order to ascertain Historic England's informal view in respect of development proposals.

I understand that the exchange concluded on 20 June with a recommendation to *'send me a copy of the proposed outline masterplan [so] I can provide a more considered response through our formal pre-application process. You can then share this with Gloucester City Council'*.

At this stage, there is no fixed masterplan for the proposals and that remains a work in progress, but in light of the Inspector's question regarding the proposed extension of the draft Winnycroft allocation (to include the site) at the most recent session of the Joint Core Strategy; and more particularly in light of the answer which Gloucester City Council gave to that question on the day in Cheltenham; my client is keen to open a formal dialogue with the Council regarding the site's promotion for development.

As you will be aware, the Council's own evidence base, prepared for the JCS, concludes that:

'development [at Winnycroft] should seek to create a positive relationship with the scheduled moated site at Sneedham's Green, such that it becomes a borrowed landscape in order to reduce the risk of it becoming side-lined and neglected as a result of the development's [presumably the Barwood site] proximity. Consideration should be given to the provision of an interpretation panel on [the] footpath network'

This is clearly a very laudable aspiration, and one which my client's land interest has the potential to bring forward and deliver. However, the Council have advised them that, in order for them to engage in pre-application discussions, it is first necessary for us to have opened a formal pre-application process with Historic England with regard to the scheduled monument.

To that end, I have spoken with Hugh Beamish in the Bristol Office; and from that I understand there is no longer a 'formal' pre-application process for consultation with Historic England, and that pre-application discussions have reverted back to direct contact with the relevant Inspector for the particular area in question. Therefore, whilst you have previously provided Rob with Historic England's informal position in respect of the moated site at Sneedham's Green, I would be grateful if you could now set out a formal opinion so that we can move forward with GCC.

Within that context, I note that the Ecus report, commissioned by and for the Council (to inform the JCS), identifies that *'the proximity of modern development to the north, and the noise and visual interference of the M5, intrude on the tranquillity and sense of remoteness such that the over-riding character of the area is one of land on the urban-fringe'*; and that was written before the Barwood site to the north was approved, let alone built.

So, in short, we believe that a sensitively designed residential development at the site, which *'creates a positive relationship'* with the scheduled moat by utilising it as a *'borrowed landscape'*, could address GCC's shortfall in housing numbers and safeguard the asset for future generations through the creation and implementation of a long term management regime, including the promotion of public access to (and enjoyment of) this feature. Therefore we believe there is merit in engagement in dialogue with the Council and Historic England as part of the promotion.

In a similar vein, I believe it may well be desirable to meet and have a look at the moat/site together, particularly in light of the length of time that has elapsed since the Barwood scheme was being considered. Subject to your availability, I could get something in the diary fairly quickly.

Please give me a call if you would like to discuss the above further, or if you would like additional information. However, in the meantime, I look forward to hearing from you shortly.

Kind regards.

Yours sincerely,

Andrew

Andrew Crutchley BA (Hons), PG Dip (Oxon), MCIFA
Director



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SOUTH WEST OFFICE

Mr Andrew Crutchley

Direct Dial: 0117 975 1300

The Environmental Dimension Partnership (EDP)

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Our ref: PA00585868

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Cirencester

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17 October 2017

Dear Mr Crutchley

Pre-application Advice

LAND AT SNOW CAPLE, MATSON, GLOUCESTER

Thank you for sending us further information about your clients proposed development at Land at Snow Caple. I understand that the master plan you have provided is indicative and is still being worked on. It does however provide me with enough information to understand the potential impacts of any development on the scheduled monument of Sneedham's Moat.

Advice

Sneedham's Moat is a moated site with about half of its moat surviving as a water filled feature. It was added to the scheduled of Ancient Monument's in 1951 to preserve it, as far as possible, in the state in which it has come down to us today. (Paragraph 6, DCMS Scheduled Monument and Non Designated Nationally Significant Archaeology Policy, October 2013).

Around 6,000 moated sites are known in England, with about 200 in Gloucestershire. Specifically around Gloucester there are a number of these moated sites, which includes Sneedham's Green, within a short (3 mile) distance of the Medieval City. These may represent the country houses/estates of wealthy and influential men from Gloucester. At the time of their construction Gloucester was a powerful and important city in Medieval Europe. Moated sites were located in rural locations as they were supported by the surrounding farmland and formed an administrative centre of large estates. That link to the countryside contributes to the monuments significance.

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There is little known about the history of Sneedham's Green moated site and few documentary sources have been located referring to it. It current lies within a rural landscape which has been altered in recent times by the construction of the M5 motorway to the east of the site. The motorway does sit within a cutting as it passes the site and spoil from the construction was spread on the field around the moat, raising the ground level. This means that the motorway is not clearly visible from the site and as you look eastwards the cutting mostly hides the motorway from view, though it is still audible. The land to the east and west rises up and is either farmland or wooded.

The proposed housing close to and surrounding the moated area would in our opinion cause harm to the significance of the monument, by removing the connection with its rural landscape and setting. The level of harm would be high and further assessment of the proposals may place that harm at Substantial.

The National Planning Policy Framework clearly states that substantial harm to designated heritage assets of the highest significance, which includes scheduled monuments, should be wholly exceptional (paragraph 132). If there are no substantial public benefits to the scheme the Local Planning Authority should refuse consent (Paragraph 133).

Even if further assessment identified the harm as less than substantial that harm would need clear and convincing justification and (NPPF 132) and public benefits (NPPF 134) to outweigh that harm.

In your previous correspondence you quote text from the Councils evidence base for the JCS with regards to Winnycroft, which mentions Sneedham's Green. I have still not managed to locate that quote. Could you please provide a link or reference to the location of that paper please?

As I have already stated I am more familiar with the conclusions of the JCS Examination (JCS Summary Comments, pp2-3) which states that:

There was also discussion around an omission site to the south of the Winnycroft allocation. The site is the location of a Scheduled Monument (SM) and other potential heritage assets. The JCS authorities view is that the presence of the SM represents a significant constraint to development and it would therefore be inappropriate to allocate the site for development. (JCS Summary Comments, pp2-3).

<http://www.gct-jcs.org/Documents/New-Evidence-Base-and-Associated-Documents/Main-Modifications-Examination-Document-Library/MM35-JCS-ExaminationSummary-Note-10082017.pdf>

From this statement it is clear that the Joint Authorities feel the site is inappropriate for development. If you can provide evidence contrary to this conclusion I would be pleased to review it.

We feel that this proposal will cause harm to the significance of the highly designated heritage asset. This is through a change in its setting which contributes to its significance. The level of harm in our opinion is high and further, more detailed, assessment may place that harm at substantial.

Thank you for involving us at the pre-application stage. Your current proposal does not



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address our concerns, as set out above, and so is unlikely to receive our support if submitted for statutory approval.

Yours sincerely

Melanie Barge

Inspector of Ancient Monuments

E-mail: melanie.barge@HistoricEngland.org.uk

24 November 2017

Our Ref: **L/EDP3746/AC/fj**

Sent by Email: Melanie.Barge@HistoricEngland.org.uk

Melanie Barge
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BS1 4ND

Dear Melanie

Land at Snow Caple, Matson, Gloucester

Thank you for your comments, in respect of the above site, dated 17 October 2017 [PA00585868], which presents Historic England's position in respect of Edward Ware Homes' proposal to bring forward residential development on land around the scheduled moated site at Sneedham's Green, south of Matson, in Gloucestershire.

Your letter of 17 October 2017 makes a number of points about this monument's significance and its setting, to which I respond in the following paragraphs.

In terms of 'advice', it is stated that "*Sneedham's Moat is a moated site with about half of its moat surviving as a water filled feature. It was added to the schedule of Ancient Monuments in 1951 to preserve it, as far as possible, in the state in which it has come down to us today*".

It is subsequently identified that 'it currently lies within a rural landscape which has been altered in recent times by the construction of the M5 motorway to the east of the site. The motorway does sit within a cutting as it passes the site and spoil from the construction was spread on the field around the moat, raising the ground level. This means that the motorway is not clearly visible from the site and as you look eastwards the cutting mostly hides the motorway from view, though it is still audible. The land to the east and west rises up and is either farmland or wooded'.

First and foremost, historic Ordnance Survey maps illustrate that, at the time of its first designation in 1951, the moat existed as a polygonal enclosure with an opening on the east side and a linear earthwork in the south which ran alongside the field boundary.

In contrast (today), the moat survives as the northern and western 'arms' of the enclosure, as well as the northern end of the eastern arm, whereas the southern portion

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of the monument has been erased as an earthwork feature (along with the adjoining field boundary).

It is not known for certain when the southern portion of the moat was lost as a landscape feature, but it is understood to have coincided with the construction of the M5 motorway on land adjoining the eastern boundary of the Snow Cople site. In any event, it is clear that the moated enclosure no longer survives in the form in which it was recognised as being of 'national importance', with there being evidence that the M5 construction works that changed its surrounding landscape were also responsible for the direct, physical change to the monument's appearance and condition.

In that regard, it is very clear that the construction of the M5 motorway has had a profound impact on not only the appearance and survival of the Sneedham's Green moated enclosure, but also on the 'surroundings in which it is experienced'. This is clearly downplayed in your comments above, but more accurately captured in Paragraphs 5.25 and 5.26 of the Ecus Environmental Consultants report for the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy, which was prepared in September 2016 and provides the 'Additional Site Assessments':

"The construction of moated sites during this period is believed to have been as much a symbol of wealth and prestige as a defensive feature, and would most likely have been intended to be visible. The present situation of the monument has been adversely effected by the raising of ground levels around it with arisings from the construction of the M5 cutting, such that the moated site now appears to lie within a topographic hollow. The position of the monument within a field bounded with hedgerows also restricts visual access, such that the character of the monuments setting is now isolated and enclosed. Public footpaths do cross within the vicinity of the site, from where its physical remains can be viewed, although the loss of its southern ditch and the lack of any interpretation limit understanding of its function.

Whilst the fieldscape and distant views of the undeveloped Robinhood Hill and Cotswolds preserve a good sense of the former rural character of the area, the proximity of modern development to the north, and the noise and visual interference of the M5, intrude on the tranquillity and sense of remoteness such that the overriding character of the area is one of land on the urban-fringe. The open views available from adjacent to the monument of the surrounding area do however afford understanding of the topographic situation of the monument and a sense of its former agricultural economy".

I have included a copy of the Ecus report for your information, as I understand that you remain unaware of its conclusions and advice, but clearly the assessment on the monument's setting is of interest when it identifies that (even before the adjacent Barwood application was consented) the *"the proximity of modern development to the north, and the noise and visual interference of the M5, intrude on the tranquillity and sense of remoteness such that the overriding character of the area is one of land on the urban-fringe"*. If that was the situation prior to the adjoining Barwood land being developed, it surely must be accepted that the setting of the scheduled enclosure is no longer 'rural' in the manner which your 17 October commentary identifies.

More pointedly, the Ecus assessment for the Joint Core Strategy is clear in recognising that setting can be influenced and affected by non-visual factors; a position outlined in current Historic England



guidance (GPA3, 2015) and since endorsed by Justice Lang in the High Court judgement regarding the Kedleston Road site in Derbyshire.

Whilst the M5 motorway may be carried in a slight 'cut' to the east of the Snow Caple site, it would be wholly disingenuous to suggest that it does not have a significant bearing on the surroundings in which the scheduled monument are 'experienced' nevertheless. Whilst the vehicles are to some extent screened from view from the moat, it is abundantly clear that the passing motorway traffic fundamentally alters the experience in terms of noise and ambience, especially given its position just beyond the running-in lane from the northbound Gloucester Services to the south. Hence, the Ecus report is unambiguous in dismissing this asset's setting as being 'rural'.

It is worth noting that, in providing written evidence ahead of the most recent of the JCS Hearings, Gloucester City Council relied on heritage reports prepared by EDP for the Barwood site to the north and made no reference to the commentary or advice contained in its own evidence base. Clearly the reports prepared by EDP refer to a different site, for a different proposal and to inform/support the submission and then determination of an outline planning application, rather than to consider whether this specific site is of such 'sensitivity' that development should be prevented or restricted because of its heritage impact. In that respect, their relevance and usefulness for the Snow Caple site currently before us are considered to be limited in the extreme.

It is therefore worth repeating that Paragraph 5.1.9 (on Page 34) provides the following advice to the Local Authorities under the heading 'Maximising Enhancements and Avoiding Harm', when it considers the scheduled monument; i.e.:

"Development should seek to create a positive relationship with the scheduled moated site at Sneedham's Green, such that it becomes a borrowed landscape – in order to reduce the risk of it becoming side-lined and neglected as a result of the development's proximity. Consideration should be given to the provision of an interpretation panel on footpath network".

The use of the term 'borrowed landscape' is clearly relevant here – because it infers that the moat should actually be brought into the developed area '*in order to reduce the risk of it becoming side-lined and neglected as a result of the [Barwood] development's proximity [to the north]*'. Given that Barwood never had any means to deliver improvements to the monument; either in terms of the footpath network or the provision of an interpretation panel; and there is certainly no requirement for them to do so within their consent; it is clearly difficult to understand how the current situation within the Winnycroft allocation will not run counter to this laudable aspiration.

Based on its present extent, the Winnycroft allocation does not 'create a positive relationship with the scheduled moated site at Sneedham's Green'; similarly, it does nothing to 'reduce the risk of it becoming side-lined and neglected'; two objectives which can only realistically be delivered by the sensitive development of the land at Snow Caple controlled by Edward Ware Homes.

In view of current Case Law, where 'substantial harm' (NPPF Para 133) is assessed as comprising an impact so serious that the significance of the asset is 'vitiating altogether or very much reduced'; it would be surprising for a sensitively designed development on this site to generate an impact of such



magnitude to meet the high threshold for substantial harm, most particularly given the extent to which the construction of the motorway has changed the physical appearance of the monument and the surroundings in which it is experienced.

Moreover, it must equally be recognised that, whilst development on this site has the potential to cause harm to the scheduled monument through change within its setting, it also has potential to bring forward significant benefits in terms of the delivery of much needed new housing, but also in terms of the moat's long-term conservation and management. Of course, these benefits would need to be factored into the balancing exercise when weighing up the acceptability of development on this piece of nondescript farmland.

As you will no doubt have seen, the Planning Inspector's final report (26 October 2017) for the JCS places a greater weight on the desirability of rapid adoption for the Strategy than on either finding new allocations or expanding existing allocations. Nevertheless, it is clear from the Council's verbal evidence to the Planning Inspector's questions (and her final written report subsequently) that an opportunity still exists to bring the Snow Cagle site forward for development through the Local Plan process, subject to the provision of the required evidence base.

We will no doubt speak again in connection with that process, but in the meantime please do not hesitate to contact me if you would like to discuss any of the above points in greater detail. In the meantime I look forward to speaking with you again soon.

Kind regards.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andrew Crutchley'. The signature is written in a cursive, slightly slanted style.

Andrew Crutchley BA (Hons), PG Dip (Oxon), MCIFA

Director

Email: andrewc@edp-uk.co.uk

Enc: Ecus report

Appendix EDP 3 Geophysical Survey Report

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GEOPHYSICAL SURVEY REPORT G16119

Land at Snow Capel Farm,
Matson,
Gloucester

Client:



On Behalf Of:

edwardwarehomes
Because boxes are for shoes

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PROSPECTION Ltd

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at the forefront of
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GEOPHYSICAL SURVEY REPORT

Project name: Land at Snow Capel Farm, Matson, Gloucester
Job ref: G16119
Client: Environmental Dimension Partnership Ltd
Survey dates: 16 December 2016
Report date: 10 January 2017
Field Co-ordinator: Stephen Weston BA
Field team: Sam Wood, Olivier Vansassenbrouck MSc, Matthew Wetton MSc, Adam Clark BA, Paul Bracken BA.
Report written by: Joe Perry BA
CAD illustrations by: Tom Cockcroft MSc
Report approved by: Dr John Gater MCifA FSA
Project Director: Dr John Gater MCifA FSA
Version number and issue date: V1: 11 January/2017

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APPENDICES

Appendix A	Technical Information: Magnetometer Survey Method
Appendix B	Technical Information: Magnetic Theory

DIGITAL CONTENT (CD)

- Minimally Processed Greyscale Images and XY Trace Plots in DWG format
- DWG Viewer
- Digital Copies of Report Text and Figures (both PDF and native formats)

1 SUMMARY OF RESULTS

No anomalies of archaeological interest were detected. A number of weak trends of uncertain origin and an old field and boundary were identified. There is a large number of ferrous anomalies to the east of the moated site and whilst they appear modern, an association with the former cannot be ruled out.

2 INTRODUCTION

2.1 Background synopsis

GSB Prospection Ltd. was commissioned to undertake a geophysical survey of an area proposed for residential development. This survey forms part of an archaeological investigation being undertaken by **Environmental Dimension Partnership Ltd** on behalf of **Edward Ware Homes**.

2.2 Site Details

NGR / Postcode	SO 850 142 / GL4 6EQ
Location	The site is located on the south-eastern edge of Gloucester, and is bounded to the south-east by the M5 motorway and to the west by Winnycroft Lane
HER/SMR	Gloucestershire
District	Gloucester
Parish	Matson
Topography	Flat
Current Land Use	Livestock
Soils	Soils are Martock (711d) association slowly permeable seasonally waterlogged stoneless silty over clayey and clayey soils over siltstone or shale. Some similar soils with slowly permeable subsoils and slight waterlogging (SSEW 1983).
Geology	Bedrock geology within the survey area consists of Blue Lias Formation and Charmouth Mudstone Formation (BGS 2017).
Archaeology	There is a scheduled ancient monument located on site (monument number 1019399: moated site at Sneedham's Green).
Survey Methods	Detailed magnetometer survey (fluxgate gradiometer)
Study Area	7.8ha

2.3 Aims and objectives

To locate and characterise any anomalies of possible archaeological interest within the study area.

3 METHODS, PROCESSING & PRESENTATION

3.1 Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage) and the Chartered Institute for Archaeologists (IfA 2002 & ClfA 2014).

3.2 Survey methods

Detailed magnetic survey was chosen as an efficient and effective method of locating archaeological anomalies.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m

More information regarding this technique is included in Appendix A

This project was carried out in accordance with a Written Scheme of Investigation submitted to and approved by Gloucestershire CC

3.3 Data Processing

The following schedule shows the basic processing carried out on the data used in this report:

1. *De-stripe*
2. *De-stagger*

3.4 Presentation of results and interpretation

The presentation of the data for each site involves a greyscale plot of processed data. Magnetic anomalies have been identified, interpreted and plotted onto the 'Interpretation' drawings. The minimally processed data are provided as a greyscale image on the CD together with an XY trace plot in CAD format. A CAD viewer is also provided.

When interpreting the results several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to very specific known features documented in other sources, this is done (for example: Abbey Wall, Roman Road). For the generic categories levels of confidence are indicated, for example: probable, or possible archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification "possible".

4 RESULTS

- 4.1 No anomalies of archaeological interest were detected.
- 4.2 An intermittent, linear anomaly is visible within the dataset. This feature corresponds with a field division recorded on an 1884 Ordnance Survey map, and has therefore been assigned to the category *Former Field Boundary*.
- 4.3 There are a couple of poorly defined curvilinear trends in the data; these are probably simply ploughing effects but, in the context of the known Scheduled Monument, they are assigned to the category *Uncertain Origin*.
- 4.4 A scatter of ferrous responses to the east of the moat are typical of those due to relatively modern debris, but the close proximity of the scheduled site might suggest a greater antiquity for the recorded anomalies.
- 4.5 A large area of magnetic disturbance was recorded in the south-east edge of the survey area and possibly construction debris from the building of the M5 motorway.
- 4.6 A pipe traverses the site on north-south alignment, located on the western edge of the site.
- 4.7 Ferrous responses adjacent to boundaries are due to fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and their form is best illustrated in the XY trace plots. These responses are characteristic of small pieces of ferrous debris in the topsoil and are commonly assigned a modern origin. The most prominent of these are highlighted on the interpretation diagram.

5 DATA APPRAISAL & CONFIDENCE ASSESSMENT

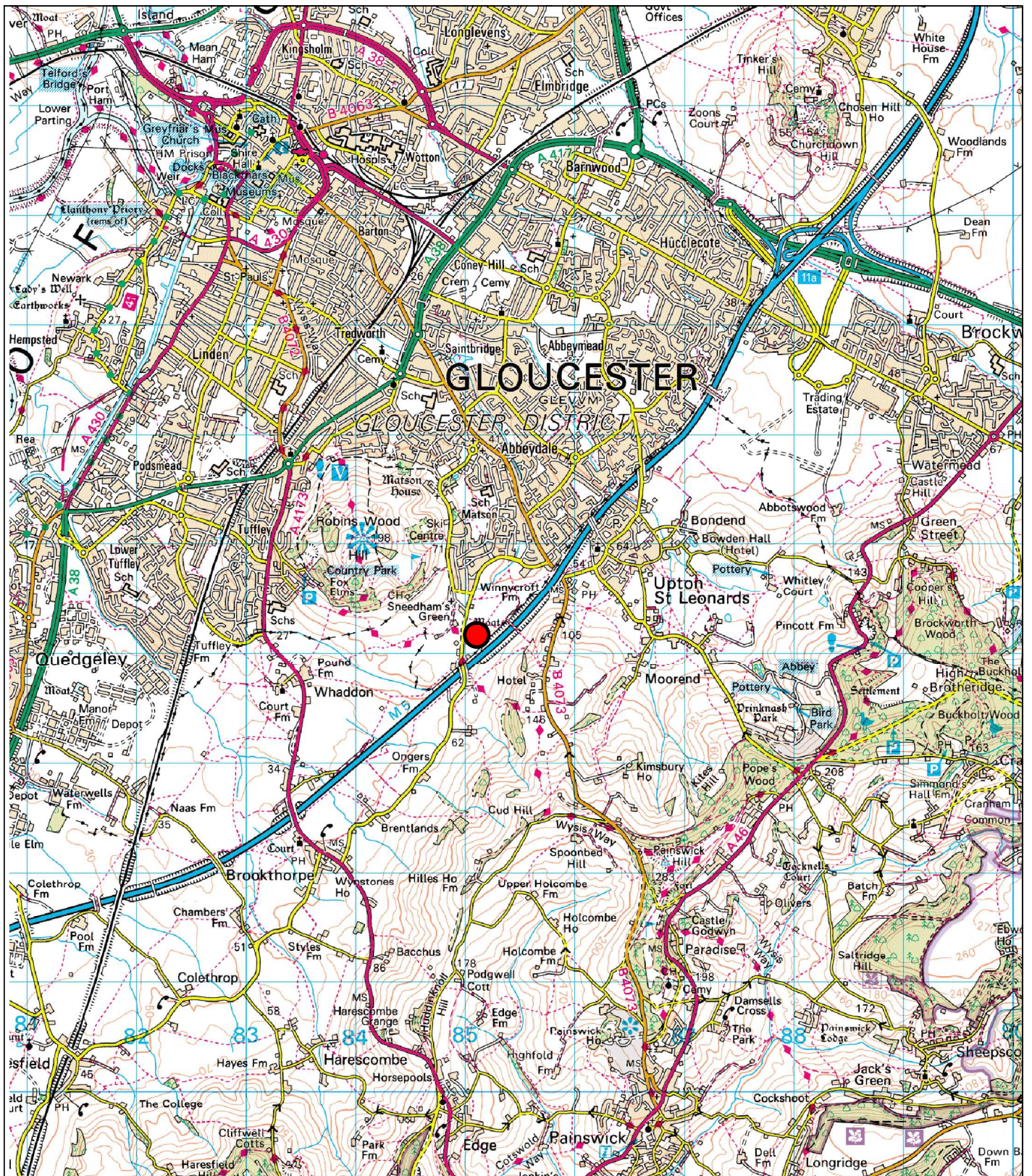
- 5.1 Historic England (then English Heritage) Guidelines (EH 2008) Table 4 states that the magnetic response over Mudstone is poor. Given that former boundaries were detected in this survey, the results suggest that the magnetic survey has been effective.

6 CONCLUSION

- 6.1 The survey did not identify any anomalies of archaeological potential.
- 6.2 A former field boundary was located.
- 6.3 A number of weak trends of uncertain origin were detected; they are likely to be due to agricultural or natural effects.
- 6.4 Ferrous responses are probably modern in origin but there is a possibility that they are associated with the moated site.

7 REFERENCES

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- SSEW 1983 *Soils of England and Wales. Sheet 5, South-West England*. Soil Survey of England and Wales, Harpenden.



Site Location



Title:

Site Location Diagram

Client:

Environmental Dimension
Partnership

Project:

G16119 Land at
Snow Capel Farm, Gloucester

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Scale:

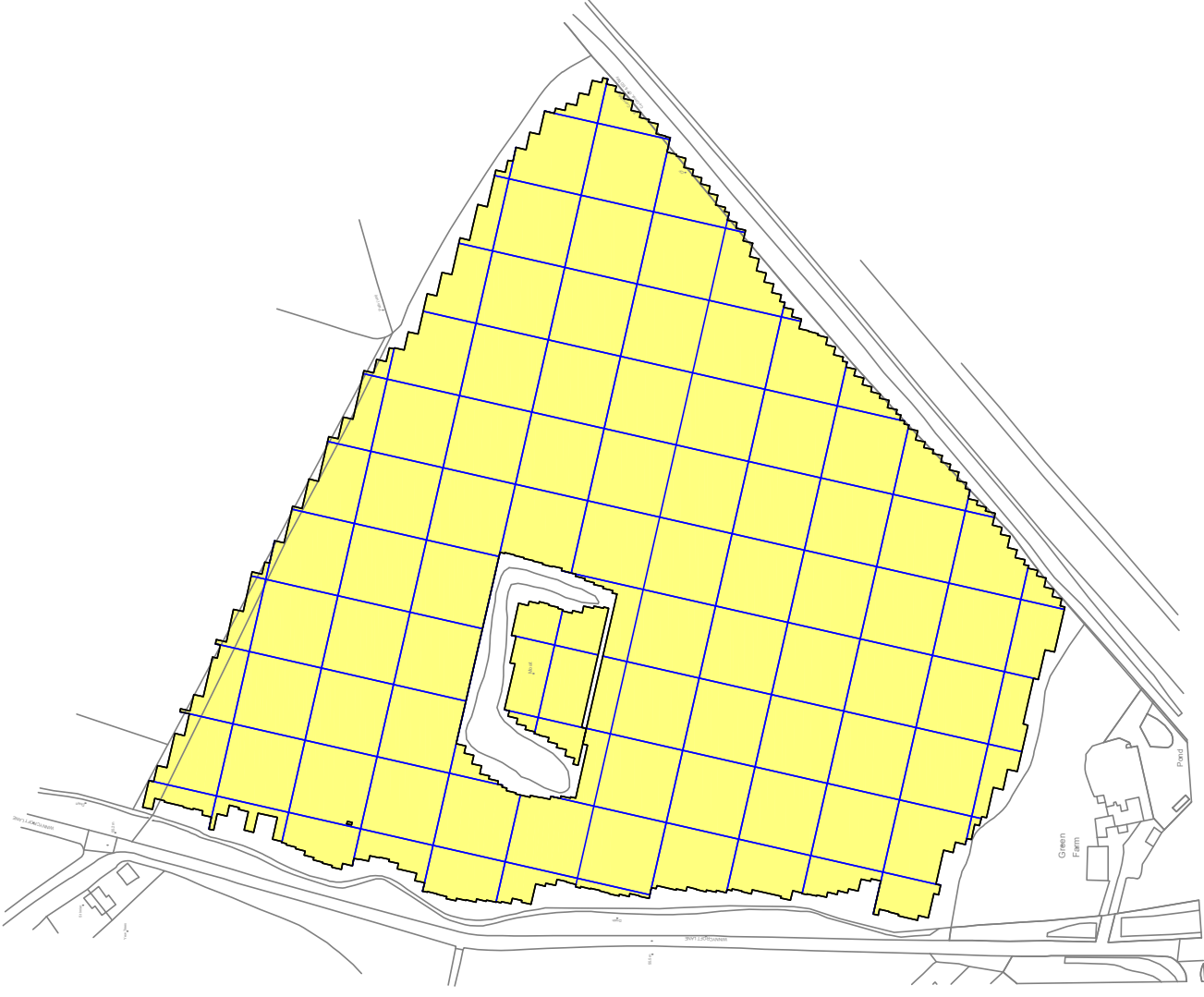
0 metres 2000



1:50000 @ A4

Fig No:

1



Magnetometer Survey Area
Showing 30m Grids



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Title:

Magnetometer Survey
Location of Survey Area

Client:

Environmental Dimension Partnership

Project:

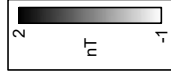
G16119 Land at Snow Capel Farm,
Gloucester

Scale:



Fig No: 2

1:2000 @ A3



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Title: Magnetometer Survey
Greyscale Plot

Client: Environmental Dimension Partnership

Project: G16119 Land at Snow Capel Farm,
Gloucester

Scale: 0 metres 80 metres
1:2000 @ A3
Fig No: 3



-  Uncertain Origin
(discrete anomaly / trend)
-  Former field boundary
(corroborated)
-  Pipe
-  Magnetic disturbance
-  Ferrous

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Title:

Magnetometer Survey
Interpretation

Client:

Environmental Dimension Partnership

Project:

G16 119 Land at Snow Capel Farm,
Gloucester

Scale:

0 metres  80

Fig No:

1:2000 @ A3

4

Appendix A - Technical Information: Magnetometer Survey Method

Grid Positioning

For hand held gradiometers the location of the survey grids has been plotted together with the referencing information. Grids were set out using a Trimble R8 Real Time Kinematic (RTK) VRS Now GNSS GPS system.

For CARTEASY^N collected data each data point had its position recorded using a Trimble R10 Real Time Kinematic (RTK) VRS Now GNSS GPS system. The geophysical survey area is georeferenced relative to the Ordnance Survey National Grid.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. This results in an accuracy of around 0.01m.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m
Magnetometer	CartEasy ^N cart system (Bartington Grad 601 sensors)	0.75m	0.125m

Instrumentation: Bartington Grad601-2 / GSB CARTEASY^N Cart system

Both the Bartington and CARTEASY^N instruments operate in a gradiometer configuration which comprises fluxgate sensors mounted vertically, set 1.0m apart. The fluxgate gradiometer suppresses any diurnal or regional effects. The instruments are carried, or cart mounted, with the bottom sensor approximately 0.1-0.3m from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is measured in nanoTesla (nT). The sensitivity of the instrument can be adjusted; for most archaeological surveys the most sensitive range (0.1nT) is used. Generally, features up to 1m deep may be detected by this method, though strongly magnetic objects may be visible at greater depths. The Bartington instrument can collect two lines of data per traverse with gradiometer units mounted laterally with a separation of 1.0m. The CARTEASY^N system has four gradiometer units mounted at 0.75m intervals across its frame – rather than working in grids, the cart uses an on-board survey grade GNSS for positioning. The cart system allows for the collection of topographic data in addition to the magnetic field measurements.

The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each site survey, data is transferred to the office for processing and presentation.

Data Processing

Zero Mean Traverse	This process sets the background mean of each traverse within each grid to zero. The operation removes striping effects and edge discontinuities over the whole of the data set.
Step Correction (Destagger)	When gradiometer data are collected in 'zig-zag' fashion, stepping errors can sometimes arise. These occur because of a slight difference in the speed of walking on the forward and reverse traverses. The result is a staggered effect in the data, which is particularly noticeable on linear anomalies. This process corrects these errors.
Interpolation	When geophysical data are presented as a greyscale, each data point is represented as a small square. The resulting plot can sometimes have a 'blocky' appearance. The interpolation process calculates and inserts additional values between existing data points. The process can be carried out with points along a traverse (the x axis) and/or between traverses (the y axis) and results in a smoother greyscale image.

Display

XY Trace Plot	This involves a line representation of the data. Each successive row of data is equally incremented in the Y axis, to produce a stacked profile effect. This display may incorporate a hidden-line removal algorithm, which blocks out lines behind the major peaks and can aid interpretation. The advantages of this type of display are that it allows the full range of the data to be viewed and shows the shape of the individual anomalies. The display may also be changed by altering the horizontal viewing angle and the angle above the plane.
Greyscale Plot	This format divides a given range of readings into a set number of classes. Each class is represented by a specific shade of grey, the intensity increasing with value. All values above the given range are allocated the same shade (maximum intensity); similarly all values below the given range are represented by the minimum intensity shade.

Interpretation Categories

In certain circumstances (usually when there is corroborative evidence from desk based or excavation data) very specific interpretations can be assigned to magnetic anomalies (for example, *Roman Road, Wall, etc.*) and where appropriate, such interpretations will be applied. The list below outlines the generic categories commonly used in the interpretation of the results.

<i>Probable Archaeology</i>	This term is used when the form, nature and pattern of the response are clearly or very probably archaeological and /or if corroborative evidence is available. These anomalies, whilst considered anthropogenic, could be of any age.
<i>Possible Archaeology</i>	These anomalies exhibit either weak signal strength and / or poor definition, or form incomplete archaeological patterns, thereby reducing the level of confidence in the interpretation. Although the archaeological interpretation is favoured, they may be the result of variable soil depth, plough damage or even aliasing as a result of data collection orientation.
<i>Industrial / Burnt-Fired</i>	Strong magnetic anomalies that, due to their shape and form or the context in which they are found, suggest the presence of kilns, ovens, corn dryers, metal-working areas or hearths. It should be noted that in many instances modern ferrous material can produce similar magnetic anomalies.
<i>Former Field Boundary (probable & possible)</i>	Anomalies that correspond to former boundaries indicated on historic mapping, or which are clearly a continuation of existing land divisions. Possible denotes less confidence where the anomaly may not be shown on historic mapping but nevertheless the anomaly displays all the characteristics of a field boundary.
<i>Ridge & Furrow</i>	Parallel linear anomalies whose broad spacing suggests ridge and furrow cultivation. In some cases the response may be the result of more recent agricultural activity.
<i>Agriculture (ploughing)</i>	Parallel linear anomalies or trends with a narrower spacing, sometimes aligned with existing boundaries, indicating more recent cultivation regimes.
<i>Land Drain</i>	Weakly magnetic linear anomalies, quite often appearing in series forming parallel and herringbone patterns. Smaller drains will often lead and empty into larger diameter pipes and which in turn usually lead to local streams and ponds. These are indicative of clay fired land drains.
<i>Natural</i>	These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions.
<i>Magnetic Disturbance</i>	Broad zones of strong dipolar anomalies, commonly found in places where modern ferrous or fired materials (e.g. brick rubble) are present. They are presumed to be modern.
<i>Service</i>	Magnetically strong anomalies usually forming linear features indicative of ferrous pipes/cables. Sometimes other materials (e.g. pvc) cause weaker magnetic responses and can be identified from their uniform linearity crossing large expanses.
<i>Ferrous</i>	This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes, or above ground features such as fence lines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.
<i>Uncertain Origin</i>	Anomalies which stand out from the background magnetic variation, yet whose form and lack of patterning gives little clue as to their origin. Often the characteristics and distribution of the responses straddle the categories of <i>Possible Archaeology</i> and <i>Possible Natural</i> or (in the case of linear responses) <i>Possible Archaeology</i> and <i>Possible Agriculture</i> ; occasionally they are simply of an unusual form.

Where appropriate some anomalies will be further classified according to their form (positive or negative) and relative strength and coherence (trend: weak and poorly defined).

Appendix B - Technical Information: Magnetic Theory

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock. Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTeslas (nT) in an overall field strength of 48,000nT, can be accurately detected.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns and material such as brick and tile may be magnetised through the same process.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried field. The difference between the two sensors will relate to the strength of a magnetic field created by a buried feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity, disturbance from modern services etc.

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Appendix EDP 4 Trial Trench Evaluation Report

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SCMG20



SNOW CAPEL, MATSON, GLOUCESTERSHIRE

ARCHAEOLOGICAL TRIAL TRENCHING

commissioned by Edward Ware Homes and Bromford Developments Ltd

January 2021

SNOW CAPEL, MATSON, GLOUCESTERSHIRE

ARCHAEOLOGICAL TRIAL TRENCHING

commissioned by Edward Ware Homes and Bromford Developments Ltd

January 2021

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This report adheres to the quality standard of ISO 9001:2015

PROJECT INFO:

HA Project Code **SCMG20** / NGR **SO 8500 1420** / Parish **Matson** / Local Authority **Gloucestershire County Council** / OASIS Ref. **headland4-411065** / Archive Repository **Gloucester City Museum**

PROJECT TEAM:

Project Manager **Ailsa Westgarth** / Author **Beth Doyle** / Fieldwork **Alexander Smith, Beth Doyle, Edward McBride** / Graphics **Rafael Maya Torcelly**

Approved by **Ailsa Westgarth**



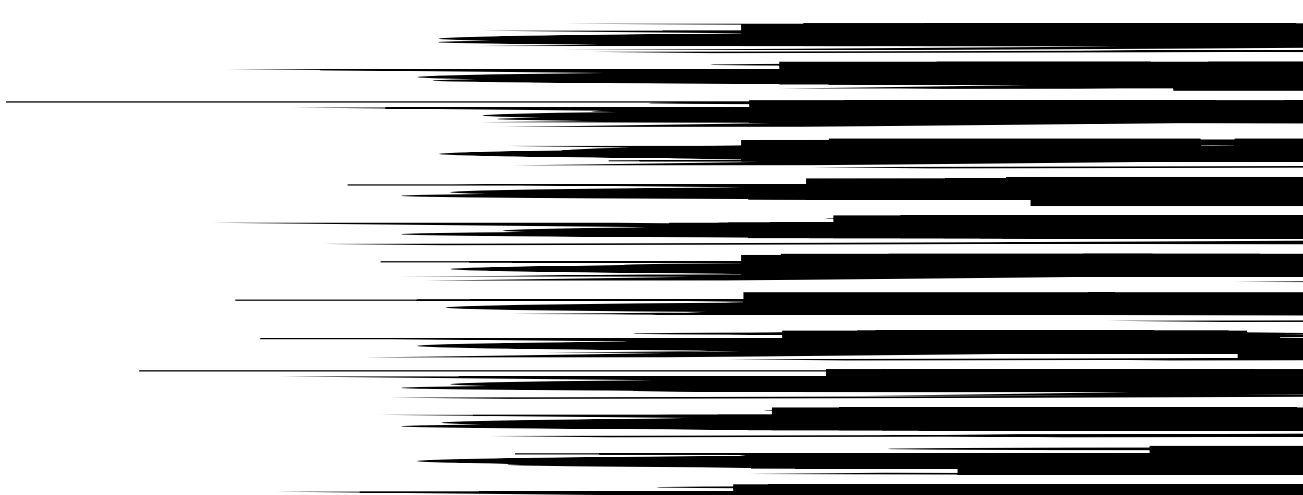
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part of the **RSK** Group



PROJECT SUMMARY



had been filled during the M5 construction.

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	1.3 AIMS AND OBJECTIVES	2
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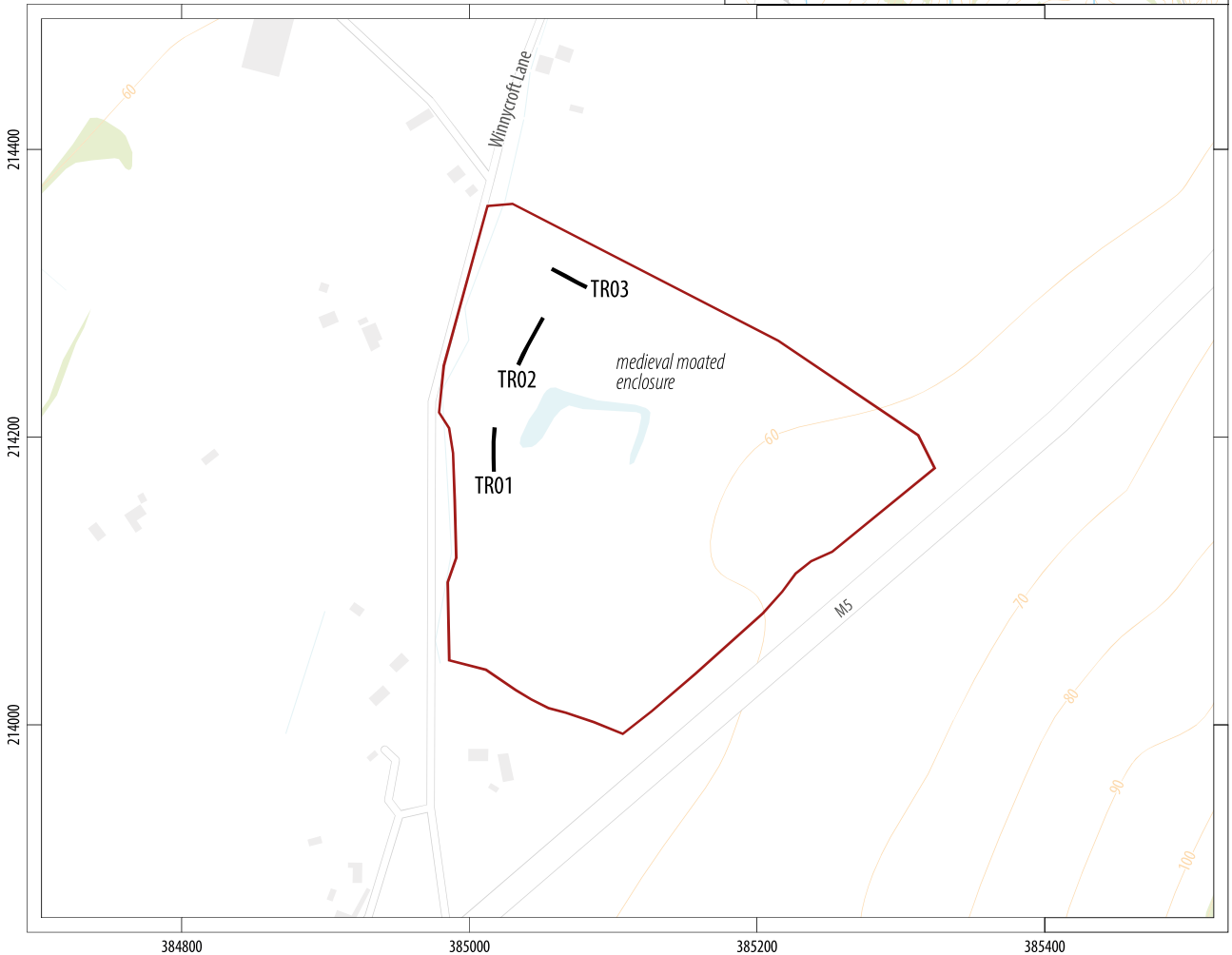
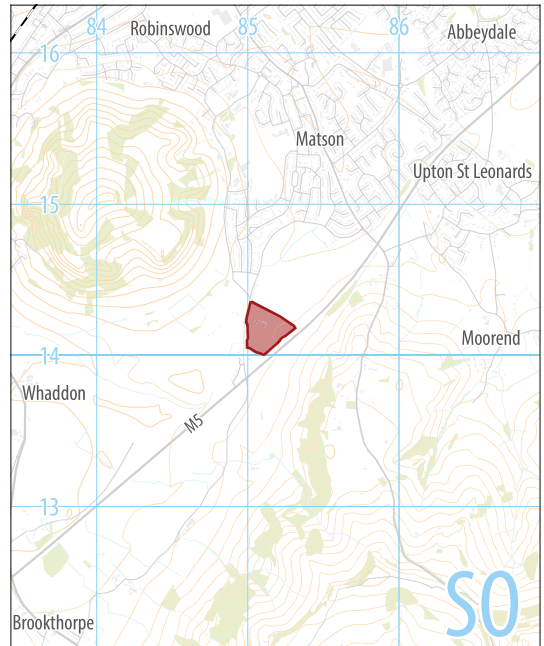
LIST OF ILLUSTRATIONS

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Snow Capel
Matson
Gloucester



0 200km
1:12,500,000 @ A4



0 100m
1:5,000 @ A4

development boundary
trench location



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SNOW CAPEL, MATSON, GLOUCESTERSHIRE

ARCHAEOLOGICAL TRIAL TRENCHING

1 INTRODUCTION

Headland Archaeology was commissioned by Edward Ware Homes and Bromford Developments Ltd (the client) to carry out the required archaeological works on land at Snow Capel, Matson, Gloucestershire. The evaluation was to assess the potential for the survival of any archaeological remains related to the Medieval Moated Enclosure, the extent of the made ground deposited during the M5 construction works and to investigate a boundary ditch, visible on Ordnance survey maps and as a geophysical anomaly. The trial trenching, conducted between 14th December to 15th December 2020, comprised the excavation of three trenches. The nature of the evaluation was agreed between EDP, the clients consultant and Gloucestershire County Council Archaeology Service (GCCAS) (Written Scheme of Investigation (WSI), 2020).

1.1 SITE LOCATION AND DESCRIPTION

Underlying geology consists of Blue Lias Formation and Charmouth Mudstone Formation. There were no superficial deposits recorded (BGS, 2020).

1.2 ARCHAEOLOGICAL BACKGROUND

An undated moated site (Sneedham's Green) is located within the site boundary. The moated site is designated a scheduled monument (monument number 1019399).

The monument includes the known extent of the Sneedham's Green moated site situated on low lying ground approximately 2km south east of the centre of Gloucester. It includes a sub rectangular moat enclosing an island which measures 66m by 42m, and which may originally have been as large as 66m by 80m, orientated north-south. The moat is 14m wide at its widest point, 8m at its narrowest and up to 1.5m deep. Cropmarks on aerial photographs indicate that

the east arm of the moat formerly extended a further 42m south and incorporated a causeway in the centre of the arm.

Earthworks on the island represent agricultural features, however it is possible that the foundations of structures survive as buried features. The date at which the moated site was constructed is not clear, although it is likely to have been built during the main period of moat building, between 1250 and 1350.

Aerial photos taken in 1969 during the construction of the M5 motorway show that the entire site, including the moated site, was disturbed. It was during this period that the modern field layout was created, by amalgamating earlier fields into one. Modern material from the construction was also spread across the development site, forming a thick deposit. Ridge and furrow and other earthworks were once present in the site, as depicted on aerial photographs of the 1950s and 1960s. These were evidently removed when the site was disturbed during the M5 construction.

A geophysical survey (GSB, 2017) was undertaken on the site in January 2017. No anomalies of archaeological interest were identified. A number of weak trends of uncertain origin and an old field boundary were identified. The boundary ditch recorded on the geophysical survey, was linked to the Moat ditch. Therefore high potential was noted for palaeoenvironmental deposits relating to the Moat use. There were a large number of ferrous anomalies to the east of the moated site and whilst they appear modern, an association with the former cannot be ruled out.

Geotechnical investigations undertaken in 2017, found evidence for made ground to approx. 2m below current ground level across most of the site, surrounding the moated enclosure. This appears to comprise construction phase material from the M5 excavation in the 1960's, overlying buried topsoil.



ILLUS 2–3 East facing section of Trench 1, area of boundary ditch

1.3 AIMS AND OBJECTIVES

The objectives of the evaluation are as follows:

- › To establish the location, extent, nature and date of archaeological features or deposits that may be present within the areas proposed to be disturbed during the development;
- › To establish the integrity and state of preservation of archaeological features or deposits that may be present within the areas proposed to be disturbed during the development;
- › To investigate the linear boundary identified on the Geophysical survey and to investigate the potential for and preservation of palaeoenvironmental remains; To inform the planning authority;
- › To assist in developing a mitigation strategy should remains of significance be present on the site; and
- › To produce and deposit a satisfactory archive and disseminate the results of the work via grey-literature reporting and publication as appropriate.



ILLUS 4 North facing shot of Trench 1, area of boundary ditch

2 METHODOLOGY

2.1 SITE WORKS

The three trenches were set out using a Trimble Global Navigation Satellite System equipped for Real Time Kinematic Survey. A Cable Avoidance Tool (CAT) was used to scan the trenches in advance of opening. As per the Written Scheme of Investigation (Headland Archaeology, 2020) all works were conducted with an 8-tonne tracked excavator, fitted with a flat-bladed ditching bucket. The machine excavation was directed under archaeological supervision down to the top level of the natural geology within the trenches or a maximum depth of 2m.

2.2 RECORDING

All recording followed Cifa Standards and Guidance for Conducting Archaeological Evaluations (2020) and methodology outlined in the WSI. The excavated contexts were recorded in plan and section with details of location, composition, and dimensions documented using the Headland Archaeology pro forma paper sheets. All contexts were given unique numbers. Digital images were taken with a camera using a graduated metric scale. An overall site plan, including post-excavation plans of each trench with spot heights, was recorded digitally using differential GPS using standard Headland Archaeology methodology. The site plan is accurately linked to the National Grid.

2.3 REPORTING AND ARCHIVES

All aspects of reporting and archive will be undertaken in accordance with guidelines published by the Cifa on behalf of the Archaeological Archives Forum (July 2007). Final report contents and format will be in line with Cifa and Gloucestershire County Council Archaeology Service (GCCAS) requirements. Copies of the report will be sent to the client for onward transmission to the local planning authority; copies (paper & electronic) will also be submitted to the HER Manager, to be uploaded to OASIS.

3 RESULTS

Three trenches measuring 30mx2m (TR1), 50mx2m (TR2) and 30mx2m (TR3) were excavated in the north-west of a single pasture field (Illus 1). The trenches were located to the west and north-west of a medieval moated enclosure. The field generally sloped from east to west, with an obvious rise of approximately 2m between the moated enclosure and M5 fencing. The enclosure measured approximately 90m by 50m.

Trench 3 was moved 27m to the north west from its original location due to the raised area of the field, suggesting a large depth of made ground. In order to locate undisturbed ground, the trench was moved to a lower area and excavated until a depth of 2m of made ground was reached.



ILLUS 5 South-east facing section of Trench 2 **ILLUS 6** South facing section of Trench 3

A layer of mid reddish brown silty clay topsoil was present across all three trenches, measuring 0.25m in Trench 1, 0.22m in Trench 2 and 0.20m in Trench 3.

The stratigraphy of Trench 1 comprised a 0.20m thick layer of dark grey silty clay etc (0102), which overlay 0.45m of light yellow grey clay. These deposits overlay 0.10m of dark grey brown silty clay (0104). This layer appeared to be the relict topsoil identified by the geotechnical investigations, suggesting the overlying layers were redeposited natural deposits.

Approximately 12m from the south end of the trench, there was a deposit of dark brown grey silty clay, which measured over 2m wide and more than 1m deep. A large tree and root system was noted in this area, along with CBM and land drain fragments. This deposit did not appear to fill a cut; however it was located in the area identified as the boundary ditch. Given the tree and modern finds in this area, it is likely that the ditch was graded and backfilled during the works on the M5.

Trench 2 comprised a 0.30m thick layer of mid red brown silty clay topsoil, which directly overlay a 0.50m thick layer of dark grey silty clay. A layer of light yellow grey silt clay was recorded below this, representing 0.33m of redeposited natural. The underlying geology of this trench comprised light grey yellow clay, continuing from 10.5m below ground level. There was no evidence for a buried topsoil layer within this trench, therefore it is possible this was removed before the deposition of the made ground.

Trench 3 was moved to the west and shortened due to the presence of Overhead Power Lines and underground services. On the advice of the County Archaeologist and the Consultant it was agreed that the trench would be extended to identify the western extent of the made ground to a depth of 1.2m. Topsoil (0301) comprised the same mid red brown silty clay as the rest of the trenches and measured 0.20m thick. A 0.30m thick, dark grey silty clay was observed below the topsoil and overlay made ground deposits. A mid orange brown

silty clay (0303) was observed across the trench, measuring between 0.60m and 0.85m to the east. This deposit overlay an intermittent, 0.10m thick layer of dark grey brown silty clay, which may represent the possible buried topsoil layer found in the test pits. This layer was not present across the eastern half of the trench, where a mottled and mixed grey yellow and dark grey blue clay layer was recorded. This deposit continued below 2m by the eastern end of the trench and overlay the natural geology. This deposit likely represents the bulk of the made ground deposits, which have created the raised ground to the north and west of the moated site.

4 CONCLUSION

The results of the evaluation at Snow Capel, Matson, demonstrated the extent of the deposition of made ground during the construction of the M5 in the 1960's. The overburden measured between 1m and more than 2m across the site, deepening in the area of raised ground to the north.

Previous geotechnical investigations had suggested areas of potential undisturbed ground to the west of the moated enclosure, however Trench 1 found that this was not the case. The redeposited clay and tree in Trench 1 were found in the same location as the boundary ditch. It is likely that this was dug out and backfilled during the works, the tree included a full root system so is likely to have been levelled during the works. There was no evidence of any earlier ditch deposits, or original boundary ditch cut.

The possible buried topsoil was not present across the whole site. It is possible that this layer, identified during the borehole survey, was another redeposited layer. However if it this layer represented a buried topsoil, it may have been removed prior to the deposition of the made ground. In Trenches 1, 2 and the western half of Trench 3, where natural deposits were reached, there was no evidence of archaeological features.

5 REFERENCES

- Archaeological Archives Forum (AAF) 2011 *Archaeological Archives A guide to best practice in creation, compilation, transfer and curation* (2nd edn) (ClfA: Reading) http://www.archaeologyuk.org/archives/aaf_archaeological_archives_2011.pdf accessed 18 January 2021
- Chartered Institute for Archaeologists (ClfA) 2014a *Code of Conduct* (Reading) (updated October 2019) <https://www.archaeologists.net/sites/default/files/CodesofConduct.pdf> accessed 18 January 2021
- Chartered Institute for Archaeologists (ClfA) 2014b *Standard and guidance for archaeological excavation* (updated October 2020) http://www.archaeologists.net/sites/default/files/ClfAS&GExcavation_1.pdf accessed 18 January 2021
- Chartered Institute for Archaeologists (ClfA) 2014c *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (updated October 2020) https://www.archaeologists.net/sites/default/files/ClfAS%26GArchives_4.pdf accessed 18 January 2021
- English Heritage 2006 *Management of Research Projects in the Historic Environment. The MoRPHE Project Managers' Guide* <https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/heag024-morphe-managers-guide/> accessed 18 January 2021
- Environmental Dimension Partnership 2017 *Snow Capel, Matson, Gloucester Heritage Topic Paper* H_EDP3746_01a_March 2017 t. Report Reference: edp5120_r001d
- GSB, 2016. Land at Snow Capel Farm, Matson, Gloucester – Geophysical Survey
- Headland Archaeology 2020 *Snow Capel, Matson, Gloucestershire, Written Scheme of Investigation for Archaeological Evaluation* [unpublished client document]
- Natural Environment Research Council (NERC) 2021 *British Geological Survey* <http://www.bgs.ac.uk/> accessed 18 January 2021

6 APPENDICES

APPENDIX 1 SITE & CONTEXT REGISTERS

Appendix 1.1 Trench/Area register

TR01	L (M)	W (M)	MIN D (M)	MAX D (M)
	30	2	0.5	1.25
Context	Description			*D BGL (m)
0101	Topsoil - Mid reddish brown silty clay			0.00-0.25
0102	Made ground - Dark grey silty clay with CBM, wood, Fe			0.25-0.45
0103	Redeposited Natural - Light yellow grey clay.			0.45-0.90
0104	Buried Topsoil - Dark brownish grey silty clay			0.90-1.00
0105	Natural - Light orange and dark blue clay			1.00->1.10
0106	Made ground - Dark grey silty clay with CBM and a tree stump with radiating roots.			0.25-1.25
Summary: No archaeology present.				

TR02	L (M)	W (M)	MIN D (M)	MAX D (M)
	50	2	0.95	1.55
Context	Description			*D BGL (m)
0201	Topsoil - Mid reddish brown silty clay			0.00-0.22
0202	Made ground - Dark grey silty clay			0.22-0.72
0203	Redeposited Natural - Light yellow grey clay.			0.72-1.05
0204	Natural - Light yellowish grey clay			1.05->1.10
Summary: No archaeology present.				

TR03	L (M)	W (M)	MIN D (M)	MAX D (M)
	30	2	1.08	1.87
Context	Description			*D BGL (m)
0301	Topsoil - Mid reddish brown silty clay			0.00-0.20
0302	Made ground - Dark grey silty clay			0.20-0.50
0303	Redeposited natural - Mid orange grey clay.			0.50-1.35
0304	Buried Topsoil - Dark brownish grey silty clay			1.35-1.45
0305	Natural - Light yellowish grey clay			1.45->1.67
0306	Redeposited Natural - Light orange and dark blue clay			1.67->1.87
Summary: No archaeology present.				

Appendix 1.2 Photo register

PHOTO	FACING	SHOWING	DESCRIPTION
001	-	-	ID shot
002	N	TR01	TR01 pre ex
003	S	TR02	S facing shot of trench
004	W	TR03	E facing section of trench
005	W	TR04	E facing section of trench
006	N	TR05	N facing section of trench
007	W	TR06	Overhead shot of 'ditch' and tree
008	N	TR07	Overhead shot of 'ditch' and tree
009	NE	TR02	TR02 pre ex
010	E	TR03	TR03 pre ex- original position
011	N	TR04	S facing section of trench
012	NE	TR02	NE facing shot of trench
013	SW	TR03	SW facing shot of trench
014	SE	TR04	NW facing section of trench
015	NW	TR05	SE facing section of trench
016	N	TR03	S facing section of trench
017	E	TR03	E facing shot of trench
018	W	TR03	W facing shot of trench
019	X	TR03	VOID
020	S	TR03	N facing section of trench
021	N	TR03	S facing section of trench
022	N	TR03	S facing section of trench
023	N	TR03	S facing section of trench
024	N	TR03	S facing section of trench
025	S	TR03	N facing section of trench
026	N	TR02	N facing shot of land drain
027	S	TR03	S facing section of trench- collapse
028	NE	TR02	NE facing shot of trench
029	SE	TR01	Shot of backfill
030	NE	TR02	Shot of backfill
031	W	TR01	E facing section of tree

APPENDIX 2 OASIS DATA COLLECTION FORM: ENGLAND

*OASIS ID: headland4-411065***PROJECT DETAILS**

Project name	Snow Caple, Matson, Gloucester
Short description of the project	Three trenches to investigate an anomaly on the geophysical survey, thought to be a ditch next to a moated enclosure.
Project dates	Start: 14-12-2020 End: 15-12-2020
Previous/future work	Yes / Not known
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	moated enclosure medieval

PROJECT LOCATION

Country	England
Site location	Gloucestershire Gloucester, Gloucester Snow Caple, Matson, Gloucestershire
Postcode	GL4 6EQ
Site coordinates	SO 8493 1426 51.826286–2.2187639 51 49 34 N 002 13 07 W Point
Height OD / Depth	Min: 1.25m Max: 1.87m

PROJECT CREATORS

Name of Organisation	Headland Archaeology (UK) Ltd
Project brief originator	The Environmental Dimension Partnership Ltd
Project design originator	Headland Archaeology (UK) Ltd
Project director/manager	Ailsa Westgarth
Project supervisor	Beth Doyle

PROJECT ARCHIVES

Digital Archive recipient	Gloucester City Museum
Digital Media available	"Survey"
Paper Archive recipient	Gloucestershire
Paper Media available	"Photograph"; "Plan"; "Report"; "Survey"



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Images



Image EDP 1: View to the north across the western end of the moat illustrating its setting including the presence of modern houses to the north-west.



Image EDP 2: View to the north-east across the eastern end of the moat across the site illustrating the difference in ground level between the land at the moat and that to the east.



Image EDP 3: View south-west across the moat from the higher ground to the east illustrating how the moat is set within a gentle basin within the site and also its more 'rural' setting to the south.



Image EDP 4: View to the north-west across the moat illustrating its setting, notably the presence of nearby houses and Robin Hill.



Image EDP 5: View to the north-west across the northern part of the site illustrating how it is located close to houses and light industrial development at the urban edge.



Image EDP 6: View west across the common land at Sneedham's Green illustrating its appearance.









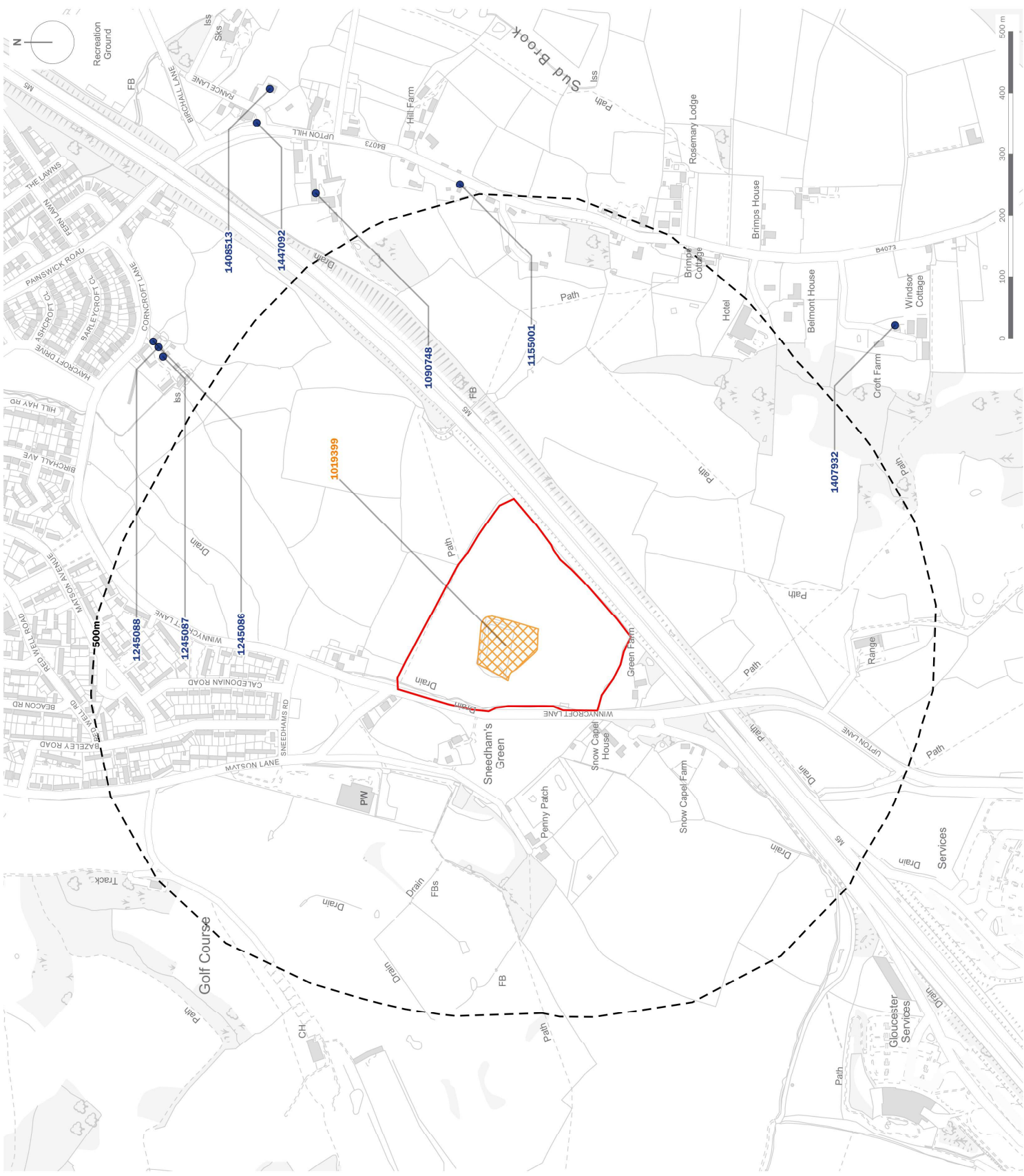
Image EDP 7: View east to the site from Sneedham's Green with only a partially screened view to the moat possible and the historic connection between it and Green only slightly appreciable.

Plans

- Plan EDP 1** Designated Heritage Assets
(edp3746_d011a 14 May 2021 MH/RS)
- Plan EDP 2** HER Records
(edp3746_d012a 14 May 2021 MH/RS)
- Plan EDP 3** Historic Maps
(edp3746_d013a 14 May 2021 MH/RS)
- Plan EDP 4** LiDAR Data
(edp3746_d014a 14 May 2021 MH/RS)
- Plan EDP 5** Aerial photographs
(edp3746_d015a 14 May 2021 MH/RS)

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-  Site Boundary
-  500m Detailed Study Area
-  Grade I Listed Building
-  Grade II Listed Building
-  Grade II* Listed Building
-  Scheduled Monument



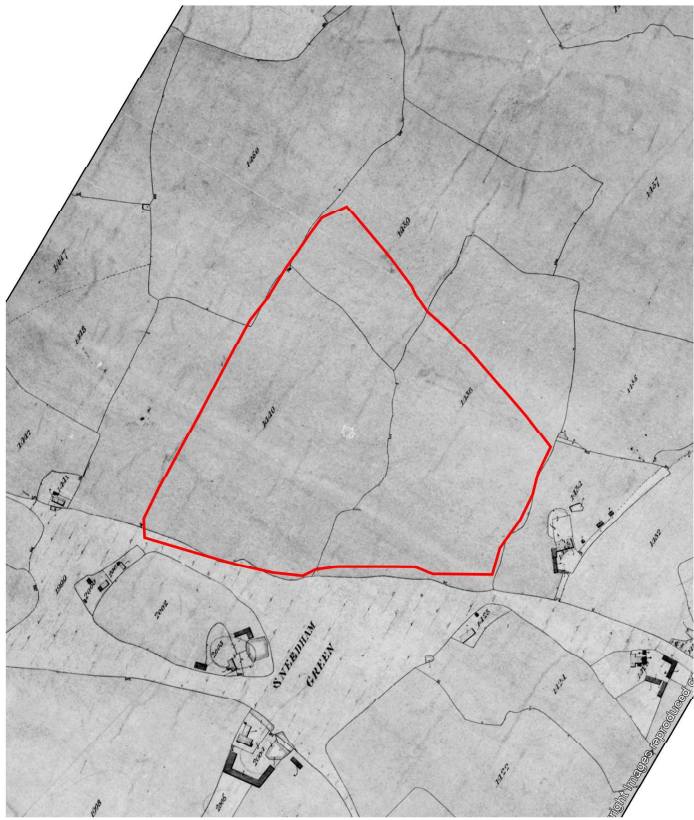
client
Edward Ware Homes and Bromford Developments Ltd
 project title
Land at Snow Capel Farm, Matson, Gloucester
 drawing title

Plan EDP 1: Designated Heritage Assets

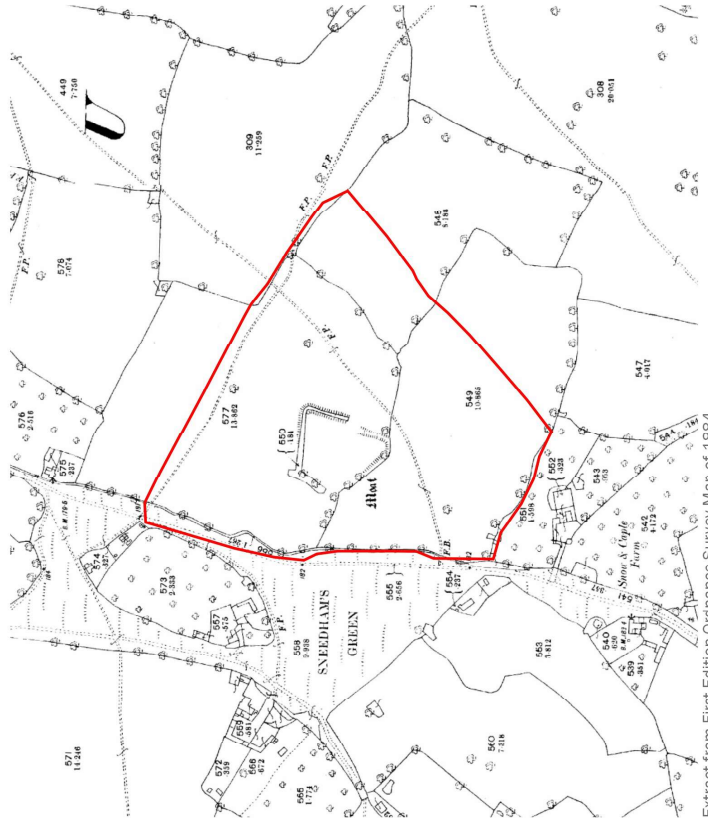
date **14 MAY 2021** drawn by **MH**
 drawing number **edp3746_0011a** checked **RS**
 scale **1:5,000 @ A3** QA **RB**



Approximate Site Boundary



Extract from Title map of Upton St Leonard's parish (1840)



Extract from First Edition Ordnance Survey Map of 1884



client
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project title
**Land at Snow Capel Farm, Matson,
Gloucester**

drawing title
Plan 3: Historic Maps

date	14 MAY 2021	drawn by	MH
drawing number	edp3746_0013a	checked	RS
scale	1:5,000 @ A3	QA	RB



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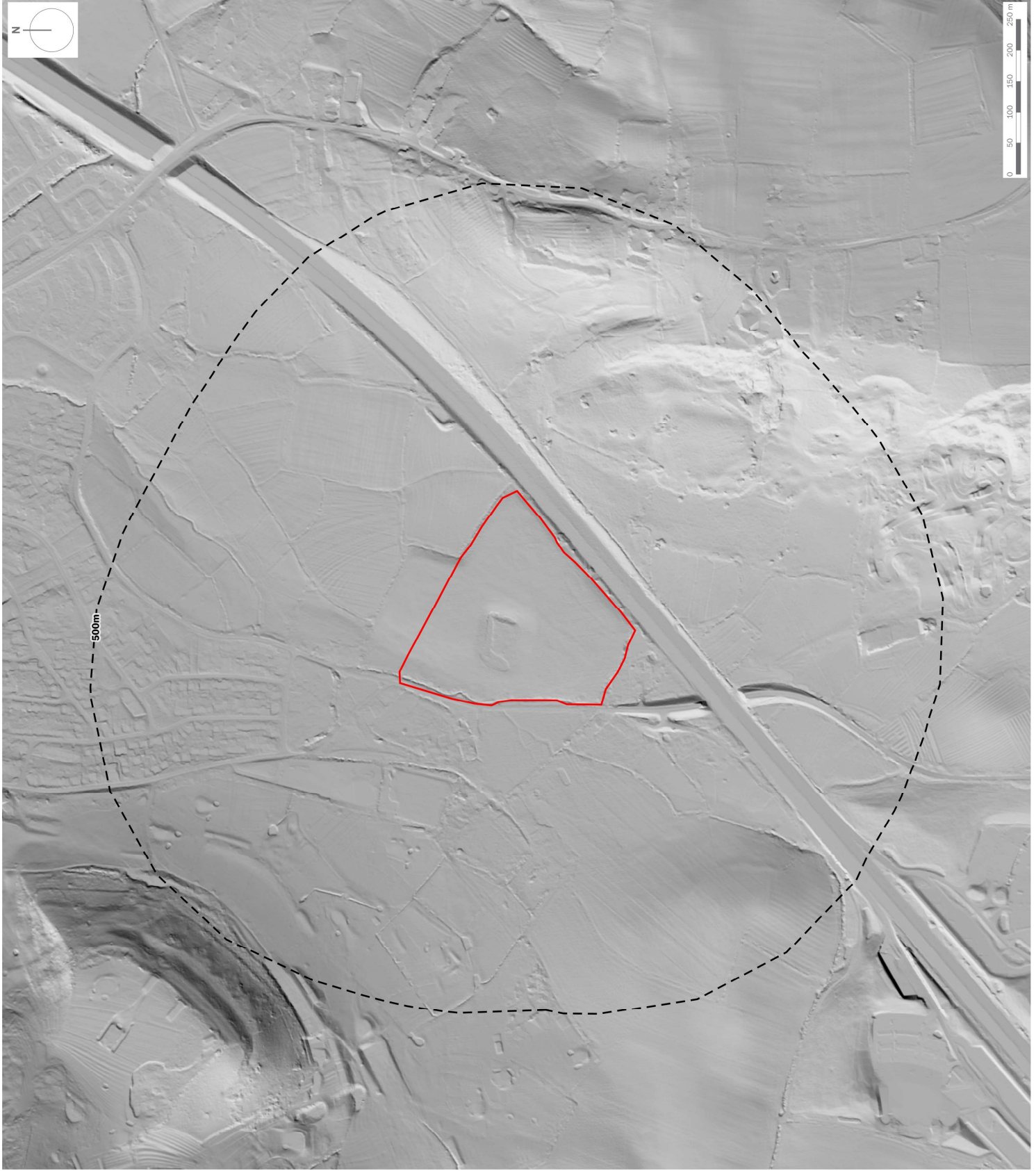
Site Boundary



500m Detailed Study Area



LIDAR 1m DTM Multidirectional Hill Shade



client

Edward Ware Homes and Bromford Developments Ltd

project title

Land at Snow Capel Farm, Matson, Gloucester

drawing title

Plan EDP 4: LIDAR Data

date

14 MAY 2021

drawn by

MH

drawing number

edp3746_0014a

checked

RS

scale

1:6,000 @ A3

QA

RB



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Extract from Aerial photograph taken 12 Dec 1946 (RAF/C>E/UK/1891)



Extract from Aerial photograph taken 09 April 1969 (OS/69097)

Approximate Site Boundary



client
**Edward Ware Homes and Bromford
 Developments Ltd**

project title
**Land at Snow Capel Farm, Matson,
 Gloucester**

drawing title

Plan EDP 5: Aerial Photographs

date	14 MAY 2021	drawn by	MH
drawing number	edp3746_0015a	checked	RS
scale	1:6,000 @ A3		RB
			QA



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Appendix 7 –

Written Scheme of Investigation, November 2020

SCMG20



Snow Capel, Matson, Gloucestershire

Written Scheme of Investigation for Archaeological Evaluation

Client: The Environmental Dimension Partnership Ltd

v1.1

16/11/2020

**Ailsa Westgarth MCI(A)
Headland Archaeology (UK) Ltd
Unit 1 Clearview Court
Twyford Road
Hereford HR2 6JR**

 **HEADLAND
ARCHAEOLOGY**

1 INTRODUCTION

- 1.1 This document is submitted by Headland Archaeology (UK) Ltd as the Project Design for a programme of archaeological evaluation related to residential development on land at Snow Capel, Matson, Gloucestershire.
- 1.2 This Project Design defines the scope of the investigation and is submitted for agreement from the archaeological advisor to the planning authority.
- 1.3 The evaluation will provide further information about the archaeological resource, to enable appropriate decisions to be reached regarding the planning submission. This Project Design takes into account relevant ClfA and regional Standards and Guidance.

SITE LOCATION AND DESCRIPTION

- 1.4 The site is located on the south-eastern edge of Gloucester (NGR SO 850 142), and is bounded to the south-east by the M5 motorway and to the west by Winnycroft Lane. The site measures c.8ha in area.
- 1.5 Underlying geology consists of Blue Lias Formation and Charmouth Mudstone Formation (BGS www.bgs.ac.uk).

ARCHAEOLOGICAL BACKGROUND

- 1.6 An undated moated site (Sneedham's Green) is located within the site boundary. The moated site is designated a scheduled ancient monument (monument number 1019399).
- 1.7 The monument includes the known extent of a moated site situated on low lying ground approximately 2km south east of the centre of Gloucester. It includes a sub rectangular moat enclosing an island which measures 66m by 42m, and which may originally have been as large as 66m by 80m, orientated north-south. The moat is 14m wide at its widest point, 8m at its narrowest and up to 1.5m deep. Cropmarks on aerial photographs indicate that the east arm of the moat formerly extended a further 42m south and incorporated a causeway in the centre of the arm.
- 1.8 Earthworks on the island indicate that the foundations of structures survive as buried features. The date at which the moated site was constructed is not clear, although it is likely to have been built during the main period of moat building, between 1250 and 1350.
- 1.9 Aerial photos taken in 1969 during the construction of the M5 motorway show that the entire area, including the moated site, were disturbed. It was during this period that the modern field layout was created, by joining the original fields into one. Modern material from the construction was also levelled across the development area. Previously noted ridge and furrow and other earthworks have been identified as having been ploughed out on aerial photos from the 1950's and 1960's.
- 1.10 A geophysical survey (EDP 2017) was undertaken on the site in January 2017. No anomalies of archaeological interest were identified. A number of weak trends of uncertain origin and an old field boundary were identified. There is a large number of ferrous anomalies to the east of the moated site and whilst they appear modern, an association with the former cannot be ruled out.
- 1.11 Geotechnical investigations undertaken in 2017, found evidence for made ground to approx. 2m below current ground level across most of the site, surrounding the moated enclosure. This appears to comprise construction phase material from the M5 excavation in the 1960's, overlying buried topsoil.

2 SCHEDULE

- 2.1 The works are planned to commence in December 2020 and will take one day to complete.
- 2.2 A draft report will then be delivered to the client and, on approval, to the planning authority within six weeks of the completion of fieldwork.

3 PROJECT TEAM

- 3.1 The project will be managed for Headland Archaeology by Ailsa Westgarth; the field team will consist of a Project Officer, field assistant, and an additional sub-contracted excavator driver. *Curricula vitae* of key personnel can be supplied on request. The project team will familiarise themselves with the background to the site and will be aware of the project's aims and methodologies.
- 3.2 Specialist artefact analyses will be managed by Julie Franklin who is Headland's Finds Manager. Julie will undertake finds assessment within her areas of competence (medieval and post-medieval metalwork, glassware, clay pipes, ceramic building material and other small finds). Further consultation will be sub-contracted to recognised period specialists familiar with finds from this geographical area as appropriate, notably David Mullin (Neolithic – Bronze-Age pottery) and Jane Timby (Romano-British pottery).
- 3.3 Environmental analysis will be managed by Dr Alex Smith. Headland has in-house specialists who can undertake analysis of plant macrofossils, faunal remains and human remains (although it is not anticipated that the latter will be removed during an evaluation project).
- 3.4 Headland Archaeology (UK) Ltd is a Registered Organisation and abides by the Codes of Conduct and Approved Practice and Standards of the Chartered Institute for Archaeologists. The company has all the necessary technical and personnel resources for the satisfactory completion of the evaluation.

4 INSURANCE & COPYRIGHT

- 4.1 Headland Archaeology (UK) Ltd is fully indemnified and all necessary insurances can be presented on request.
- 4.2 Copyright will be retained by Headland Archaeology (UK) Ltd. Headland will licence the client and other bodies as necessary for use in matters relating to the project and for use of the project archive by the relevant museum. This licence will also extend to non-commercial use.

5 HEALTH & SAFETY

- 5.1 All of Headland's work is undertaken in accordance with current H&S legislation. A risk assessment and method statement will be prepared prior to the commencement of fieldwork. All staff will wear appropriate PPE and this will include high-visibility clothing, hard hats and safety footwear. Suitable site welfare facilities will be located at an appropriate location after consultation with the landowner.

6 ACCESS & SERVICES

- 6.1 This WSI is submitted on the understanding that there will be unhindered access (including machine-access) to all areas of the site. A plan of any services within the proposed development area will also be provided by the client or their agents. Any livestock/cars/spoil heaps etc. will be removed by the client prior to the archaeological works taking place.

6.2 Trenches will be laid out to the agreed plan so as to avoid any services and their associated exclusion zones.

6.3 Trenches will be scanned with a cable locator tool prior to excavation.

7 OBJECTIVES

7.1 The objectives of the evaluation are as follows:

- To establish the location, extent, nature and date of archaeological features or deposits that may be present within the areas proposed to be disturbed during the development;
- To establish the integrity and state of preservation of archaeological features or deposits that may be present within the areas proposed to be disturbed during the development;
- To investigate the linear boundary identified on the Geophysical survey and its relationship (if any) to the moated site;
- To inform the planning authority;
- To assist in developing a mitigation strategy should remains of significance be present on the site; and
- To produce and deposit a satisfactory archive and disseminate the results of the work via grey-literature reporting and publication as appropriate.

8 STRATEGY

8.1 Initial discussions with EDP and the client have resulted in agreement on the overall trenching strategy.

8.2 A total of three trenches will be excavated across the site. Having assessed the information obtained during the geotechnical investigations, the overburden has been recorded to approx. 2m below current ground level in areas of the site. As such it is expected that trench 3 will be required to be stepped to allow for deeper site investigation, resulting in a wider surface trench area. The GI information does not suggest that this will be necessary in the other two trenches. However if deposits do exceed 1m they will be stepped.

8.3 Trenches have been positioned to assess the extent of the made ground and the level of disturbance which occurred during the M5 construction works. A trench has also been positioned to investigate a possible linear anomaly identified during the geophysical survey (EDP 2017). As this may be linked to the moated enclosure, it is expected that environmental samples will be taken from each context within this feature.

9 METHOD

FIELDWORK

9.1 Three trenches will be excavated to identify the made ground deposits and anomalies from the geophysical survey (Appendix 1 – Trench plan). Trench 1 measures 30m long, Trench 2 measures 50m and Trench 3 is 60m long.

9.2 All trenches will be set-out using differential GPS, which will also be used to provide absolute heights above OD. Service plans will be consulted in advance of excavation and safe digging techniques will be observed.

- 9.3 All trenches will be opened by a JCB 3CX backhoe. All trenches will be excavated by machine under direct archaeological supervision and will be excavated in controlled spits. Machine excavation will terminate at the top of the natural geology or the first significant archaeological horizon, whichever is encountered first. Spoil will be stored beside the trench; topsoil/tarmac and hardcore and subsoil will be kept separate by putting topsoil on one side of the trench and subsoil on the other.
- 9.4 Excavation of archaeological deposits and features required to satisfy the objectives of the evaluation will continue by hand (except where agreed otherwise with the archaeological advisor). On completion of machine excavation, all faces of the trench that require examination or recording will be cleaned using appropriate hand tools where required. The stratigraphic sequence will be recorded in full in each of the trenches, even where no archaeological deposits have been identified.
- 9.5 A sufficient quantity (to adequately evaluate the site) of identified features will be investigated and recorded. This will typically involve excavation of 50% of discrete features, and a 1m slot of linear features. Where features form a definite arrangement a sample of features within the arrangement will be sample excavated. Features not suited to excavation in evaluation trenches will be investigated in plan only. This would typically apply to areas of complex, intercutting features such as structures with *in-situ* floor surfaces, kilns and other 'special' features, all of which benefit from open area investigation and suffer when excavated during trial trench evaluations. No features will be wholly excavated; similarly, structures and features worthy of preservation will not be unduly excavated.
- 9.6 Due to Health and Safety considerations, excavations will normally be limited to a maximum depth of 1m below existing ground level. Test pits may be machine-excavated to greater depths; any such test pits will be located within blank areas of existing trenches, will not be entered by site staff, and will be backfilled immediately after excavation. Where required any trench exceeding 1m deep will be stepped for safety.
- 9.7 Trenches will be backfilled by replacing excavated materials back in the hole in reverse order of excavation; and by tamping down with the excavator as tidily as practicable.
- 9.8 No backfilling of trenches is to take place without prior agreement by the archaeological advisor to the planning authority.

RECORDING

- 9.9 All recording will follow the Headland manual and ClfA Standards and Guidance. All contexts, small finds and environmental samples will be given unique numbers. All recording will be undertaken on *pro forma* record cards. In the event that stratified deposits are encountered, a 'Harris' matrix will be compiled. Digital photographs on a minimum 10mp camera will be taken as the site photographic archive.
- 9.10 A site plan including all identified features, areas of excavation and other pertinent information will be recorded digitally. The site plan will be accurately linked to the National Grid and heights to OD. Where appropriate, sections and stratigraphic sequences will be recorded digitally. Digital recording will be undertaken using a differential GPS. If additional detailed recording of features and sections is required (ie. where their complexity means that archaeological information could be lost if recorded digitally) then plans and sections will be hand-drawn on permatrace at an appropriate scale (normally 1:20 or 1:50 for plans and 1:10 for sections).

SAMPLES AND ARTEFACTS

- 9.11 A sampling strategy has been agreed for the ditch identified on the geophysical survey in Trench 1. Bulk samples will be taken from each separate context recorded

within the ditch. These will be processed and assessed in line with Historic England guidelines on environmental archaeology (English Heritage 2011).

- 9.12 A bulk sample will typically be 40 litres. However, where large deposits are encountered more than one bulk sample may be taken. Similarly, small deposits such as the fills of postholes may contain less than 40 litres of sediment and will be fully sampled from the excavated section. All samples collected on site will be processed and assessed, unless the stratigraphic assessment demonstrates that they derive from features with no archaeological significance, or unless they would provide duplicate information (e.g. multiple samples from the same phase of a ditch). A statement will be given on any discarded samples. The results and recommendations for any further work will be included in the evaluation report.
- 9.13 Finds will be routinely recorded by context and recorded 3-dimensionally where appropriate (i.e. where their position within a context can provide further significant information or the find is of particular significance). Any artefacts retrieved during the evaluation will be cleaned using appropriate techniques and packaged and stored in accordance with *First Aid for Finds* (Watkinson & Neal 1998). All artefacts recovered during the evaluation will be cleaned, marked and catalogued. Headland's in-house finds specialists will be available to provide advice remotely or on site if necessary.
- 9.14 The terms of the Treasure Act 1996 will be followed with regards to any finds which might fall within its scope. Any finds will be removed to a safe place and reported to the local coroner as required by the procedures laid down in the "Code of Practice". Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft. The find will also be reported to the Portable Antiquities Scheme Finds Liaison Officer.
- 9.15 Deposits on the site have potential to be waterlogged contexts. They are expected to comprise the fills of negative features. The site sampling strategy is to collect bulk samples from selected deposits for wet sieving and floatation in order to recover any environmental material and other finds (e.g. bone, pottery etc.). Deposits will be selected on site for sampling based upon their potential to contain artefacts or ecofacts relevant to understanding the character, date or significance of the deposit and of the environmental resource itself. It is noted that not all environmental remains are visible to the naked eye under field conditions; therefore bulk samples will be taken from features of potential significance even when no ecofactual/artefactual evidence has been directly observed.
- 9.16 Where waterlogged deposits are encountered (such as peat) appropriate sampling techniques will be employed so as to maximise the environmental information gained from such deposits. This may include the taking of monolith or core samples for pollen and non-pollen palynomorphs (e.g. testates and fungal spores) and large specialist samples for plant macrofossil, wood (including waterlogged wood) and insect analyses.

10 MONITORING

- 10.1 Access to the site will be afforded to the archaeological advisor for monitoring purposes.

11 REPORTING AND ARCHIVE

- 11.1 All aspects of reporting and archive will be undertaken in accordance with guidelines published by the ClfA on behalf of the Archaeological Archives Forum (July 2007). On completion of the evaluation Headland will produce a site archive and, if appropriate, an Updated Project Design in line with the MAP2 specification and MoRPHE Guide. This will include all relevant specialist assessments of excavated material.

- 11.2 Final report contents and format will be in line with ClfA and Gloucestershire County Council Archaeology Service (GCCAS) requirements. Copies of the report will be sent to the client for onward transmission to the local planning authority; copies (paper & electronic) will also be submitted to the HER Manager, to be uploaded to OASIS. All reports will be submitted within two months of the completion of fieldwork.
- 11.3 Headland Archaeology (UK) Ltd actively seeks to encourage land-owners to deposit artefacts with an appropriate museum, and agreement will be sought to this effect. Where permission is forthcoming the finds and archive will be deposited with the appropriate museum in line with its deposition guidelines. Deposition will be undertaken within one year of the completion of fieldwork.
- 11.4 A digital copy of the archive including photographs will be sent to Archaeology Data Service as per its guidelines.
- 11.5 If further publication of the results of the evaluation is required then a specification will be agreed with GCCAS and costs will be provided for agreement by the client.

12 PUBLIC ENGAGEMENT

- 12.1 The potential for the archaeological works to contribute to the advancement of educational or community benefits through public engagement has been considered. This potential is currently assessed to be low because of the limited duration and extent of the works and the low archaeological potential of the area.
- 12.2 Headland proposes no further additional public engagement beyond dissemination of the results as described above. This position will be kept under review as the works progress and the results become known. If circumstances change then potential public engagement activities – for example, press releases or other publicity - will be discussed with GCCAS and the client.

13 HUMAN REMAINS

- 13.1 All finds of human remains will be reported to the consultant/client/coroner/curator. Ordinarily none will be excavated during the course of the present program of work. However, if at the discretion of the archaeological advisor remains are considered to be at risk of harm from reinstatement of trenches, excavation may be appropriate. If human remains are to be excavated during subsequent work, a license will be gained from the Ministry of Justice in accordance with Section 25 of the 1857 Burial Act. All excavation and treatment of cremated and inhumed human remains will be undertaken in cognisance of ClfA Technical Paper Number 13 (Brickley & McKinley & 2004) and relevant English Heritage guidelines (2005).

14 COPYRIGHT

- 14.1 Copyright will be retained by Headland Archaeology (UK) Ltd. Headland will licence the client, GCCAS and other bodies as necessary for use in matters relating to the project and for use of the project archive by the relevant museum. This licence will also extend to non-commercial use by the GCCAS HER.

15 PUBLICITY

- 15.1 No press releases or publicity material will be issued without prior approval of the client.

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APPENDIX 2: TRENCH LOCATION





**Appendix 8 –
Geophysical Survey, January 2017**

GEOPHYSICAL SURVEY REPORT G16119

Land at Snow Capel Farm,
Matson,
Gloucester

Client:



On Behalf Of:



GSB
PROSPECTION Ltd

*Celebrating over 30 years
at the forefront of
Archaeological Geophysics*



GEOPHYSICAL SURVEY REPORT

Project name: Land at Snow Capel Farm, Matson, Gloucester
Job ref: G16119
Client: Environmental Dimension Partnership Ltd
Survey dates: 16 December 2016
Report date: 10 January 2017
Field Co-ordinator: Stephen Weston BA
Field team: Sam Wood, Olivier Vansassenbrouck MSc, Matthew Wetton MSc, Adam Clark BA, Paul Bracken BA.
Report written by: Joe Perry BA
CAD illustrations by: Tom Cockcroft MSc
Report approved by: Dr John Gater MCifA FSA
Project Director: Dr John Gater MCifA FSA
Version number and issue date: V1: 11 January/2017

GSB Prospection Ltd
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6	CONCLUSION	3
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Figure 3	1:2000	Magnetometer Survey – Greyscale Plot
Figure 4	1:2000	Magnetometer Survey – Interpretation

APPENDICES

Appendix A	Technical Information: Magnetometer Survey Method
Appendix B	Technical Information: Magnetic Theory

DIGITAL CONTENT (CD)

- Minimally Processed Greyscale Images and XY Trace Plots in DWG format
- DWG Viewer
- Digital Copies of Report Text and Figures (both PDF and native formats)

1 SUMMARY OF RESULTS

No anomalies of archaeological interest were detected. A number of weak trends of uncertain origin and an old field and boundary were identified. There is a large number of ferrous anomalies to the east of the moated site and whilst they appear modern, an association with the former cannot be ruled out.

2 INTRODUCTION

2.1 Background synopsis

GSB Prospection Ltd. was commissioned to undertake a geophysical survey of an area proposed for residential development. This survey forms part of an archaeological investigation being undertaken by **Environmental Dimension Partnership Ltd** on behalf of **Edward Ware Homes**.

2.2 Site Details

NGR / Postcode	SO 850 142 / GL4 6EQ
Location	The site is located on the south-eastern edge of Gloucester, and is bounded to the south-east by the M5 motorway and to the west by Winnycroft Lane
HER/SMR	Gloucestershire
District	Gloucester
Parish	Matson
Topography	Flat
Current Land Use	Livestock
Soils	Soils are Martock (711d) association slowly permeable seasonally waterlogged stoneless silty over clayey and clayey soils over siltstone or shale. Some similar soils with slowly permeable subsoils and slight waterlogging (SSEW 1983).
Geology	Bedrock geology within the survey area consists of Blue Lias Formation and Charmouth Mudstone Formation (BGS 2017).
Archaeology	There is a scheduled ancient monument located on site (monument number 1019399: moated site at Sneedham's Green).
Survey Methods	Detailed magnetometer survey (fluxgate gradiometer)
Study Area	7.8ha

2.3 Aims and objectives

To locate and characterise any anomalies of possible archaeological interest within the study area.

3 METHODS, PROCESSING & PRESENTATION

3.1 Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage) and the Chartered Institute for Archaeologists (IfA 2002 & ClfA 2014).

3.2 Survey methods

Detailed magnetic survey was chosen as an efficient and effective method of locating archaeological anomalies.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m

More information regarding this technique is included in Appendix A

This project was carried out in accordance with a Written Scheme of Investigation submitted to and approved by Gloucestershire CC

3.3 Data Processing

The following schedule shows the basic processing carried out on the data used in this report:

1. *De-stripe*
2. *De-stagger*

3.4 Presentation of results and interpretation

The presentation of the data for each site involves a greyscale plot of processed data. Magnetic anomalies have been identified, interpreted and plotted onto the 'Interpretation' drawings. The minimally processed data are provided as a greyscale image on the CD together with an XY trace plot in CAD format. A CAD viewer is also provided.

When interpreting the results several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to very specific known features documented in other sources, this is done (for example: Abbey Wall, Roman Road). For the generic categories levels of confidence are indicated, for example: probable, or possible archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification "possible".

4 RESULTS

- 4.1 No anomalies of archaeological interest were detected.
- 4.2 An intermittent, linear anomaly is visible within the dataset. This feature corresponds with a field division recorded on an 1884 Ordnance Survey map, and has therefore been assigned to the category *Former Field Boundary*.
- 4.3 There are a couple of poorly defined curvilinear trends in the data; these are probably simply ploughing effects but, in the context of the known Scheduled Monument, they are assigned to the category *Uncertain Origin*.
- 4.4 A scatter of ferrous responses to the east of the moat are typical of those due to relatively modern debris, but the close proximity of the scheduled site might suggest a greater antiquity for the recorded anomalies.
- 4.5 A large area of magnetic disturbance was recorded in the south-east edge of the survey area and possibly construction debris from the building of the M5 motorway.
- 4.6 A pipe traverses the site on north-south alignment, located on the western edge of the site.
- 4.7 Ferrous responses adjacent to boundaries are due to fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and their form is best illustrated in the XY trace plots. These responses are characteristic of small pieces of ferrous debris in the topsoil and are commonly assigned a modern origin. The most prominent of these are highlighted on the interpretation diagram.

5 DATA APPRAISAL & CONFIDENCE ASSESSMENT

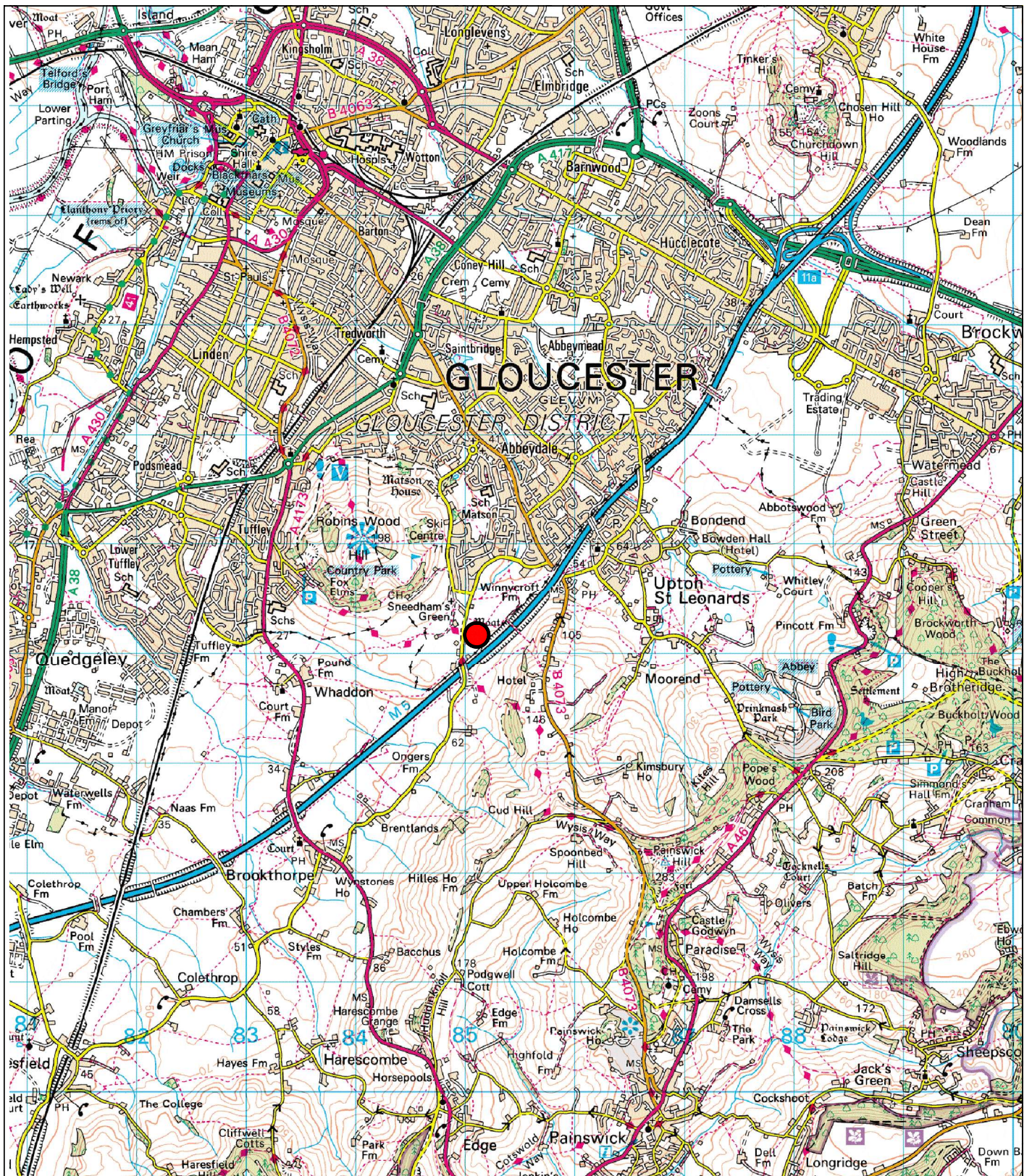
- 5.1 Historic England (then English Heritage) Guidelines (EH 2008) Table 4 states that the magnetic response over Mudstone is poor. Given that former boundaries were detected in this survey, the results suggest that the magnetic survey has been effective.

6 CONCLUSION

- 6.1 The survey did not identify any anomalies of archaeological potential.
- 6.2 A former field boundary was located.
- 6.3 A number of weak trends of uncertain origin were detected; they are likely to be due to agricultural or natural effects.
- 6.4 Ferrous responses are probably modern in origin but there is a possibility that they are associated with the moated site.

7 REFERENCES

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Site Location

Title:
Site Location Diagram

Client:
Environmental Dimension
Partnership

Project:
G16119 Land at
Snow Capel Farm, Gloucester

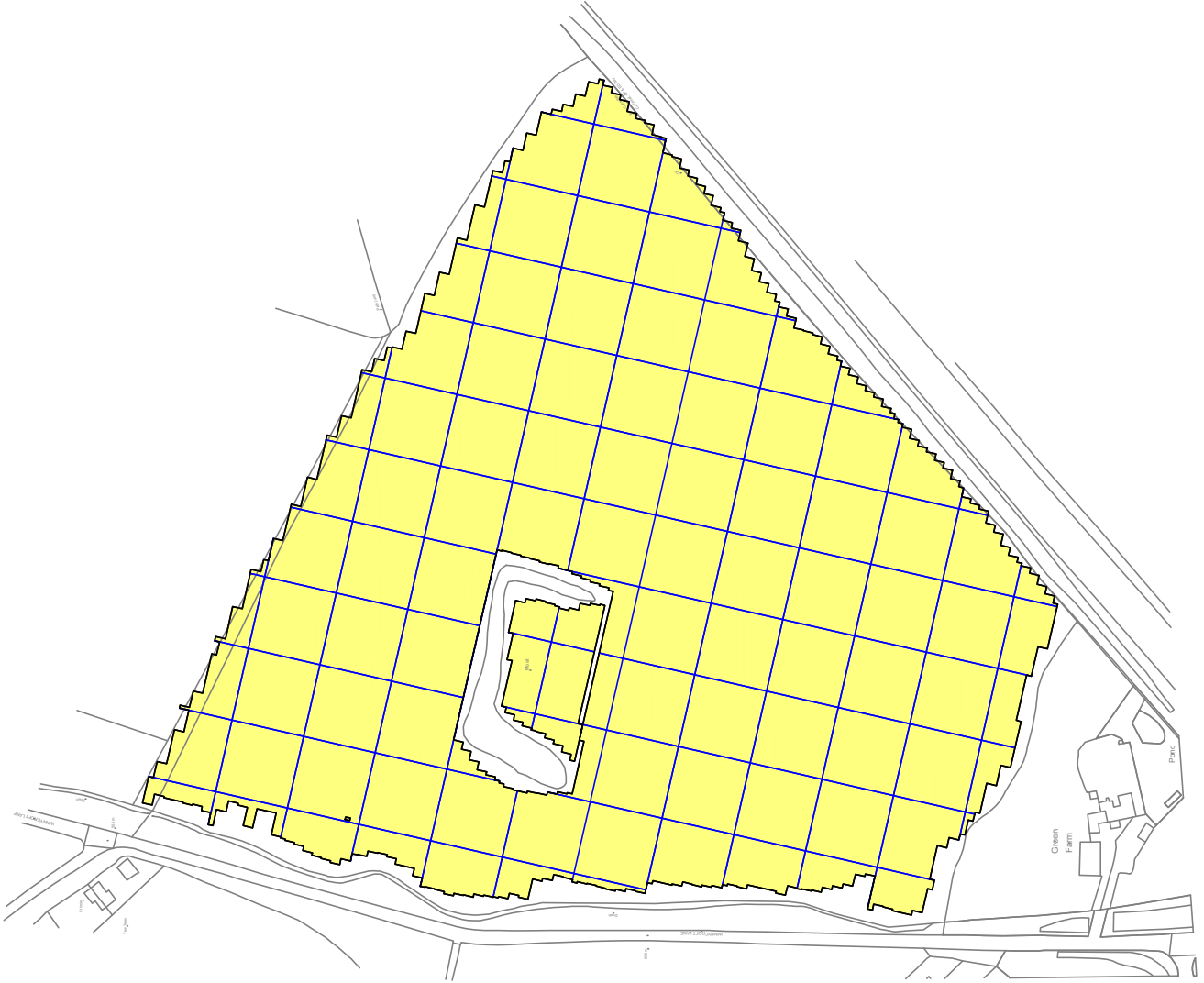
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Scale: 0 metres 2000
1:50000 @ A4

Fig No:
1



Magnetometer Survey Area
Showing 30m Grids



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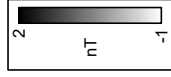


Title: Magnetometer Survey
Location of Survey Area

Client: Environmental Dimension Partnership

Project: G16119 Land at Snow Capel Farm,
Gloucester

Scale: 0 metres 80 metres
1:2000 @ A3
Fig No: 2



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Title: Magnetometer Survey
Greyscale Plot






Client: Environmental Dimension Partnership

Project: G16119 Land at Snow Capel Farm,
Gloucester

Scale: 0 metres 80 metres
1:2000 @ A3

Fig No: 3



-  Uncertain Origin
(discrete anomaly / trend)
-  Former field boundary
(corroborated)
-  Pipe
-  Magnetic disturbance
-  Ferrous

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Title:

Magnetometer Survey
Interpretation

Client:

Environmental Dimension Partnership

Project:

G16 119 Land at Snow Capel Farm,
Gloucester

Scale:

0 80 metres
1:2000 @ A3

Fig No:

4