RESPONSE TO

PLANNING APPLICATION MW.0074/18

BY HILLS QUARRY PRODUCTS LTD

FOR

THE EXTRACTION OF SAND, GRAVEL AND CLAY INCLUDING THE CREATION OF A NEW ACCESS, PROCESSING PLANT, OFFICES WITH WELFARE ACCOMMODATION, WEIGHBRIDGE AND SILT WATER LAGOON SYSTEM WITH SITE RESTORATION TO AGRICULTURE AND NATURE CONSERVATION INCLUDING LAKES WITH RECREATIONAL AFTERUSES AND THE PERMANENT DIVERSION OF FOOTPATH 171/15 AND CREATION OF NEW FOOTPATHS

ON BEHALF OF CLIFTON HAMPDEN & BURCOT PARISH COUNCIL

JULY 2018

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APPENDICES

1. INTRODUCTION

1.1. This consultation response to planning application MW.0074/18 by Hills Quarry Products ('the applicant') for a new sand and gravel quarry on land at Fullamoor Plantation, Clifton Hampden ("Fullamoor Quarry") is made on behalf of Clifton Hampden & Burcot Parish Council (CH&BPC).

1.2. CH&BPC previously made representations to Oxfordshire County Council via their appointed subcommittee Bachport (Burcot and Clifton Hampden Protection of the River Thames) further to the identification of land southwest of Clifton Hampden as a potential new area for sand and gravel extraction within the Oxfordshire Minerals sites issues and options consultation paper. This is the land to which the current application relates. Bachport's views were supported by Long Wittenham, Appleford and Culham Parish Councils.

1.3. The applicant previously made an application for the Fullamoor Quarry proposal in February 2016 ("application MW.0039/16"), which was refused planning permission in November 2017. Bachport responded to the four rounds of consultation on application MW.0039/16, raising a number of serious concerns and objections about the significant adverse impacts that would be caused by the proposed development. Bachport's representations were designated "objector group" in the planning officer's report for the refused application. Consequently this submission is submitted directly by the Parish Council so there can be no equivocation on the Parish Council's position. This submission is supported by Long Wittenham, Appleford and Culham Parish Councils.

1.4. In the following response CH&BPC cross-refers to and relies on the previous responses by their subcommittee Bachport, the content of which continues to be fundamentally relevant to the new application.

1.5. Section 2 of this response describes the development proposal noting where it differs from the scheme previously proposed and/or changes in circumstances. The following sections 3 - 8 then address the issues which CH&BPC considers are relevant to determining whether the proposed development should be granted planning permission, identifying whether there has been any reason to warrant a change in position, when compared with previous comments. These are structured focusing in the first place on the reasons for refusal of application MW.0039/16, followed by other matters that CH&BPC considers are also strong reasons for rejecting the application.

2. THE APPLICATION PROPOSAL

2.1. The proposal is to open a new sand and gravel quarry on 104 hectares (ha) of land in the Oxford Green Belt between the River Thames to the south of Culham Science Centre and southwest of Clifton Hampden. The planning application documents are accompanied by an Environmental Statement (ES).

2.2. The proposed extent of mineral extraction is 76ha with the remaining 28ha to be used for the site access, plant site, silt ponds, soils and overburden storage. The extent of the blue line on the application area plan, drawing no.: C6_LAN_001 extends to a wider 160ha area, to which a number of the reports submitted in support of the application relate.

2.3. The mineral reserve is estimated at 2.5 million tonnes (mt), and it is now proposed to be extracted at a rate of 200,000 tonnes per annum (tpa), not 250,000 tpa as previously proposed. The duration of the operational life of the site is therefore given as 12.5 years (compared with 10 years previously). No timescales are provided within the application documents for the duration of the initial development works (construction of site access, implementation of flood mitigation measures, installation of processing plant, formation of bunding etc). The restoration works are said to take a further year after the final phase of working.

2.4. The sand and gravel deposit is up to 4m deep. The underlying clay would also be extracted to be used on site for sealing the sides of the excavations and to assist in restoring the site.

2.5. The mineral comprises approximately 70% sand and 30% gravel (maximum size 10-20mm with an insignificant proportion of coarse gravel >20mm[1]). It is proposed to be worked dry (requiring pumping of the groundwater), and transported by a field conveyor system to the plant site.

2.6. The extraction area would be worked in 10 phases with the direction of working broadly counter clockwise from the northwestern corner through the western and central part of the site then along the River Thames and into the northeastern section before finally extracting beneath the plant site back at the northern edge of the site. Provision is proposed to be made for out of sequence working in the northeastern corner of the site (phase 7) at times when flooding prohibits working in the southern part of the site. As a consequence phase 7 would be stripped ready for working at the same time as phases 4, 5 and 6 are operational.[2] A line of three 7 metre high bunds with gaps in between (to allow for flood water flow) would be placed along the eastern boundary of phase 7 for the duration of its working.

2.7. A new access would be constructed from the Abingdon Road (A415) to the plant site. The new road would be approximately 240m in length and enclosed by 2m high bunding on either side.

2.8. The plant site would cover an area 9.4ha in size[3] on the northern edge of the extraction area. It would contain the mineral processing plant, offices and welfare accommodation, a weighbridge, parking provision for 20 cars and 10 HGVs[4] and a silt lagoon.

[1] Paragraphs 4.7 and 4.16 of ES Chapter 11 and Appendix 11C
[2] Paragraph 4.24 of the planning statement
[3] Table 1, page 12 of the planning statement
[4] Paragraph 4.50 of the planning statement

2.9. Application MW.0039/16 originally included the installation of a concrete plant within the plant site and proposed that about 12% of the mineral would be used to make concrete. The concrete plant is omitted from the current application plans, though paragraph 6.12 of the planning statement identifies that the wash plant ensures that the mineral is suitable for concrete manufacture. No alteration to the area proposed to be used for the plant site has been made following removal of the concrete plant from the current application.

2.10. A variety of different shapes and sizes of bunds ranging from 5 – 10m in height would be formed around the plant site, and a number of angular shaped settlement ponds would be constructed (following extraction of the underlying gravel) on the other side of these bunds to the east and west of the plant site for management of silt from the mineral processing and dewatering operations.

2.11. Other than where used for bunding, stripped soils and overburden would be placed in large rectangular mounds ranging in height from 3 – 5m in storage areas at the northwestern corner and western boundary of the application site (on land not proposed to be worked for mineral as part of this application).

2.12. Further to a request for additional information on application MW.0039/16, including a re-assessment of the noise effects on local residents, the measure of an 8 metre high acoustic bund was introduced along the northern edge of the western materials storage area. It is, however, not clear from the current application documents that this acoustic bund will be put in place. The planning statement refers (at paragraph 4.20) only to storage mounds and overburden (but no acoustic bund) being in place on the western side of the site at Development Stage A, and (at paragraph 6.49) only to the mitigation measures of amenity bunding to screen the plant and phase 7 having been included in the noise calculations; and with no mention of any bunding to phase 1. Whilst a bund is shown at the relevant location on the working plans, there is no confirmation that it serves the purpose of an acoustic bund or whether it will remain in place for the duration of the working, rather than formed during the early phases of working and being removed as part of the re-use of the materials in the storage area during restoration works.

2.13. Paragraph 4.11 of the planning statement describes a flood mitigation measure to be implemented as part of the pre-development works, comprising removal of soils to an average depth of 0.8 metres from about 1.8ha of a field to the east of the extraction area in front of Warren Cottage. In application MW.0039/16 this feature was alternatively described as being up to 1.5 metres deep. None of the application plans provides the precise details of the proposed feature. Drawing no.: C6_LAN_046 shows the location of the water feature, which is similar in size to the smaller of the proposed restoration lakes.

2.14. The proposed traffic generation is given as about 74 heavy goods vehicle (HGV) movements per day (compared to less than 100 movements per day under application MW.0039/16), with hours of transportation restricted to prevent vehicle movements from the site during workday

peak am and pm hours (of 7.30am to 8.30am and 4.15pm and 5.15pm[5]). There will be additional traffic movements relating to staff and visitors, the majority of which will take place at the beginning and end of the working day. A routeing agreement is proposed to ensure that lorries associated with the development avoid certain routes including the bridges over the Thames at Clifton Hampden and Culham, and a financial contribution is offered for the widening of the footpath on the south side of the A415 at the Clifton Hampden school crossing point. Hills lorries returning to site during the restricted hours will be required to park-up at Rye Farm HGV park on the eastern side of Abingdon (currently closed) having travelled through Abingdon, or lay-bys on the A4074[6].

2.15. The area of the application site comprises agricultural land with mature hedgerow and woodland belts and copses along field boundaries. The planning statement identifies (at paragraph 6.95) that there are 100ha of agricultural land, 41.8ha of which will be restored leaving a net loss of 15ha of grades 2 and 3a, which is best and most versatile (BMV) agricultural land.

2.16. All of the woodland belts and hedgerow within the proposed extraction area are to be removed. As part of the initial development works new planting is proposed along parts of the eastern, northern and western extraction/working boundaries and along the River Thames. New planting would also be implemented upon restoration of the site.

2.17. Public footpath 171/15 currently runs from the edge of Clifton Hampden village in a south westerly direction into the middle of the application site and then turns south east to meet up with the Thames Path National Trail, and is proposed to be permanently diverted around and fenced off from the eastern limits of the extraction area along the existing concrete track to Clifton Lock. The Thames Path runs along the northern bank of the River Thames and the proposal is to provide a standoff of 25m from gravel extraction to the river, within which the National Trail would run, with fencing at 5m from the excavation edge.[7]

2.18. Bordering the River Thames the vast majority of the site lies within the floodplain. The northern extent of the floodplain is roughly coincident with the northern boundary of the application site and with the base of an escarpment of adjoining land, which rises about 8-9m above the floodplain.

2.19. Paragraph 4.30 of the planning statement records that a ridge of high ground will be maintained during working running east-west roughly along the northern boundaries of phases 4, 6 and 8 to mimic existing ground levels and prevent floodwaters accessing the northern parts of the floodplain. However the working plans do not include the creation of this artificial flood embankment, and instead show working through this natural ridge.

[5] Paragraph 4.54 of the planning statement
[6] Paragraph 6.5 of the transport assessment (Appendix G to the planning statement)
[7] Paragraphs 4.27 and 4.52 of the planning statement

2.20. The higher land to the north of the application site features a number of residential properties which by virtue of the difference in land levels have direct views over the application area. One of these properties is Fullamoor Farmhouse, which is a grade II listed building and is the closest designated building to the site. The planning statement does not identify this property under "Designations" (paragraph 2.12) and does not come to any conclusions as to the impact of the proposal on the setting to this heritage asset or the Clifton Hampden conservation area.

2.21. The land at Fullamoor is known to contain significant archaeological interest including a Scheduled Monument (SM) of a Bronze Age round barrow cemetery on the western boundary of the application site. A 10m fenced buffer zone to the SM would be provided. The remainder of the archaeological interest within the proposed mineral extraction site would be lost.

2.22. Restoration would essentially be to agriculture in the northwestern part of the site with two large lakes occupying the southern and eastern parts of the site, and the silt ponds turned into reed marsh/wet woodland areas and a pond. A bird management plan to monitor, manage and deter birds that present a strike hazard to aviation safety would need to be implemented due to the development site being located within the safeguarding zone for RAF Benson.

2.23. Upon restoration new rights of way would be provided, including the realignment of part of footpath 171/15 close to its original route to the point where it has to divert around the large lake to re-connect with the Thames Path, new footpaths circumventing the large lake and a route along the site entrance linking to diverted footpath 171/15.

3. TRAFFIC

3.1. Bachport's comments on application MW.0039/16 were that the Transport Assessment (TA) and ES Chapter 8 Transport & Access were not produced to an adequate standard or scope, for a variety of reasons[8], but most notably because the TA did not include any information or analysis on local junction capacity, and therefore failed to recognise the impact of and serious consequences of additional quarry traffic on the significant queuing problems at the Clifton Hampden A415/B4015 staggered junction, which extend past the proposed quarry entrance for up to four hours per weekday at peak times.

3.2. This view was also previously held by the Highways Authority who stated in the Scoping Opinion provided to the applicant in 2014 (ref MW.0045/14) that the following work should be undertaken:

- Identification of likely vehicle routings whilst making the commitment to exclude quarry related HGVs from passing through Abingdon town centre; and

[8] See: Section 12 and Appendix 7 of May 2016 Bachport response;
Section 8 and Appendix 5 of March 2017 Bachport response; and
Section 8 of August 2017 Bachport response

- Assessment of the impact of quarry traffic on the A415 between the proposed quarry access and the A4074 in the east, to include detailed capacity analysis at its junctions with the B4015 at Clifton Hampden and the A4074 at Berinsfield.

3.3. In November 2017 following a fourth round of consultation on application MW.0039/16, the Highways Authority having conducted its own traffic surveys and modelling work of adjacent junctions in Culham and Sutton Courtenay (in the absence of any from the applicant), confirmed that the quarry proposal would have a severely harmful traffic impact and should be refused planning permission. The survey work concluded that additional HGV movements would bring about a situation best described as gridlock, causing significant adverse effects in terms of delay, safety and vehicle emissions. Moreover the Highways Authority confirmed that the applicant's reliance only on comparing new trips with existing flows and the lack of provision of any junction analysis were inappropriate, given the sensitivity of the network.

3.4. CH&BPC acknowledges that the Highways Authority's recommendation of refusal of application MW.0039/16 was subsequently waived, following the applicant agreeing to prohibit peak hour trips – for all vehicles (including HGVs, staff and visitor trips), and that the current application is both for a 20% reduction of HGV movements (though with the consequence of an extended duration of operations) and that transportation hours are to be restricted during the hours of 7.30am to 8.30am and 4.15pm and 5.15pm. However, these conditions do not overcome the serious concerns about the traffic effects of the proposal for the reasons that have been set out in Bachport's previous responses on application MW.0039/16[9], which are in summary:

- Peak hours are not confined to the limited restricted transportation hours proposed. Traffic congestion is experienced between 7.30am to 9.30am and 4.00pm to 6.00pm, and can occur at other times of the day.
- The restricted hours mean more vehicles increasing congestion and road safety issues during other times of the day, for example when Clifton Hampden primary school children cross the A415 to and from the car park at the beginning and the end of the school day.
- Queues already extend from Clifton Hampden as far back as the railway line and from Abingdon and Culham Bridge to the Culham junction.
- Current congestion will only worsen due to significant additional housing and employment developments proposed in the area.
- Whilst the applicant can control vehicles leaving the site it would not be possible to prevent third party vehicles arriving at the site during the restricted hours. Whilst such vehicles could be banned from driving into the site, that would not address the issue, as they would have already contributed to the local congestion.
- The moving of the farm access to the quarry entrance creates further significant new movements of slow turning farm vehicles onto and off the highway (and having to join the

[9] See: Section 12 of May 2016 Bachport response;
Section 8 and Appendix 5 of March 2017 Bachport response;
Section 8 of August 2017 Bachport response;
Bachport response of 10 November 2017 to Transport Development Control comments; and
Bachport letter of 21 November 2017

queues of traffic on the A415 rather than simply cross over in transporting livestock, feed, bedding etc.) between the farm yard to the north and the fields to the south of the road.

3.4. Bachport's previous responses included queries as to where lorries would wait up during the restricted times. This is now addressed by the proposal for them to park up at Rye Farm HGV park and in laybys on the A4074. However, lorries parking up at Rye Farm HGV park will have traversed Abingdon during the peak hour restrictions contributing to congestion in the town. Furthermore this lorry park is currently closed until further notice and so alternative location(s) need to be identified for this arrangement to function.

3.5. In addition it is not entirely clear from the application documents that all vehicle trips will be restricted to and from the site during the specified peak periods. Whilst this is stated at paragraph 6.34 (in assessing the development against planning policy), paragraph 4.47 of the planning statement in describing the form of the proposal only says that the hours of transportation will be restricted to prevent vehicle movements from the site during workday peak am and pm hours, and paragraph 4.11 of ES Chapter 8 Transport & Access states that staff will generally arrive before operations commence and depart after operations finish. Table 6.1 of the TA identifies typical arrivals of 0600-0700 and departures of 1800-1900 every weekday for staff, which assumes a 12-hour working day (or 60 hours per week) per employee). This is not a realistic assumption. In reality staff will arrive and leave at different times reflecting their differing roles and the need to comply with the working time regulations. It is further noted under paragraph 5.22 of ES Chapter 8 that for construction activity (to set up the mineral working) delivery times are to be "scheduled to as far as possible minimise the impacts on other road users". There is therefore no clear undertaking that during the restricted hours mineral lorries will be prevented from arriving at the site, or that other trips, i.e. staff and visitor vehicles or construction activity vehicles, will be prohibited.

3.6. The severity of the impact that arises from queuing traffic in this area is demonstrated in the photographs at Appendix 1.

3.7. CH&BPC maintains it's objection to the proposed new quarry at Fullamoor on the grounds that it would not comply with the requirements of South Oxfordshire Local Plan (SOLP) policies T1 and T7, South Oxfordshire Core Strategy (SOCS) policy CSM1, and Oxfordshire Minerals and Waste Core Strategy (OMWCS) Policy C10, because the minerals and waste development would:

- be harmful to the safety of all road users including pedestrians and cyclists;
- materially decrease the efficiency and quality of the local road network; and
- have significant negative impacts on local residential and environmental amenity,

that has not been overcome by the current application proposals.

4. THAMES CROSSING

4.1. Following issue of the Final Publication Version of the South Oxfordshire Local Plan 2011-2033 (SOLP2033) in October 2017, which crystallised the options for the new Thames crossing between Culham and Didcot Garden Town transport scheme into two, one of which crosses over a large section of the proposed quarry, Bachport raised the concern that application MW.0039/16 as submitted was highly likely to prejudice implementation of the road scheme[10].

4.2. The current application now provides a report (the "Clarkebond report") at Appendix 4 to the TA (Appendix G to the planning statement) outlining measures that can be instigated into the quarrying works to safeguard the road alignment. These are that mineral extraction should be allowed to proceed and to provide for reinstatement of the worked areas to a level and condition largely comparable to the pre-worked condition.

4.3. The Clarkebond report describes, however, a road line affecting only phases 1, 2 and 4 of the quarry (on the west side of the site only) and relies on the affected area having been already worked prior to commencement of any road construction. However the actual safeguarded route in the SOLP2033 (page 221, Appendix 5 of the Plan) is much wider covering the larger extent of the central part of the quarry, including the plant site and access road, and the silt ponds. The plant site is also the final phase of mineral extraction. Paragraph 8.5 of the TA confirms that the County Council wishes to commence construction of the road in 2021, and therefore given the proposed timescale of the quarry development, namely 12.5 years with further (unspecified) time for pre-development works, it is actually very unlikely that, should the route cross the quarry site, the plant site area will have been worked prior to commencement of operations.

4.4. The Clarkebond report also identifies that should the road route that crosses the site be chosen, there will be a need for amendments to the restoration scheme to reinstate ground suitable for construction of a road and new peninsulas of land onto which columns to support a road crossing the lake area can be constructed. It is suggested that the underlying clays could be utilised to construct the peninsulas/piers and that a planning application would be made to alter the restored lake shape. However CH&BPC was given to understand at a meeting with the Highways Authority in July 2018 that there is no design requirement for the road to be on piers rather than an embankment to cross the floodplain as suggested by the applicants report.

4.5. There is also no mention of the possibility of a route being chosen that crosses the plant site (a distinct possibility to avoid the silt pond locations on either boundary of the safeguarded land) and its consequences for the proposed development. If road construction commenced by 2021 then the processing plant and other infrastructure would need to be moved. The environmental effects of such a significant change to the scheme, including in terms of (but not limited to)

[10] See Section 4 of November 2017 Bachport response

flood risk, noise/dust emissions, harm to heritage assets and landscape and visual impact and the necessity of new bunding, have not been assessed. CH&BPC considers such a change would fundamentally alter the character and nature of the development proposal and that this potential consequence of the road crossing needs to be addressed and an alternative scheme put forward that has been fully assessed in respect of all its environmental effects. Without this information it cannot be said that the proposal could be acceptable in the circumstances of the new crossing requiring relocation of the plant site.

4.6. Moreover, it is doubtful that the terms of the provisions as expressed in the Clarkebond report demonstrate that the proposed development would not harm delivery of the road scheme (as required by SOLP2033 policy TRANS3), because they are limited to a timeframe of the road route crossing the quarry being confirmed within 5 years of commencement of quarry operations[11]. Whilst every effort is being made to implement the road crossing as soon as possible, there is no certainty that the funding will be in place within the timescale set out in the Clarkebond report. In those circumstances the quarry proposal going ahead would incur significant additional costs[12] to the scheme (to be met from public finances), prejudicing its delivery and that of the Vale of White Horse and South Oxfordshire Local Plan strategies.

5. GREEN BELT, LANDSCAPE CHARACTER AND VISUAL IMPACT

5.1. In commenting on application MW.0039/16 Bachport consistently drew attention to the harm to the Green Belt, local landscape character and visual amenity that would be caused by the proposed development[13]. Those comments record the National Planning Policy Framework (NPPF) advice (paragraph 146) that mineral extraction is a form of development that is not inappropriate in the Green Belt provided it preserves the openness of the Green Belt and does not conflict with the purposes of including land in it.

5.2. With regard to preserving openness, Bachport's previous comments explained why this would not be met by application MW.0039/16, as follows:

- The site is visually exposed from a number of surrounding vantage points, which would afford direct views of the workings and derogation of the landscape character with harm to Green Belt openness.
- The proposals to remove and work all of the existing hedgerows and woodland areas within the proposed extraction area would exacerbate this harm to openness.
- The position of the site lying below an escarpment on the northern boundary also makes it very difficult to screen the workings from the viewpoints on surrounding higher land.
- Due to this local land topography (and removal of the existing established vegetation) extremely high and extensive bunding is proposed in an attempt to screen the workings.

[11] See page 2 of the Clarkebond report under heading "Revision of Restoration Works"
[12] Estimated at £44.5 million as reported to 27 November 2017 Planning and Regulation committee
[13] See: Sections 9 and 11 of May 2016 Bachport response;
Sections 2 and 3 of March 2017 Bachport response;
Sections 2 and 3 of August 2017 Bachport response; and
Section 2 of November 2017 Bachport response

These bunds would be significantly larger than would routinely be the case with a mineral working and due to their unusually vast size (equivalent to long rows of 2-3 storey houses) they would be highly unnatural and disruptive features in any landscape, but particularly so within the Green Belt.

- The processing plant, and associated development, including engineered (and unnaturally shaped) silt lagoons, would be at visually prominent parts of the site and would introduce a distinctly urbanising element in the countryside.

5.3. With regard to the concept of conflict with the purposes of including land in the Green Belt, Bachport's view was in summary that the proposed development would harm the 3rd and 4th purposes of the Green Belt (paragraph 134 of the NPPF), because it would:

- introduce various elements of substantial new built development as described above, contrary to assisting in safeguarding the countryside from encroachment; and
- be detrimental to the setting and special character of the historic town of Abingdon. The tranquil riverside setting, within which the application site sits, is important to and defines the character of the historic heart of Abingdon, and would be radically altered in character both by mineral working and the proposed restoration to water based areas.

5.4. In light of the fact that the two provisos of NPPF paragraph 146 would not be met by the proposed development, Bachport concluded that application MW.0039/16 would be inappropriate development in the Green Belt, which is by definition harmful to the Green Belt and should not be approved except in very special circumstances.

5.5. In application MW.0039/16 the applicant addressed the issue of Green Belt very much as an after thought, expressing the view that the proposal was not inappropriate development because it was mineral extraction and would not introduce any new permanent structures[14]. No analysis was provided as to whether the provisos (of preserving openness and not conflicting with Green Belt purposes) for mineral extraction to qualify as inappropriate development were met. Furthermore the reliance on there being no "permanent" structures to affect openness was inappropriate given the lengthy duration of the development, which would include pre-mineral extraction development and restoration operations.

5.6. When requested by the County Council the applicant provided a response as to the very special circumstances for the processing plant and bunding, (which the County Council considered to be inappropriate development). The applicant's response (that the structures were necessary specifically for the quarry, so should be allowed, otherwise it would be nonsensical for the NPPF to state that mineral extraction need not be inappropriate, and there would be no permanent encroachment of impact on openness[15]) did not however provide the necessary justification to outweigh the harm to the Green Belt that would be caused.

[14] Paragraph 5.106 of MW.0039/16 planning statement
[15] Paragraph 114 of Planning and Regulation Committee report of 27 November 2017

5.7. With the current application the applicant is persisting with the view that the proposed development is not inappropriate (by virtue of paragraph 146 of the NPPF). The applicant again relies on there being no "new permanent structure which could conflict with 'openness'", and adds: "During working there will be some impact visually with elements of the development which do have spatial presence such as bunds, processing plant, conveyors", but considers that these elements will not harm the openness of the Green Belt, because they will be viewed against the rising ground to the A415 (blending in with it), and "whilst there will be a visual impact to these elements, the effects will not be harmful". Furthermore the applicant considers that the changes to the landscape from the restoration proposals would not be harmful to the openness of the Green Belt in this location[16].

5.8. Turning to the matter of conflict with the purposes of the Green Belt the applicant does not consider that there would be encroachment, claiming that the countryside/landscape character would not be eroded as the visual influence of the working and restoration operations would be well contained and screened. On preserving the setting and special character of historic towns the applicant does not consider the impact on Abingdon, and in respect of Clifton Hampden relies on the Heritage assessment not having identified any significant harm to its conservation area and listed buildings[17].

5.9. There has been no material change between application MW.0039/16 and the current application in respect of the physical impact that the development would have on the land – and hence area of Green Belt (the only changes relate to hours of working, annual production and duration of the development). There is therefore no reason for CH&BPC to resile from the earlier firmly held view that the proposed development would be inappropriate development in the Green Belt.

5.10. Moreover, there has now been a more recent Court of Appeal case [16th March 2018] that has strengthened this viewpoint and clarified matters of openness in relation to mineral working.

5.11. The judgment of Samuel Smith Old Brewery (Tadcaster) and Oxton Farm v North Yorkshire CC and another [2018] EWCA Civ 489 (the "SSOBT case") has made clear that in assessing the effect of development on the openness of the Green Belt the decision maker must not merely be concerned with the absence of built development, or narrow the matter down to consideration of spatial impact alone, but must also consider the relevance of the visual impact of the development on the openness of the Green Belt[18].

5.12. The judgment clarifies that this does not mean that a proposal can only be regarded as "not inappropriate" if the openness would be left entirely unchanged; and that there may be cases in which a proposed development will have no harmful visual effects on the openness of the Green Belt, but that development for mineral extraction will often have long-lasting visual

[16] Paragraphs 6.108 - 6.109 of the planning statement
[17] Paragraph 6.110 of the planning statement
[18] See paragraphs 40 and 45 of the judgment

effects on the openness of the Green Belt, which may be partly or wholly repaired in the restoration phase – or may not.

5.13. In circumstances where there would for example be: a substantial development taking place over a lengthy period of time; permanent change to the character of the landscape; adverse visual effects; or the impact could not be described as neutral, then the planning judgment must consider the effect of the development (i.e. the mineral extraction) on the openness of the Green Belt, and if harmful due to visual impact, determine that the development is inappropriate and that very special circumstances would be necessary for it to be approved.[19]

5.14. In light of this new judgment CH&BPC now considers that the proposed development is not only inappropriate, because of the harm to openness of the Green Belt by virtue of the built development associated with the quarry, but also because of the harmful visual effects that the activities to facilitate the mineral extraction would generate.

5.15. Paragraph 6.107 of the planning statement refers to this new case law, but relies on it only for confirmation that (preservation of) openness does not mean that the Green Belt cannot change. It does not recount the fundamental finding of the judgment, which is that an inherent part of Green Belt policy is to plan positively to retain and enhance landscapes [and] visual amenity[20], and that therefore the visual effect of the development on the openness of the Green Belt is a matter that must be taken into consideration – in addition to the question of whether it would preserve the openness in spatial terms. The judgement warns against adopting an overly narrow conception of the "openness of the Green Belt" and, in consequence, failing to exercise the planning judgements required by paragraph 146 of the NPPF[21].

5.16. Despite awareness of the judgment the applicant is continuing to adopt this overly narrow approach by considering only the elements of the development which have a spatial presence, and so concluding that they would not have a harmful visual impact (see paragraph 5.7 above). Not only does this approach fail to take into account the visual impact of the mineral operations themselves on the Green Belt, it also reaches a conclusion of lack of harm in terms of visual effects that is not supported by the applicant's own evidence.

5.17. Table 1 below shows the magnitude of visual impact, identified within the various iterations of the Landscape and Visual Impact Assessment (LVIA) accompanying application MW.0039/16 and the current application, likely to be experienced (even after mitigation) as a result of the proposed development from the properties to the north of the site and the local footpaths. It is evident from this that the claim that "the effects will not be harmful" (at paragraph 6.108 of the planning statement) is not substantiated. The current LVIA has assessed only seventeen viewpoints (a smaller number than in previous LVIAs), and of these eleven (65%) would experience significantly negative effects by the applicant's own assessment. Not one of them

[19] See paragraphs 39, 42, 47 and 49 of the judgment
[20] Paragraph 7 of the judgment and NPPF paragraph 141
[21] Paragraph 50 of the judgment

has been assessed as experiencing a neutral or negligible effect (even the long distance view from Wittenham Clumps). Moreover these findings do not bear out the statement at paragraph 6.110 of the planning statement that "the visual influence of the working and restoration operations is well contained and screened".

Table 1: Applicant's Analysis of Predicted Significance of Residual Visual Effects During Working

Viewpoint MW.0039/18	Jan 2016 LVIA	Oct 2016 LVIA	Jun 2017 LVIA	May 2018 LVIA
VP1: Edge of River Thames at junction footpaths 171/8 & 171/15	Major adverse	Major adverse	Major to Major/ Moderate adverse	Major/moderate adverse (Now VP1)
VP2: Thames Path	Major adverse	Major adverse	Major to Major/ Moderate adverse	Major/Moderate adverse (Now VP2)
VP4: Footpath 106/2 between Appleford and Long Wittenham	Moderate adverse	Moderate adverse	Moderate adverse	Moderate adverse (Now VP15)
VP5: Thames Path near weir	Not assessed	Major adverse	Major to Major/ Moderate adverse	Not assessed
VP6: Footpath 171/15 near Warren Cottage	Minor adverse	Minor adverse	Moderate adverse	Moderate adverse (Now VP10)
VP8: Southern bank of River Thames near apex of the meander	Not assessed	Moderate adverse	Moderate adverse	Moderate adverse (Now VP17)
VP9: Northern bank of River Thames	Not assessed	Moderate adverse	Moderate adverse	Moderate adverse (Now VP16)
VP17: Fullamoor Farm House (Section A only at Jan 2016)	Minor adverse	Moderate to major adverse	Major/Moderate adverse	Major/Moderate adverse (Now VP4)
VP18: Fullamoor Barns (Section B only at Jan 2016)	Minor adverse	Moderate to major adverse	Major/Moderate adverse	Major/Moderate adverse (Now VP5)
Section C: South Cottage	Minor adverse	Moderate adverse	Moderate adverse	Moderate adverse (Now VP8)
Section D: House at Turnpike	Minor adverse	Moderate adverse	Moderate adverse	Minor adverse (Now VP9)
VP22: Southeast corner of the application site	Not assessed	Major adverse	Major adverse	Major/Moderate adverse (Now VP13)
VP23: Diverted section of footpath 171/15 north of mid-terrace woodland	Not assessed	Major adverse	Major adverse	Major/Moderate adverse (Now VP3)

5.16. This table shows the diverging conclusions about the degree of impact that have been reached in the various LVIAs and does not provide a great deal of confidence about their veracity, and implies a certain lack of objectivity. It needs also to be noted that paragraph 6.80 of the planning statement records a 'minor adverse' visual impact for the properties to the north in wintertime when this is actually identified as 'major/moderate adverse' in the LVIA assessment. It is furthermore unclear why the impact from (new) VP9 (House at Turnpike) is now minor adverse when it was previously assessed to be moderate adverse. Even so, the predicted visual effects actually demonstrate that the development will have significant adverse visual effects and in so doing the openness of the Green Belt will be damaged.

5.17. This harm to the openness of the Green Belt is exacerbated by the proposal to remove all existing landscape structure – not only through the mineral extraction but also through restoration to features that radically alter the baseline character of this area of Green Belt (contrary to the advice at NPPF paragraph 141 and a matter that will be returned to below) – including all of the woodland, many individual trees and all of the hedgerows within the extraction area. Bachport's previous strong objections to this wholesale loss of existing well established and historic landscape structure are set out in full in previous responses on application MW.0039/16[22], but are in summary, because:

- The trees and hedgerow are highly important features for:
  a. the value that they provide to landscape character;
  b. their historical significance (they date back at least until the late 18th Century); and
  c. the wildlife and biodiversity interest that they support.
- There are several trees proposed to be lost that should be classified as veteran according to standing advice; CH&BPC were refused access to conduct their own half day tree survey with an eminent specialist in veteran trees
- It is common and best practice for mineral operators to maintain the existing tree and hedgerow structure of a site, as advocated in the OMWCS;
- There is no explanation or justification as to why it has to be removed (and replaced) rather being worked around;
- The planning authority has a statutory duty to seek to preserve existing planting in the first instance;
- The extensive clearance of existing land cover would open up views across the site and has the consequence of needing to introduce high and alien bunds to screen the workings, whereas existing trees and hedgerow would have filtered or even truncated views for parts of the site; and
- Advance and restoration planting would not mature as quickly as the applicant maintains and the adverse visual and landscape effects would take a long time to diminish.

[22] See: Paragraphs 9.9 – 9.14 of May 2016 Bachport response;
Sections 2 and 3 of March 2017 Bachport response;
Sections 2 and 3 of August 2017 Bachport response; and
Paragraphs 2.8 – 2.13 of November 2017 Bachport response

5.18. Another element of the proposal that is not generally or commonly found for mineral extraction is the unusually high and long bunds. Usually bunds to screen a mineral working would be much lower at around 3m or less (as for example the one shown in the applicant's example of a grassed bund photograph), and those proposed for the application site are some 230% - 330% larger than conventionally found. Screen bunding of such size is required in this case in an attempt to mitigate both visual impact and the harmful effects from noise emissions, because of the local land topography (in addition to the opening up of views into the site through removal of existing woodland and hedgerows). Contrary to the applicant's suggestion (as referred to at paragraph 5.7 of this response above) the bunds would not blend into the higher ground to the north of the site, which is actually so high as to afford direct views of the disturbed landscape – of both the unnatural bunds and the extraction areas/conveyors etc. Seven metre high bunds (the height of a two-storey house) are also proposed along the eastern boundary of the site (away from the higher ground) and these would be also be extremely incongruous in views over the fields from Clifton Hampden village.

5.19. The applicant's LVIA acknowledges that bunds can be visually intrusive, but it would seem they suggest only in circumstances where they are not properly constructed or maintained. Notwithstanding the very serious reservations that Bachport previously raised about the ability to properly construct and maintain bunds of the sheer size proposed, without them becoming unstable and prone to slumping, there is not even any acknowledgement in the current application's LVIA of the effects that the screening bunds might themselves have in landscape and visual terms and certainly no discussion of their harmful effects on the openness of the Green Belt.

5.20. The applicant places much reliance on the equipment and bunds being temporary, but this is nevertheless a long term development over a very large area (the site the subject of the SSBOT case was for a shorter period of seven years across only 6ha). Moreover, the harm to the openness of the Green Belt would in any event also endure upon restoration of the site. The scheme involves proposals that would radically and irreversibly change the character and quality of the landscape.

5.21. The area within which the application site lies is an area of valued local countryside, which provides an important part of the setting to Clifton Hampden and has strong coherence with the River Thames, the setting and heritage of which SOCS policy CSEN1 seeks to maintain for its amenity value. It is therefore a valued landscape to which protection is applied in line with NPPF paragraph 170. The South Oxfordshire Landscape Assessment (SOLA) also applies a strategy of Conserve to the flat floodplain pasture within the application site - where conservation is an overwhelming priority.

5.22. Instead of conservation, however the proposal is to introduce a number of new elements to the landscape that are not at all typical of or conducive to this sensitive river corridor landscape, such as:

a. new large water bodies with a huge 1 kilometre long lake proposed to run parallel to the River Thames, and the line of the Thames Water National Trail reduced to a causeway;
b. new hedgerows and tree planting (to remove views of the working) enclosing the River

Thames and Thames National Trail, as with the new section of diverted footpath, thereby reducing the experience of the landscape and views across open farmland currently enjoyed; and

c. retention of unnatural square-shaped settlement lagoons in the northern part of the site, surrounded by security fencing, because they would not dry out through being in the floodplain.

These elements do not respect the intrinsic value of this area of countryside, they would radically and irreversibly change it; even after the restoration is complete the legacy landscape would remain out of character within its context, with a failure to preserve the essential characteristics of the Green Belt in this area (NPPF paragraph 133).

5.23. This failure to respect the inherent local landscape character in the design of the scheme derives no doubt from the lack of regard that has been had in the applicant's LVIA to the SOLA, even though it is a formal Supplementary Planning Document (and therefore must be taken into account in determining the planning application), and to selective application of the Oxfordshire Wildlife & Landscape Study (OWLS). The applicant's LVIA instead relies on the content of published landscape assessments and guidance only so far as they can be used to support the development proposal, and has deliberately resisted considering relevant guidelines and landscape management advice that would have informed the suitability of the application scheme.

5.24. On the matter of conflict with the purposes of the Green Belt the applicant's reliance on the Heritage assessment not having identified any significant harm to the assets of Clifton Hampden conservation area and listed buildings pre-supposes that the assessment has been done to the required standard. However, that is not the case, for the reasons that are explained in section 7 below. The special historic character and setting to Clifton Hampden would not be preserved and there would be harmful encroachment upon the countryside through the introduction of long term development and alien features that would deteriorate the landscape character.

5.25. In summary the proposed development would have long-lasting spatial and visual effects on the openness of the Green Belt, which would also not be repaired in the restoration phase. It is important to note that the Council's landscape advisor's final comments on application MW.0039/16 (of 27th October 2017) concluded with him remaining concerned by the overall landscape and visual effects and timescales of the proposed quarry development. In addition, the proposed development also conflicts with the purposes of including land in the Green Belt. The application therefore has to be considered inappropriate development and should not be approved unless very special circumstances exist.

6. VERY SPECIAL CIRCUMSTANCES

6.1. At paragraph 6.111 of the planning statement the applicant states the matters they consider to amount to very special circumstances (vsc), which are summarised below:

1. A sustainable deliverable supply of aggregates in South Oxfordshire, where the Council has identified that new sites are required due to production issues at other Oxfordshire sites, which will have benefits for reduced aggregate cost due to local availability and reduced transportation miles with lower pollution/greenhouse gas emissions.
2. The application site is within a "strategic resource area" broad location for mineral extraction identified through OMWCS policy M3.
3. The restoration will deliver biodiversity and recreational gains.

6.2. For application MW.0039/16 the Council also identified a number of vsc[23], summarised as follows:

1. The need to permit additional reserves to meet OMWCS policy M2.
2. Over half of permitted reserves are at a single site and NPPF paragraph 145 (now 207) requires that MPAs should ensure that large landbanks are not bound up in very few sites.
3. Most other permitted sites would be worked out within a shorter period than the 7 year minimum landbank resulting in a fall in production capacity in coming years and inability to maintain the Local Aggregate Assessment (LAA) requirement through the minimum landbank period.
4. Some quarries sometimes produce mineral below anticipated levels, so it might be necessary to have permissions equating to a higher total production capacity.
5. There is a need for the additional capacity to be located in southern Oxfordshire to comply with the locational split of production capacity identified through OMWCS policies M3 and M5.

6.3. CH&BPC does not consider any of these matters are of sufficient weight as to outweigh the harm that would be caused to the Green Belt by the proposed development for the reasons given below.

The need to permit additional reserves

6.4. According to the Council's most recent LAA (December 2017) at the end of 2016 the permitted sand and gravel reserves in Oxfordshire were 11.383 mt. This equates to a landbank of 11.2 years. Even accounting for another year of production and assuming that this was at the LAA requirement rate of 1.015 mtpa - notwithstanding the LAA rate being some 70% higher than actual 10-year average sales - there would remain a landbank of 10.2 years. The landbank would therefore be at a level 45% higher than the minimum required for 7 years supply.

6.5. Moreover, in November 2017 permission for 2.5 mt reserves at Cholsey was resolved to be granted, which will increase the landbank still further.

[23] See paragraphs 115 - 122 of Planning and Regulation Committee report of 27 November 2017

6.6. Table 2 below provides an estimation of the current reserves in sand and gravel quarries in Oxfordshire and shows that the likely level of current permitted reserves as at July 2018 probably amounts to about 15 mt, or a supply of 14.8 years (at the LAA requirement rate).

Table 2: Current Permitted Sand and Gravel Reserves

Site	Operator	Reserves at July 2018	Annual production capacity
North Oxon			
Cassington	Hanson	[a]380,000	180,000
Finmere	Opes Industries	[b]490,000	106,000
Gill Mill, Ducklington	Smiths of Bletchington	6,200,000	325,000
Stonehenge Farm, Stanton Harcourt	Hanson	1,550,000	200,000
Total		**8,620,000**	
South Oxon			
Moorend Farm	David Einig	[c]20,000	n/a
Sutton Courtenay	Hanson	[d]500,000	250,000
Sutton Wick	Curtis	200,000	75,000
Thrupp Lane, Radley	Tuckwells	925,000	75,000
Wicklesham, Faringdon	Grundons	553,000	60,000
Caversham	Lafarge	1,680,000	155,000
Cholsey	Grundons	2,500,000	140,000
Total		**6,378,000**	
Grand Total		**14,998,000**	

[a] Source = application no.: MW.0158/15
[b] Source = application no.: MW.0122/10
[c] Source = application no.: MW.0101/12
[d] Source = application no.: MW.0150/13 granted June 2018

6.7. The figures in Table 2 are taken from the 2017 LAA where given, otherwise the source is provided in the footnotes to the table. Where applicable an adjustment has been made to allow for production from a site since the date of the original reserves figure so that the reserves represent the likely current position. The following sense check of the figures given in the table demonstrates that they are robust. If the reserves for the following sites (that are not included in the LAA landbank) are removed:

- Thrupp Lane (cannot be worked until new conditions have been approved);
- Sutton Courtenay (very recent permission); and
- Cholsey (permission has not yet been formally granted)

the grand total reduces to 11.073 mt, which is similar to the estimation of the current landbank level identified at paragraph 6.4 above, when adjusted in line with the annual average sales figure (of about 0.595 mtpa) rather than the LAA requirement of 1.015 mtpa.

6.8. There is therefore already more than sufficient supply and no pressing need to permit additional reserves, so the requirement for new reserves should be given little weight.

Ensuring large landbanks bound up in very few sites do not stifle competition

6.8. The site, which the Council refers to as having over half the permitted reserves, is Gill Mill at Ducklington. According to footnote 27 in the OMWCS the site had a 7.8 mt reserve at March 2013. Assuming the average rate of working of 325,000 tpa (also given in the footnote), although an output of up to 400,000 tpa is possible[24], this reserve would now be in the region of 6.2 mt (as shown in Table 2). Given that recent permissions for new reserves have significantly enhanced the overall level of permitted reserves, it is no longer the case that Gill Mill has more than half the permitted reserves.

6.9. Moreover, the purpose of the NPPF advice relied upon is actually concerned with preventing a monopoly of supply, and as Table 2 also demonstrates, this is far from the case in Oxfordshire. Therefore it cannot be said there are large landbanks bound up in very few sites to stifle competition and this issue should not be given any weight.

Maintenance of the landbank and production capacity

6.10. The Council's third consideration, that most other sites are expected to be worked out before the end of the 7 year minimum period, is also not supported by the evidence, as demonstrated by Table 3 below. Only Sutton Courtenay – assuming no further extensions are permitted to it – would certainly be worked out. If Cassington and Finmere commenced working in 2019 they could also be worked out, but there is no certainty that that is the case. Both sites may well not start for some time yet, and so are quite likely to continue to have available reserves into the current landbank period.

6.11. The Council's claim, that there would be an inability to maintain the LAA requirement throughout the 7 year land bank period, is not substantiated. There would continue to be a steady and adequate supply of aggregate and the Council's argument that there is a requirement to ensure maintenance of the LAA rate throughout the minimum landbank period is of negligible value in weighing against the harm that this proposed development would have on the Green Belt.

[24] See paragraph 116 of Planning and Regulation Committee report of 27 November 2017

Table 3: Annual Production Capacity of Permitted Reserves over the Landbank Period

	Annual Production Capacity (millions of tonnes)						
Site	2019	2020	2021	2022	2023	2024	2025
North Oxon							
Cassington	0.180	0.180	0.020				
Finmere	0.106	0.106	0.106	0.106	0.66		
Gill Mill, Ducklington*	0.325	0.325	0.325	0.325	0.325	0.325	0.325
Stonehenge Farm, Stanton Harcourt	0.200	0.200	0.200	0.200	0.200	0.200	0.200
Total:	**0.811 - 0.886**	**0.811 - 0.886**	**0.651 - 0.726**	**0.631 - 0.706**	**0.591 - 0.666**	**0.525 - 0.600**	***0.525 - 0.600**
South Oxon							
Sutton Courtenay	0.250	0.250					
Sutton Wick /Thrupp Lane, Radley**	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Wicklesham, Faringdon	0.060	0.060	0.060	0.060	0.060	0.060	0.060
Caversham	0.155	0.155	0.155	0.155	0.155	0.155	0.155
Cholsey***		0.140	0.140	0.140	0.140	0.140	0.140
Total:	**0.540**	**0.680**	**0.430**	**0.430**	**0.430**	**0.430**	**0.430**
Grand Total:	**1.351 - 1.426**	**1.491 - 1.566**	**1.081 - 1.156**	**1.061 - 1.136**	**1.021 - 1.096**	**0.955 - 1.030**	**0.955 - 1.030**

* Output for Gill Mill at full capacity would increase to 400,000 tpa.
** Thrupp Lane to come on stream after Sutton Wick (paragraph 5.11 of LAA Update 2015).
*** Likely that the quarry is not into full production before 2020 due to pre-development works.

Enabling a higher total production capacity to compensate for quarries producing below anticipated levels

6.12. This justification advanced by the Council is based on one example of Gill Mill being closed due to flooding in early 2014. It is submitted that this one off occurrence due to an extreme event that lasted only a relatively short period (of no more than a few months) does not provide the level of benefit that warrants opening up a new quarry and the harm to the Green Belt that would ensue. It is normal practice for sand and gravel quarries located in the floodplain to make provision for flood events, for example by increasing stock and surge piles before and during winter months to ensure that production capacity is maintained and sales do not drop.

6.13. Notably the LAA requirement figure is also to be kept under review. Paragraphs 5.8 – 5.9 of the 2017 LAA acknowledge that the 10-year sales average has fallen and that sales fell in 2016. As identified at paragraph 6.4 above it is currently at a level some 70% higher than actual sales (and 48% higher than sales of the last 3 years). Table 3.1 of the LAA also shows that the last time sales were anywhere close to the LAA requirement figure were in 2005/2006 – some 12-13 years ago. Should the LAA rate be reduced in future years to reflect the ongoing trend for lower sales of land won material then current total production capacity would present over provision of quarries in Oxfordshire.

6.14. A key indicator reinforcing the lack of need for more supply is that Stonehenge Farm, a new quarry granted permission in 2010, some 7 years ago when the landbank was said to be only 3 years and new supply was more urgently required than now, is not operational.

6.15. To enable an even higher total production capacity than the current LAA requirement through opening up even more quarries when there is clearly substantially lower actual demand would be entirely unsustainable, likely lead to a glut in provision, and so detrimentally affect the local aggregates business as a whole, prolonging the working out and restoration of all existing sites, and rather than a benefit would be a further harm compounding the harm from this site to the Green Belt for many more years than stated in the application.

Facilitating the locational split of quarries in Oxfordshire

6.16. This matter identified by the Council is the same as the applicant's first vsc. OMWCS policy M3 seeks (amongst other things) to provide for the allocation of (new) sand and gravel working sites with 25% (by tonnage) in northern Oxfordshire and 75% in southern Oxfordshire, in order to achieve an approximately equal split between northern and southern Oxfordshire by 2031. The intended purpose of this policy is to enable a distribution of sand and gravel production that more closely reflects the distribution of demand for aggregate within the county.

6.17. From Table 3 above it can be seen that the split is (in light of the new permission at Cholsey) already 58% to northern Oxfordshire and 42% to southern Oxfordshire (by 2025), assuming the higher rate of production from Gill Mill. At the rate for Gill Mill used in the OMWCS the split would be 55% and 45% respectively. This can be described as an approximately equal split. In addition southern Oxfordshire would have more widespread impact with four quarries as opposed to only two in northern Oxfordshire.

6.18. Alternatively, if planning permission were to be granted for the application site the remaining plan provision requirement would have been fulfilled with 100% (not 75%) being located in southern Oxfordshire, which would not be in compliance with OMWCS policy M3. Should the LAA rate change over the plan period to a lower rate to more closely reflect recent sales rates, the flexibility that is purported to have been built into the strategy for mineral working to allow for changes in demand for locally supplied aggregates (see paragraph 4.20 of the OMWCS) would not have been delivered.

6.19. Notwithstanding these concerns about balance of supply, it is also the case that in respect of the objective of minimising the distance that minerals need to be transported by road, this application site is not well located to provide an effective locally sourced construction material to the county's main growth areas in the south. The key locations for development within southern Oxfordshire area are identified as Didcot and Wantage & Grove.[25] Although the application proposal might be relatively close to these locations "as the crow flies", it would not be close in terms of road miles travelled and/or environmentally suitable routes.

6.20. Driving through Abingdon the distance would be about 17km to Didcot and 24km to Wantage & Grove. The proposed quarry would therefore not reduce travel to only very short distances in respect of Didcot as claimed at paragraph 6.13 of the planning statement. Notably the same paragraph does not refer to the other growth area of Wantage & Grove, but to Wallingford. Yet Wallingford has not been identified in any of the development plans as an area of strategic growth.

6.21. Abingdon however has an AQMA and any HGV routing via the town needs to be restricted, as set out in the applicant's TA and ES Chapter 12 Dust and Air Quality to avoid further harm to air quality. All other alternative routes to the main growth areas of Didcot and Wantage & Grove would require substantially more road miles than the direct route via Abingdon, including routing via Oxford, and would be substantially further than other mineral areas under consideration in both southern Oxfordshire and northern Oxfordshire.

6.22. The application proposal however is not aimed principally to supply the southern Oxfordshire market, when it is confirmed[26] that: 50% of the proposed vehicle movements will travel north and 10% west beyond the A34 with only 20% travelling southwards towards the strategic growth area in southern Oxfordshire (via the A34), and an equal amount (20%) travelling southwards towards Wallingford via the A4074. Given that at most 40% of the mineral is destined for southern Oxfordshire overall, it is very clear that the application site would not meet the balance of supply intended to be achieved through the minerals strategy.

6.23. There are other sites located within the southern Oxfordshire strategic resource areas for sand and gravel provision to provide for the local need, when and if it arises, which are outside the Green Belt. These potential sites in southern Oxfordshire have been identified through the OMWCS process, and with the exception of the Lower Radley sites, all of the others are closer to Wallingford[27], Didcot, Wantage & Grove[28].

6.24. These sites may also provide a better quality resource than that of the application site, which is 70% sand and contains no coarse grained gravel (or insignificant amounts), and is therefore not gravel rich and not able to meet the wide range of building applications local markets would be demanding. The yield per hectare of mineral is considerably lower than consented

[25] Paragraph 2.5 of the OMWCS
[26] See figure 1 of Appendix A to ES Chapter 8
[27] The distance from the Drayton St Leonard/Stadhampton site to Wallingford is about 12km, Warborough site 6km, Cholsey site 0.5km, compared with about 14km from the application site.
[28] Wallingford is 11km from Didcot

sites, and so requires more land to be opened up to get at the same quantity of mineral that would be produced from a smaller area at other quarries in Oxfordshire[29].

6.25. Given these factors that:

- the objective of OMWCS policy M3 has already been met;
- there are not likely to be any significant environmental savings through reducing vehicle movements as a result of the location of the appeal site; and
- there are other potential sites that may well be better located to achieve environmental benefits without giving rise to harm to the Green Belt.

little weight should be given to this matter.

Location of the site within a "strategic resource area"

6.24. As identified at paragraph 6.23 above there are a number of other potential sites within strategic resource areas that should the need arise could be developed without harming the Green Belt, and this is not a factor that should be given any weight.

Biodiversity and recreational gains

6.25. That the restoration of the site will deliver biodiversity and recreational gains is an outcome of the development and cannot be relied upon as a vsc. It is a potential benefit from the development through mitigation, not a vsc for the development. Moreover there are other reasons why this element of the proposed restoration would not amount to a vsc, as described below.

6.26. The proposed development includes the creation of new and restored semi-natural habitats which the applicant promotes as providing key biodiversity benefits that would offset any residual effects associated with the loss of hedgerows and other habitats as a result of the proposed quarrying operations[30]. Bachport previously commented on application MW.0039/16 in respect of the implications for nature conservation as a result of the proposed development, noting the adverse consequences of the loss of woodland and species rich hedgerow for existing habitats supported by the application site, including a diverse bat population, and highlighting the conflict between the potential for the restoration strategy to encourage large numbers of birds, and the need to prevent a bird hazard to air traffic from RAF Benson. It is considered that the need and methods proposed to be used to deter birds from the newly created habitats could result in a significant adverse impact to other existing birds that currently use the site and are therefore likely to have a detrimental impact on the existing nature conservation value of the site rather than the positive one described. [31]

[29] See Section 7 of May 2016 Bachport response for more detail.
[30] Paragraph 8.4 of ES Chapter 10 Biodiversity
[31] See: Sections 17 and 18 of May 2016 Bachport response;
Section 7 of March 2017 Bachport response;
Paragraphs 2.14 – 2.23 and Sections 3 and 7 of August 2017 Bachport response; and
Paragraphs 2.8 – 2.13 of November 2017 Bachport response

6.27. Bachport also previously commented in respect of the effects for recreational use of the site, raising strong objection to the proposed loss of an historic and highly scenic public footpath, the harm that would be caused to the enjoyment of diverted routes during working, and the inadequacy of the proposed replacement route(s).[32] Of key note, in addition to the fact that there would no longer be any direct access to the Thames Path as currently enjoyed, one of the (more circuitous) routes to the east around the large lake would be impassable at times of flood for some considerable length where it would run parallel to before linking in with the Thames Path. The photographs at Appendix 2 taken on 7 April 2018 illustrate this point.

6.28. Moreover, Bachport raised significant concern in response to application MW.0039/16 with regard to the proposed recreational use of the large lake and the harmful effects of that on the Green Belt. The proposals include a car park and the 1km long lake would be suitable for rowing (as was the original proposal at the time of the request for a scoping opinion in 2014), and for such activities there would inevitably be pressure for further enabling development, such as a clubhouse, boat park and further car parking areas, introducing an urbanisation of the site, harming openness and conflicting with the purposes of the Green Belt, both in terms of safeguarding the countryside from encroachment and protecting this landscape of historic importance. Bachport's previous comments also stressed that the SOLA resisted recreational development in this area - in order to preserve the river environment and landscape, and that the proposed recreational use of the site would conflict with the objectives of the emerging Burcot and Clifton Hampden Neighbourhood Plan, which includes this area.[33]

6.29. Whilst the proposed creation of new and restored semi-natural habitats may enhance the site to a degree (notwithstanding the loss of existing woodland and species-rich hedgerows), the proposed recreational use of the site would contribute to the harm caused by the proposed development and therefore this matter should be not be given anything more than limited weight.

Conclusion on very special circumstances

6.30. For the reasons given in section 5 the proposed development would amount to inappropriate development, which is by definition harmful to the Green Belt. The NPPF (paragraph 143) indicates that when considering a planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt and that very special circumstances will not exist unless the potential harm to the Green Belt, and any other harm, is clearly outweighed by other considerations. The harm to the Green Belt in the circumstances of this case would be considerable and there would be other significant harm, as expanded upon in other sections of this response, which would not be outweighed by the other considerations raised, whether they are considered individually or cumulatively.

[32] See: Section 16 of May 2016 Bachport response; and
Paragraphs 2.22 – 225 of March 2017 Bachport response;
[33] See: Paragraphs 18.10 – 18.15 of May 2016 Bachport response

7. HISTORIC ENVIRONMENT

7.1. In response to the consultations on application MW.0039/16 Bachport raised the concern that the evaluation of the impact on the setting to the Monument adjoining the site and others in the locality, as well as the Clifton Hampden conservation area and other local heritage assets has underplayed the detrimental effects of the proposed development on the local historic environment.[34] This viewpoint is reinforced in respect of the current application. Furthermore CH&BPC considers that there is clear justification to refuse the application as the development proposal would cause unacceptable harm to the significance of Fullamoor Farmhouse heritage asset, which is now a grade II listed building.

7.2. The NPPF requires (paragraph 193) 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 that 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.

7.3. NPPF paragraph 194 then clarifies that any harm to, or loss of, the significance of a designated heritage asset, which can be from its alteration or destruction, or from development within its setting, should require clear and convincing justification. This wording reflects the statutory duty in section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 that when considering whether to grant planning permission which affects a listed building or its setting, the authority shall have special regard to the desirability of preserving the building or its setting, or any feature of special architectural or historical interest which it possesses. Preserving or conserving means doing no harm.

7.4. The definition of "significance" (for heritage policy) in the NPPF Glossary confirms that it derives not only from a heritage asset's physical presence, but also from its setting. The National Planning Practice Guidance (NPPG) further explains that heritage assets may be affected by direct physical change or by change in their setting. Being able to properly asses the nature, extent and importance of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals. (ID: 18a-009-20140306).

7.5. The setting of a listed building is often an essential part of the building's character. The National Planning Policy Framework (NPPF) glossary defines the "setting of a heritage asset" as:

"The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral."

[34] See: Section 10 of May 2016 Bachport response;
Paragraph 2.5 of March 2017 Bachport response; and
Paragraph 2.15 of November 2017 Bachport response

7.6. The NPPG states that a thorough assessment of the impact on setting needs to take into account, and be proportionate to, the significant of the heritage asset under consideration and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it. Setting is the surroundings in which an asset is experienced, and may therefore be more extensive than its curtilage. All heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not. The extent and importance of setting is often expressed by reference to visual considerations. Although views of or from an asset will play an important part, the way in which we experience an asset in its setting is also influenced by other environmental factors such as noise, dust and vibration from other land uses in the vicinity, and by our understanding of the historic relationship between places. (ID: 18a-20140306)

7.7. A report has been conducted by Keevill Heritage ("the Keevill report"), a copy of which is at Appendix 3, in order to research the history of the farmhouse with a view to understanding the importance of the locality to the building's setting. The report has been validated by Historic England and added to the listing information held for the asset on the Historic England website. The report confirms that the location of the property, on a flat area of higher ground which then slopes markedly towards the River Thames, was chosen with great care, and that the landscape provides an important historical setting for the farmhouse, providing the framework for exceptionally fine vistas from and to the building in a wide arc on its south side. The report finds that this setting to the south is vital for a proper understanding and appreciation of the farmhouse as well as being important in its own right. Of particular interest in the findings is that the positioning of Grasshill Covert and Fullamoor Plantation were planned to frame views of the local landscape, but also to block views of the farmhouse from Long Wittenham and Appleford, serving to make the immediate landscape around the farmhouse into a private one.

7.8. By irreversibly removing the current farmland outlook that is key to the setting of Fullamoor Farmhouse, the quarry proposal would be development that would be entirely inappropriate and unsympathetic to the significance of this designated heritage asset, and would denigrate the interest for which the building is listed and the contribution it makes to the local countryside. CH&BPC considers that this amounts to a case where substantial harm would be caused by a development proposal to the significance of the heritage asset.

7.9. Under the heading "How to assess if there is substantial harm?", the NPPG confirms (ID: 18a-017-2040306) the NPPF advice that significance derives not only from a heritage asset's physical presence, but also from its setting and that harm may arise from works to the asset or from development within its setting. In such a case as this where substantial harm would be caused to the significance of the designated heritage asset, paragraph 195 of the NPPF is clear that planning permission should be refused unless it can be demonstrated that the substantial harm is necessary to achieve substantial public benefits that outweigh the harm.

7.10. Given the clear evidential basis of the application site area directly affecting Fullamoor Farmhouse, and the nature of the proposal being entirely discordant to this farmland setting of the farmhouse it is undeniable that the proposal would harm and not preserve the significance of the asset. Even if it should be considered, that the harm is "less than substantial", paragraph 196 of the NPPF states that such harm should be weighed against the public benefits of the proposal. This advice, however, needs to be read in conjunction with the NPPF paragraph 193, which requires that when considering the impact of a proposal on the significance of a designated heritage asset great weight should be given to the asset's conservation, reflecting the statutory duty in section 66 (1) of the Planning and Listed Building Act, and as NPPF paragraph 194 confirms any harm to the significance of a designated heritage asset - including from development within its setting – requires clear and convincing justification.

7.11. The Court of Appeal case Barnwell Manor Wind Energy Ltd v East Northamptonshire DC & Others [2014] EWCA Civ 137 confirms that in enacting section 66 (1), Parliament intended that the desirability of preserving the settings of listed buildings should not simply be given careful consideration but "considerable importance and weight" when carrying out the planning balance. There are a further three court cases, which confirm and illustrate the need to comply with the obligation imposed by section 66(1) and not fall into the trap of simply carrying out a balancing exercise in accordance with paragraph 134 (now 196) of the NPPF [35]. This gives rise to a strong statutory presumption against granting planning permission for development which would cause harm to the settings of listed buildings. Even where the harm is deemed to be "less than substantial" the overarching statutory duty of section 66 (1) cannot be ignored; the need to preserve heritage assets (including their settings) must demonstrably be given "considerable importance and weight", i.e. more weight than if it were simply a factor to be taken into account with all other material considerations; and clear and convincing justification for any harm to significance of a heritage asset however slight is required.

7.12. There are no public benefits – substantial or otherwise, that would justify allowing (or even to weigh against) the harm to the heritage asset for the reasons explained at Section 6 above.

7.13. Paragraph 190 of the NPPF requires the decision-maker to "take account of the available evidence and necessary expertise" when considering the likely impact on a heritage asset. The evidence that the applicant has provided is, however, far from robust and should not be relied upon for a variety of reasons, as explained in the following paragraphs.

7.14. Previously with application MW.0039/16 the applicant's evidence confirmed that the application site forms an integral part of the setting to the farmhouse. Paragraphs 5.88 and 5.89 of ES Chapter 4 Archaeology and Cultural Heritage of December 2016 stated that the farmhouse "was aligned to take in the aspect to the south", so that it "would have looked out over its landholding to the south which included the land now taken up by the proposed site"

[35] R (on the application of) Forge Field Society & Others v Sevenoaks DC & Interested Parties [2014] EWHC 1985 (Admin); R (on the application of Gillian Hughes) v South Lakeland DC & Interested Parties [2014] EWHC 3979 (Admin; and Jane Mordue v Secretary of State for communities and Local Government and Others [2015] EWHC 539 (Admin).

and that the "southern boundary is more open affording views to the south. Indeed from within the site there are views across to Fullamoor Farm which is visible on the slightly higher ground to the north". These comments are no longer apparent in the updated ES Chapter 4.

7.15. Furthermore previously the assessment as to the degree of harm ranged from moderate to minor during operation and negligible/neutral 15 years post restoration[36]. Now that the building has been listed and therefore has greater importance and is more sensitive to change within its surrounding environment, (according to paragraph 5.51 of the updated ES Chapter 4) the assessment has nevertheless and unexpectedly changed to only minor temporary adverse reducing to negligible/neutral 15 years post restoration[37].

7.16. It would seem that the contribution that the setting makes to the significance of the heritage asset of Fullamoor Farmhouse (in order to determine whether development within it would give rise to harm) has not been properly assessed, despite the requirement to do so (NPPF paragraph 189). This is apparent from various omissions, comments and/or findings in the updated ES Chapter 4.

7.17. Paragraph 6.47 of the updated ES Chapter 4 simply states that the farmhouse derives "some of its significance from its rural agricultural setting", which "includes the long views to and from the farmland to the south (the area of the site) as this formed part of the farm's original landholding when it was established."

7.18. Elsewhere, ES Chapter 4 then also contradicts or reduces the value of this setting to the heritage asset, for example:

1. Paragraph 5.72 states that because the character of the property is now domestic in nature its rural setting can be considered to make only a limited contribution to its significance. Conversely the Keevill report, in acknowledging that the farmhouse no longer functions as the managerial centre of the agricultural land, concludes that it clearly sits within it, literally and conceptually.
2. Paragraph 6.48 draws the incorrect conclusions, (as said to be sourced from the applicant's LVIA), that the northern edge of the site is already largely screened in views from the farmhouse and that bunds and additional planting will enhance this to provide all-year round screening. These conclusions have shown to be erroneous in previous Bachport comments[38], and are in any event inconsistent with the LVIA's findings on the (residual) visual effects of the workings, which are assessed as major/moderate adverse from Fullamoor Farmhouse (see Table 1 above).
3. Paragraph 5.26 makes the somewhat surprising finding that a "contemporary map shows the area of the site to the south of Fullamoor Farm as 'enclosed' fields, the boundaries of which bear little resemblance to those surviving today". This is entirely at odds with the

[36] Paragraphs 6.51 and 6.52 of December ES Chapter 4
[37] Paragraph 6.49 and 6.50 of Updated ES Chapter 4
[38] See: paragraphs 9.3 and 10.7 of May 2016 Bachport response;
paragraphs 2.2 – 2.5 of March 2017 Bachport response
paragraphs 2.29 - 2.30 of August 2017 Bachport response;
paragraph 2.15 of November 2017 Bachport response;

conclusions of the Keevill report, which found that the "1797 map of Oxfordshire shows the field boundaries to the south of Fullamoor Farm very largely as they survive today".

4. Paragraph 5.28 also concludes that no real trace of the medieval open field system survives in the modern landscape. Yet the Keevill report found traces of ridge and furrow still surviving – as shown in the photograph Figure 16 of the report.

7.19. This failure to understand properly the importance of the setting to the heritage asset is further compounded by a lack of appreciation of the full effect of the proposals upon that asset. This is clearly illustrated by a number of comments in the updated ES Chapter 4, including:

1. paragraph 5.23 states that the significance of the farmhouse, as informed by its setting, may be affected to some degree by the proposals (emphasis added). There is no acknowledgement that great weight must be attached to conservation of a designated heritage asset and that special regard must be had to preserving it and its setting.
2. Paragraph 4.13 advises that in this case the effects on the setting would be limited to the operational life of the site and would reduce over time and cease at the end of the restoration of the landscape. This overlooks the extensive loss of woodlands and historic field boundaries and the ongoing fundamental and irreversible loss of landscape character even upon restoration.
3. Paragraphs 6.48 and 6.49 state that bunds will screen the site and that during the operational lifetime of the quarry the operations would have no impact on the architectural and historic values of the Listed Building, which are the primary factors informing its significance. The bunds themselves (as well as silt ponds etc.) are matters which need to be considered in respect of their effect on the heritage asset, and the conclusion that there would be no impact from workings is misguided, as the setting to the heritage asset would plainly not be preserved.
4. Paragraph 6.48 states that the land converted into a lake and wetland will be screened by additional woodland planting (therefore implying avoidance of harm to the significance of the asset). However, this compounds the harm to the asset's setting, because the long views to and from the farmland to the south (which the updated ES Chapter acknowledges at paragraph 6.47 form part of the asset's setting and therefore value) would be lost in perpetuity.

7.20. Even so the applicant has identified that some harm would be caused to the building. The separate setting assessment report at Appendix 4A (paragraph 5.2.19) to updated ES Chapter 4 identifies it as "less than substantial", and therefore a clear and convincing case has to be made for setting aside the need to preserve the significance of the asset. This has, however, not been done, and the matter is more than a balancing act. There is a strong statutory presumption against granting planning permission for development, which would cause any harm to the settings of listed buildings. Planning permission should therefore be refused on the grounds that the development proposal would cause unacceptable harm to the significance of Fullamoor Farmhouse heritage asset.

8. OTHER MATTERS

8.1 Bachport previously also commented on application MW.0039/16 in respect of a number of other matters, including:

- The loss of best and most versatile agricultural land[39];
- Inadequate water management provision[40];
- Adverse impacts on health and quality of life from the environmental effects of working and transportation[41];
- Deficient consideration of alternative options and cumulative impact[42].

8.2 These comments are summarised in the paragraphs below and continue to apply to the current application.

The loss of best and most versatile agricultural land

8.3 The information provided by the applicant on the extent of grade 2 and 3a, classified as best and most versatile (BMV), agricultural land affected by the proposed development was materially revised following requests for further information and challenges to the reliability of the calculations and the method of assessment. The revised information nevertheless still underplayed the quantity of BMV land that would be lost, for the following reasons:

- Errors in the calculations caused by introducing land outside the extraction area into the assessment;
- The area to be restored to lowland meadow habitat surrounding the wildlife lake is said to have BMV quality, yet this land is not to be used for agriculture, as its primary purpose is lowland meadow habitat to ensure there is no net loss in biodiversity on site following restoration;
- Land with grade 2a and 3a soil samples in the south of the site has been discounted as BMV land, based on incorrect conclusions about the extent of floodzone 3 (FZ3) and flawed application of the relevant guidance about when BMV land within FZ3 should be downgraded; and
- The proposed flood compensation area in front of Warren Cottage is grade 2 and has not been included in the applicant's calculations on loss of BMV land.

8.4 As a consequence CH&BPC considers that about 61ha of BMV land would actually be affected by mineral extraction, as opposed to the applicant's figure of 44ha, and that about 38ha of BMV land would be lost, not just 15ha as the applicant suggests.

[39] See: Section 15 of May 2016 Bachport response;
Section 5 of March 2017 Bachport response;
Section 5 of August 2017 Bachport response

[40] See: Section 14 of May 2016 Bachport response;
Section 6 of March 2017 Bachport response;
Section 6 of August 2017 Bachport response; and
Section 3 of November 2017 Bachport response

[41] See: Paragraphs 12.8 – 12.10 and Section 13 of May 2016 Bachport response;
Section 4 of March 2017 Bachport response

[42] See: Sections 8 and 19 of May 2016 Bachport response;
Section 9 of March 2017 Bachport response

Inadequate water management provision

8.5 Advice was sought from expert hydrogeological and hydrological consultants on the information provided in the ES Chapters 2 and 3 on Hydrology and Hydrogeology and Flood Risk and they identified a number of serious concerns. These included:

- A sequential test that was not fit for purpose;
- A floodplain numerical model not capable of accurately predicting floodplain changes to the degree of accuracy claimed;
- The predicted increases in flow velocity shown by the applicant's hydraulic modelling causing:
  a. Serious risk of erosion and eventual loss of the land between the restored lake and river bank with consequential severance of the Thames Path;
  b. Substantial increase in flood hazard risk (i.e. drowning) around the excavations and restored lakes;
  c. Increased flood risk to the area
- A lack of evaluation of the cumulative effect of the proposed development in conjunction with the future Didcot-to-Culham Relief Road and River Thames Crossing;
- Insufficient information on surface water run-off management for storm waters;
- Inadequate assessment in relation to groundwater and the effects on:
  a. local water abstraction wells/boreholes;
  b. the Lower Greensand aquifer;
  c. the Scheduled Monument;
  d. and agricultural land productivity;
- Incomplete consideration of the effects for fluvial flooding, such as:
  a. No inclusion within the model of the floodplain south of the River Thames including the villages of Appleford and Long Wittenham;
  b. No consideration of silt lagoons in the floodplain representing a water quality issue and wider flood hazard;
  c. No assessment of erosion risk and sediment mobilisation from back fill materials likely to be more easily eroded than in-situ sands and gravels; and
  d. No detailed design of the 'high ridge separation bund' to demonstrate how it would be stable and maintain flood protection.

8.6 The properties at Clifton Hampden already suffer from flooding and therefore any variation in the current floodplain geometry is likely to have an effect on these properties. It is not a question of increased potential flood risk but actual flood risk. Many of the concerns previously raised on this matter have not been adequately addressed and there remains therefore significant uncertainty that the proposed development would not exacerbate risk to local residents at times of flood events.

Adverse impacts on health and quality of life from the environmental effects of working and transportation.

8.7 It is a recognised fact that minerals developments can have adverse local impacts, and safeguarding people's quality of life from these effects whether individually or cumulatively

should be an important consideration in determining whether a proposed form of development is acceptable.

8.8 The applicant's noise assessment was initially found to be defective, and further information was requested in relation to:

- background noise monitoring; and
- the nature and duration of temporary works and noise controls during those works.

8.9 The new noise measurements showed a significant difference in levels calling into doubt the robustness of the applicant's noise assessment. In addition the noise assessment did not take account of the following factors:

- the third octave band frequency composition of the noise generated by the plant to ensure that no unacceptable tonal or impulsive factors would be caused at the closest receptors;
- the consequences of the proposed very early morning traffic between 5.30 and 7.00 am;
- the intrusive effects of reversing beacons on mobile plant and haulage vehicles;
- the effects on residential properties in Long Wittenham closest to the extraction area;
- the effects of more HGV traffic on the A415 through Burcot; or
- noise impact associated with the proposed recreational use of the site upon restoration.

8.10 As a result of the new noise measurements, the scheme was changed to introduce a new 8 metre high noise bund to screen the Fullamoor properties from the noise effects of working. This would be in addition to the massive bunds already proposed on the eastern boundary - to attenuate noise impacts on Clifton Hampden village - and around the plant site. The sheer size and extent of the proposed bunds are beyond any normally found around other quarry sites in Oxfordshire and demonstrate that the topography of the site makes it difficult to mitigate noise emissions.

8.11 Bunds are also used to contain dust emissions, but there is a serious concern that they will not be effective for the properties nearest to the site, because lying some 8-9 metres above the workings a natural amphitheatre effect would be created accelerating the rising of dust emissions. Conversely the lack of bunds on the southern edge of the operating area - because bunding is not permitted in this area in order to continue to allow the river to flood - would increase dust (and noise) exposure to users of the Thames Path and residents of Appleford and Long Wittenham on the opposite banks of the river.

8.12 CH&BPC remains unsatisfied therefore that the proposed activities will not generate an unacceptable level of disturbance to local sensitive receptors.

Deficient consideration of alternative options and cumulative impact

8.13 The applicant's consideration of alternative options has clearly been focused on the applicant's own desire to establish a sand and gravel quarry in Oxfordshire, rather than whether the proposed site is the most environmentally acceptable option. The lack of a satisfactory sequential test has already been identified at paragraph 8.5 above. In addition there was no review of other potential sites that would not lead to the loss of BMV agricultural land, and no

consideration or comparing of the environmental effects of other potential mineral sites that have been identified through the OMWCS process. The question of alternative supply options was touched upon, but simply rehearsed misguided notions about the ability of recycled aggregate to replace virgin aggregate, in order to discredit this valuable source of alternative material.

8.14 The ES has only assessed the significance of effects on an issue-specific basis, and has not considered the potential for in-combination effects to occur to sensitive receptors, so the question of whether additional measures would be needed to reduce the potential in-combination impacts has not been addressed.

8.15 In addition the ES has not properly assessed the potential for environmental impacts to occur as a result of other planned and proposed projects within the vicinity of the application site, including for example:

- Expansion of Culham Science Centre
- Local housing proposals, including Berinsfield expansion;
- New Thames crossing and road link between Didcot and the Culham Science Centre; and
- A new solar farm on land northeast of the agricultural buildings at Fullamoor Farm.

8.16 CH&BPC considers therefore that there have been serious shortcomings in complying with the requirement to carry out a proper assessment of alternatives and to consider the cumulative effects of the proposal with other proposed or planned developments.

9. CONCLUSION

9.1. CH&BPC does not consider that the current application for a new quarry at Fullamoor would resolve any of the concerns that have been previously raised by Bachport and that the strong OBJECTION to the proposed development as set out above and in previous responses on application MW.0039/16 is sustained.

9.2. The reasons for objection are summarised below:

- The proposed development would give rise to severe highways impacts with unacceptable harm being caused to all road users and significant worsening of already excessive local congestion;
- The effects of the HGV traffic travelling to and from the quarry would be highly detrimental to local residential and environmental amenity;
- The proposed development would jeopardise the proposed new Thames crossing between Culham and Didcot Garden Town transport scheme and prejudice delivery of the Vale of White Horse and South Oxfordshire Local Plan strategies;
- The proposed development would be inappropriate in the Green Belt, and there are no very special circumstance that outweigh the harm to the Green Belt, and any other harm;
- The proposed development would have significantly detrimental landscape and visual impacts;

- The proposed restoration objectives are contradictory, conflicting with purported nature conservation benefits; and would be contrary to the development priorities of the Burcot and Clifton Hampden Neighbourhood Plan;
- The development proposal would be damaging to enjoyment of the local rights of way network;
- The proposed development would be harmful to the local historic environment;
- The proposed development would lead to significant loss of BMV land;
- The submitted proposal does not demonstrate that the water management systems would not have any adverse effects on the water environment and flood risk;
- The proposed activities are likely to generate an unacceptable level of disturbance to local sensitive receptors; and
- There has been a failure to carry out a proper assessment of alternatives and to consider the cumulative effects of the proposal with other proposed or planned developments.

9.3. The County Council is urged to stand by its previous decision and to refuse planning permission for application no. MW.0074/18.

APPENDIX 1

PHOTOGRAPHS OF QUEUING TRAFFIC ON THE A415

Photo 1
Taken at Culham Science Centre entrance looking east towards Clifton Hampden village
Time: 5.16pm 4 July 2018
Shows 1.3+ km of queuing traffic to the traffic lights

Photo 2
Taken at Culham Science Centre looking west towards Abingdon.
Time: 5.17pm 4 July 2018
Shows 1.3+ km of queuing traffic to the traffic lights at Clifton Hampden in conjunction with Photo 1

Photo 3
Taken at Culham Science Centre looking east towards Clifton Hampden village
Time: 4.20pm 20 November 2017

Photo 4
Taken from a car in the queue at the location of the proposed quarry access looking east towards Clifton Hampden village
Time: 8.39am 20 March 2018 (the day of the applicant's road survey)

Photo 5
Taken from a car in the queue at the Clifton Hampden traffic lights looking east
Time: 8.55am 20 March 2018 (the day of the applicant's road survey – the surveyor can be seen in high vis yellow clothing by the speed limit sign c.250m from the junction)

Photo 6
Taken at the Clifton Hampden junction looking west at traffic arriving from the direction of the quarry site
Time: Between 7.30 – 9.00am 28 April 2016 (day of Bachport traffic survey)

Photo 7
Taken at the Clifton Hampden junction looking west at traffic arriving from the direction of the quarry site
Time: Between 7.30 – 9.00am 28 April 2016 (day of Bachport traffic survey)

Photo 8
Taken at the Clifton Hampden junction looking west at traffic arriving from the direction of the quarry site
Time: Between 7.30 – 9.00am 28 April 2016 (day of Bachport traffic survey)

Photo 9
Taken at the approach to the Clifton Hampden lights looking east showing narrow lanes
Time: 5.55pm 21 December 2015

Photo 10
Taken at the Clifton Hampden lights looking east showing a sand and gravel tipper lorry straddling the narrow lanes
Time: Late morning 10 April 2016

APPENDIX 2

PHOTOGRAPHS OF FLOODED DIVERTED FOOTPATH ROUTE

Photo Locations of Flooded Route of Proposed Diverted Footpath

Photo Location

Direction of Photo

Photo 1

Photo 2

Photo 3

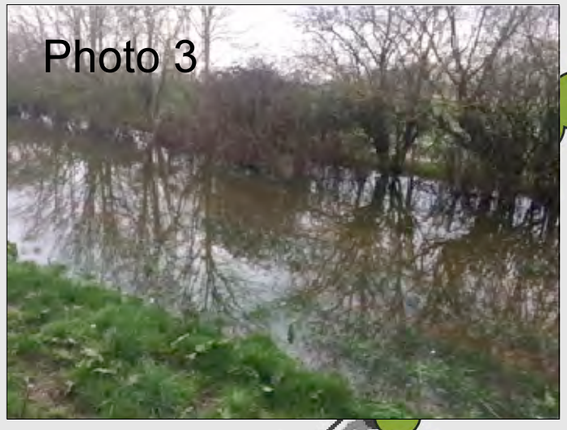

Photo 4

Photo 5

Photo 6

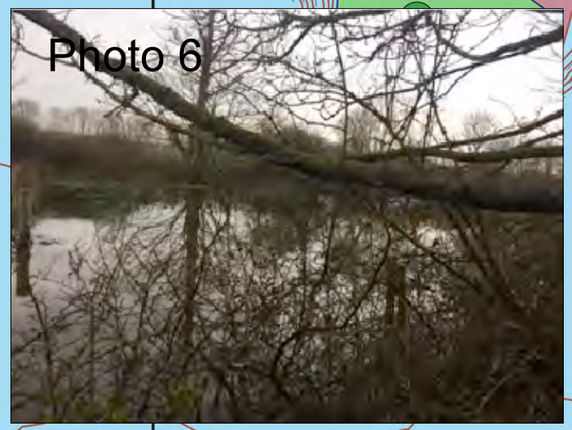

Photo 7

1 2 3 4 5 6 7

Issues

Clifton Cut

Path

Weir

APPENDIX 3

KEEVILL HERITAGE REPORT ON THE SETTING OF FULLAMOOR FARMHOUSE

Fullamoor Farm, Clifton Hampden, Oxfordshire

The setting of the Grade II listed farmhouse

National Grid Reference SU 53355 95099 (for the farmhouse)

Figure 1: Fullamoor Farmhouse seen from the south

Graham D Keevill
Keevill Heritage Ltd
For Ian and Jaqi Mason
March 2018

Fullamoor Farm, Clifton Hampden, Oxfordshire: The setting of the Grade II listed farmhouse

Contents

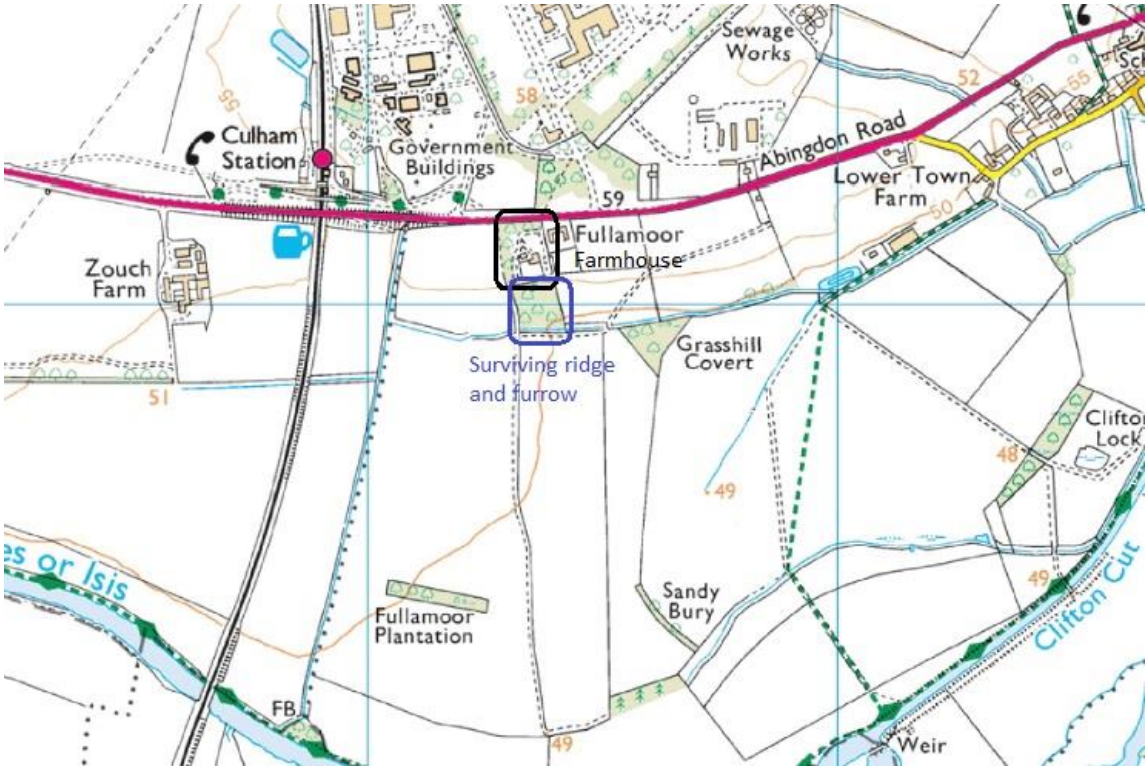

Figure 2: The location of Fullamoor Farmhouse, to the south of the A415 Abingdon Road. Culham Science Centre (developed within a World War II air base) lies to the north of the road and east of the railway line. Ordnance Survey data Crown Copyright 2018. All rights reserved. Licence number 100051221.

Graham Keevill is a senior heritage professional with more than 35 years of experience in the assessment, analysis and protection of the historic environment. He has been a full Member of the Chartered Institute for Archaeologists since 1985, and was elected as a Fellow of the Society of Antiquaries in March 2018. He works regularly with (often for) Historic England, and is the Cathedral Archaeologist for Rochester, Salisbury, Christ Church Oxford, and Blackburn; at each of these he provides a full range of advice on archaeology, historic buildings, landscape issues, and the setting of all of these (individually and/or in combination). He also carries out commissioned work for English Heritage, Historic Royal Palaces and the National Trust, among many other clients in the public, church and private sectors. His consultancy practice, Keevill Heritage Ltd, is based in Didcot, Oxfordshire.

Executive summary

The historic character of a place is the group of qualities derived from its past uses that make it distinctive. This report studies the inter-relationship between Fullamoor Farmhouse (a Grade II listed building) and its surrounding landscape to draw conclusions on the importance of the locality to the building's setting. The report is designed to assist decision makers, applicants and other interested parties, with regard to the statutory obligation to have special regard to the desirability of preserving listed buildings and their settings, in accordance with the good practice advice provided by Historic England.

The report uses a combination of archaeological and historical evidence, along with aerial photographs dating from the 1930's to the present day, to build up a picture of the long history of land use in the area. This long historical picture shows that the landscape surrounding the farmhouse has developed in distinct stages over several millennia and has rarely been a static entity. This is a dynamic process which continues to the present day.

The landscape provides an important historical setting for the farmhouse, and provides the framework for exceptionally fine vistas from and to the building in a wide arc on its south side. The report concludes that this setting to the south is particularly vital for a proper understanding and appreciation of the Grade II listed farmhouse as well as being important in its own right. This landscape is a fragile resource, and is the subject of several development proposals which could cause irrevocable and irreversible harm to it, and which should continue to be be resisted to avoid similarly irreversible harm to the farmhouse's setting.

1 Introduction

Mr and Mrs Ian and Jaqi Mason are the owners of Fullamoor Farmhouse. The curtilage of the latter includes gardens, terraces and paddocks on all sides of the house. They have commissioned this report to provide an independent assessment of the historic development of historic and present landscape around the farmhouse (particularly to the sides and south front), as these are important features in the setting of the listed building. The report studies the inter-relationship between building and landscape, because the two are mutually important contributors to the visual quality and character of the other: the landscape and views are the setting for the farmhouse, which is in itself an important focal point in and feature of views. Research and assessment concentrated on the area immediately around the farmhouse and on its south side to the River Thames; this was the core of the historic farm, extending to c 368 acres. Warren Farm, immediately to the east and part of the historic Fullamoor estate until 1995, extended the estate by a further c 266 acres. Together these farms occupied virtually the whole area bounded by Clifton Hampden village to the east, Abingdon Road to the north, the railway embankment to the west, and the River Thames to the south. The estate also extended to the north of Abingdon Road, and this area has also been part of the report's remit. Figure 3 is taken from a mid-1980s sale brochure for the farm estate, and shows the extent of the Fullamoor and Warren Farm holdings.

Sources used in the study included the Heritage Gateway for archaeological information, while some past archaeological studies of the area related to proposed developments were accessed online via the county council's planning portal. The National Heritage List was accessed via the Historic England website for information about designated heritage assets. Historic maps were examined, principally the Ordnance Survey 25 inch and 6 inch map editions from the later 19th century onwards, and the Victoria County History provided an excellent historical summary of Clifton Hampden (accessed via

the British History website).[1] Historic aerial photographs at the Historic England Archive Centre in Swindon were an especially important component of the research, both for information on archaeological sites and the historic development of the farmland since World War II. All aerial photographs within a 1km radius of the farmhouse were examined. Some of the earliest examples are from the 1930s by Major George Allen: these specifically covered the area around Fullamoor Farm, partly because of the Bronze Age barrow cemetery at Fullamoor Plantation that he recognised and photographed. These images are available online via Ashmolean Museum's website.[2] Finally site visits were made in December 2017 to examine the surroundings of the farmhouse and assess views from it.

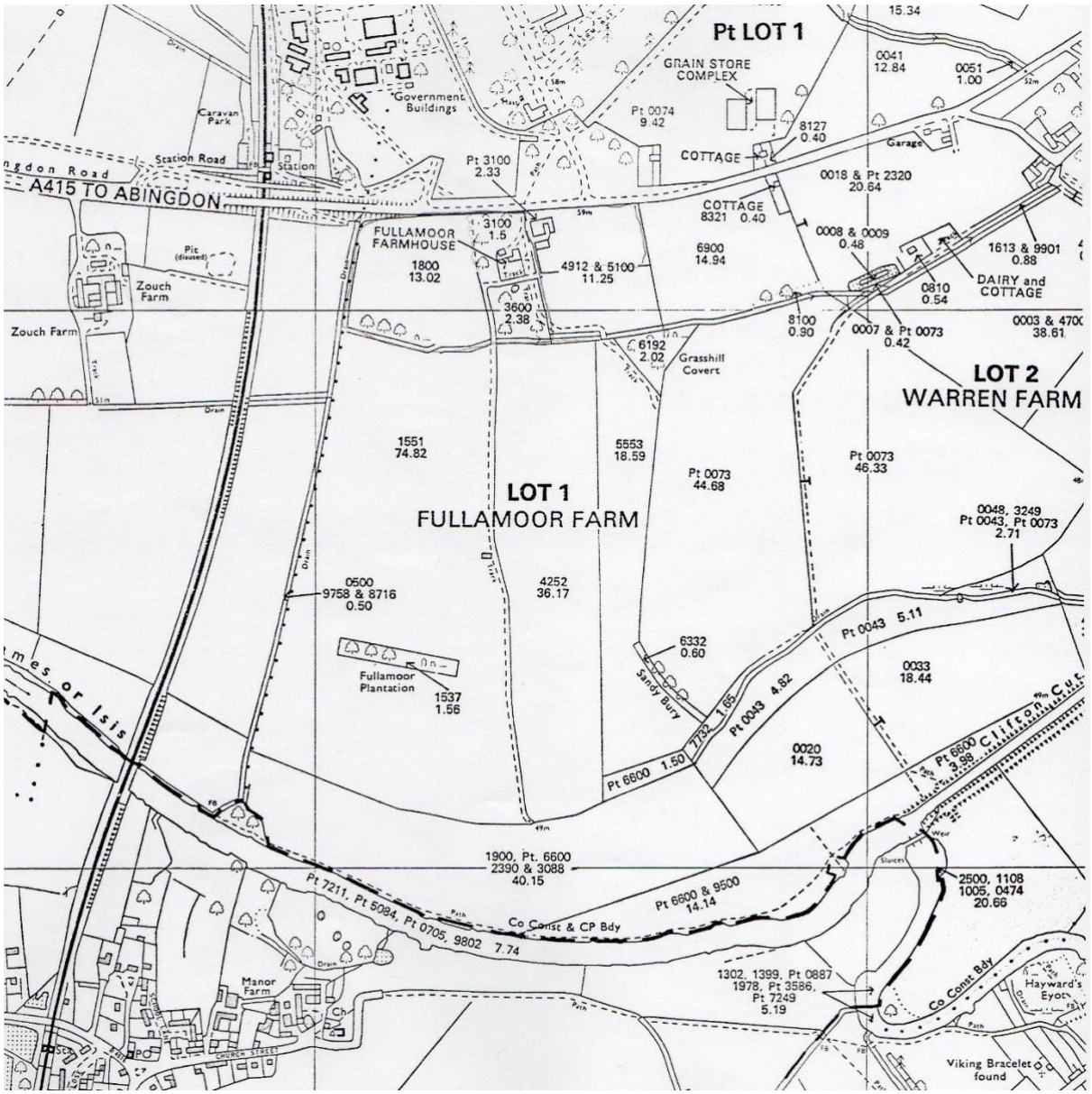

Figure 3: The extent of Fullamoor Farm (Lot 1) and Warren Farm (Lot 2) in the mid-1980s.

[1] http://www.british-history.ac.uk/vch/oxon/vol7/pp16-27
[2] http://britisharchaeology.ashmus.ox.ac.uk/aerial-photos/aerial-photos.html

1.1 The setting of and views from the farmhouse

The farmhouse enjoys a rural setting just beyond the west edge of Clifton Hampden village. The house is on a flat area running along the south side of the A415 Abingdon Road: the ground slopes markedly away towards the River Thames 1.2km to the south, giving dramatic and impressive views across a wide landscape arc from south-west to south-east (Figure 4). Assessment of features in the view suggests that this was no accident, and that the position of the farmhouse had been chosen with great care. The Didcot-Oxford railway line lies approximately 460m to the west of the house, on a raised embankment (see Figure 2). The railway is obviously a 19th-century insertion into the setting of the farmhouse. It is prominent in views to the west. Shelter belts and veteran trees largely screen views to the east, although there are good vistas in this direction from the terraced walk at the south end of the rear garden and the paddock beyond it.

Figure 4: Panoramic view looking south from the farmhouse, with Grasshill Covert in the background on the left and Fullamoor Plantation behind the trees just to the right of centre.

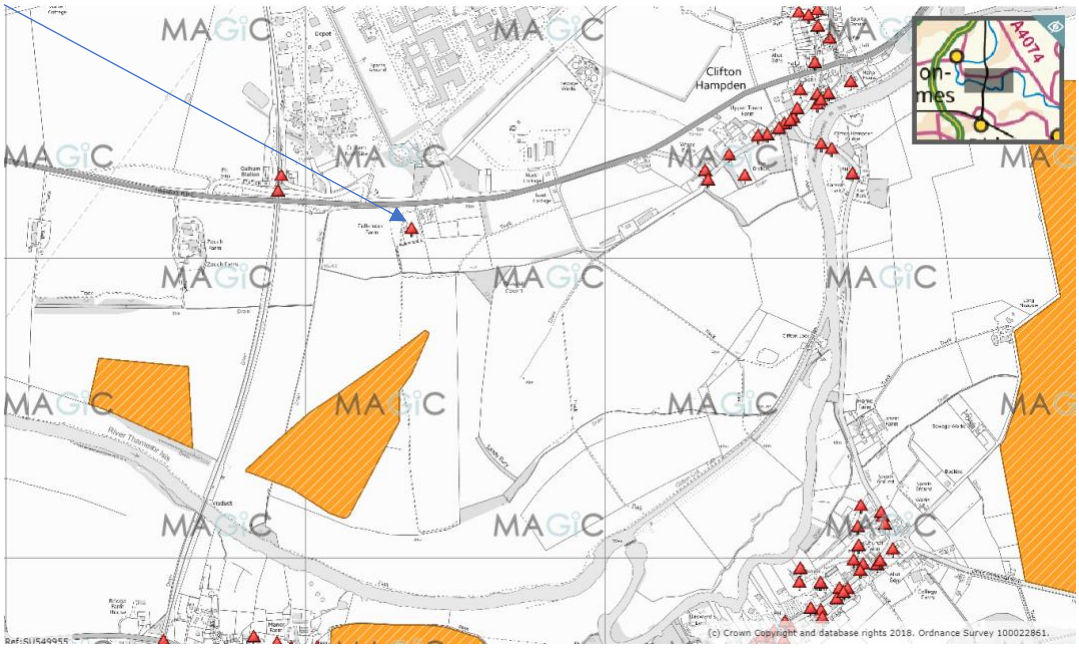

Figure 5: Extract from magic.gov.uk mapping showing the location of the listed farmhouse (arrowed) and the two Scheduled Monuments to its south and south-west.

Fullamoor Farm lies to the south of Culham Word War II aerodrome, now an international scientific research establishment, on the opposite side of the A415 Abingdon Road. A shelter belt of trees along the north edge of the road screens the science park from views within the house's curtilage. Geologically, the farmhouse sits on bedrock of the Gault Formation (Mudstone, formed in the Cretacious Period between 101-113 million years ago) overlain by drift deposits of the Summertown-Radley Sand and Gravel Member (Quaternerary, formed up to three million years ago). The bedrock changes to Lower Greensand (Sandstone) with overlying Northmoor Sand and Gravel where the land falls sharply away a short distance to the south of the house. The Gault Formation resumes further towards the Thames, again with the Northmoor Sand and Gravel above it. The river itself is also on the Gault, overlain by Alluvium (Clay, Silt, Sand and Gravel).

Fullamoor Farmhouse is a Grade II listed building (Figure 5; national heritage list number 1449039). It was designated on 16 November 2017. It is perhaps surprising that it had not been listed before this, as the house is clearly a historic building of considerable character and interest. It probably originated in the 17th century, as a timber-framed two-cell building. This was extended substantially in 1769 (there are dated graffiti on the south elevation of the east range), when brick was used to encase the old structure and build the new. It was extended again in the Victorian period. There is a detached former agricultural building immediately to the west of the house (converted to domestic use by the current owners in 2012), not directly included in the listing but within the curtilage and therefore covered by the designation. The list description is provided in Appendix 1. Figure 1 shows the front (south) elevation, while Figure 6 shows the north frontage.

Figure 6: The north frontage of the farmhouse, with the east wing to the left.

The surroundings of the farmhouse contain several other designated heritage assets (see Figure 5). There are numerous listed buildings in Clifton Hampden village, and two at Culham railway station. Two Scheduled Monuments (sites protected because of their archaeological importance) are near the farmhouse: a Bronze Age round barrow cemetery at Fullamoor Plantation c 375m south of the house (national heritage list number 1421606), and an extensive settlement site a short distance to

the west of this beyond the railway embankment (national heritage list number 1059789), c 900m south-west of the house.

2 The historic development of the landscape around the site

The development of the historic landscape can be adduced in a number of ways. Firstly, cropmarks visible on aerial photographs evidence provide clear and ample evidence for early settlement and ritual activity in the area. Major Allen's 1930s photographs of the Fullamoor Plantation barrow cemetery appear to have been the first recognition of this site. Remarkably, the barrows continue to show strongly on aerial images, showing that the ring ditches defining the barrows have survived through centuries of arable agriculture. Other cropmarks clearly represent settlement areas and associated trackways. These cannot be dated from the aerial photographs alone, but their form suggests a later prehistoric or Roman origin. Apart from the Scheduled site, examples are known to the south-east and east of the farmhouse, including in the fields immediately to the east of the farm's former barns. Examples of the aerial photographs are given in Figures 7 and 8.

Figure 7: Top - Allen's aerial photographs AA0620 and AA0213, taken on 26 June 1934 and 12 July 1933 respectively. AA0620 clearly shows round barrows and other features at Fullamoor Plantation (the farmhouse is just out of the picture at top left); the other photograph shows a rectangular enclosure in the centre of the field to the right of the barns (Allen suggested that this was a Roman feature), with ridge and furrow surviving in the next field to its south. The bottom image, from 2013, also shows the barrows near the Plantation (NMR 27794/1).

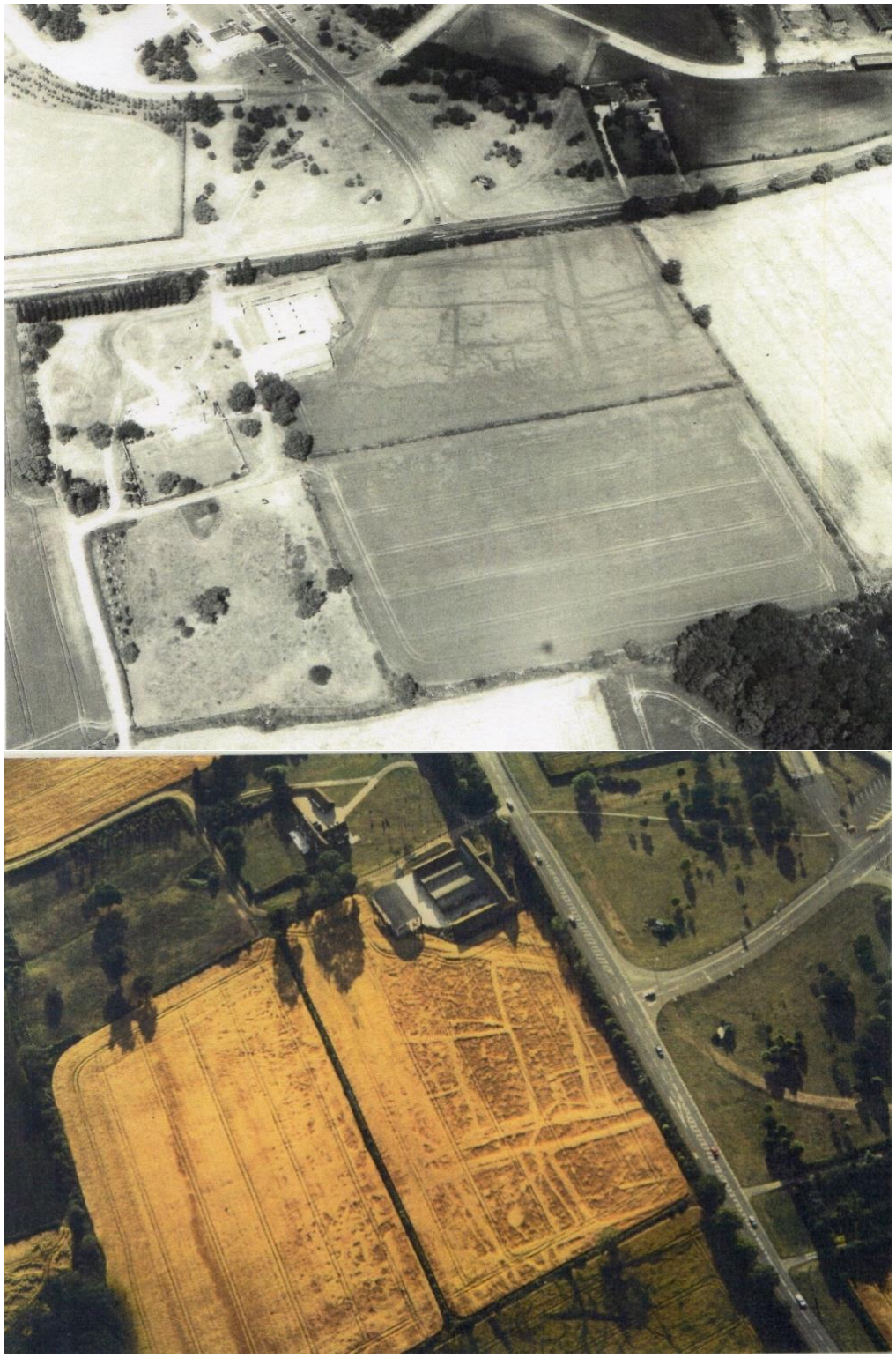

Figure 8: The same field next to the farm's old barns photographed by Allen in 1933 seen in 1989 (top) and 1990, with remarkably clear cropmarks. These continue south-west towards (probably into) the paddock south of the farmhouse, and clearly pre-dated the medieval ridge and furrow field system as well as the Abingdon Road. Images and NMR 4453/77 (top) and NMR 4608/20.

Other evidence for prehistoric and Roman activity comes from dedicated archaeological fieldwork. A watching brief during the excavation of a new Thames Water pipeline across Fullamoor Farm in 1991 revealed prehistoric features associated with the barrow cemetery near Fullamoor Plantation, as

well as a Roman track or causeway leading from there down towards the River Thames (Booth, Boyle and Keevill 1993, 106-115). Geophysical surveys and excavations by Thames Valley Archaeological Services in 2013 recorded extensive numerous archaeological features across a wide area of the land at Fullamoor/Warren Farm, some of it comprising dispersed evidence for general activity in the landscape, but with clear Iron Age/Roman enclosure/settlement concentrations immediately to the north of Clifton Cut (ie land parcels 0020 and 0033 on Figure 3; Dawson 2013 and Taylor 2013). It is clear that the landscape around Fullamoor Farm was under extensive use during the Bronze and Iron Ages, and into/through the Roman period. This included burial monuments, settlement areas, and agriculture.

The historic landscape comes into sharper focus in Anglo-Saxon, medieval and later periods. Fullamoor Farm lies within parish of Clifton Hampden, in the historic Hundred of Dorchester (VCH 1962). The parish boundary with Culham to the west does not seem to have changed since the latter was surveyed in AD940 (VCH 1962, Blair 1998). Clifton means 'farmstead on or near a cliff or bank' and is of Saxon origin (Mills, 1998). The Hampden element may have been added when Miles Hampden was Lord of the Manor in the 1530s, perhaps to distinguish the village from Clifton Ferry on the opposite side of the river, which was then in Berkshire. Clifton Hampden was not listed separately in the Domesday survey of 1086, being accounted as part of the Dorchester Hundred generally. The village and its lands were dominated by the open-field agricultural system throughout the medieval period, and well into the 18th century. Traces of ridge and furrow still survive (see below), linking the present landscape with its medieval past. The name *Fullyngemorefurlonge* is recorded in 1408 (Llewelyn 2000, 118, 281), and refers to the land immediately west of the current farm house. It suggests a very long pedigree for the farm.

The medieval open fields were inclosed by Robert Hucks in 1770, when four very large farms (in county terms) were established (VCH 1962). Fullamoor was one of these (the remaining three farm houses were all in the village itself; ibid), though the architectural evidence for its earlier origin perhaps suggests that the house (and thus probably the farm as a whole) already existed by the 1770s. The earliest county maps such as Saxton's of 1574 and Morden's of 1695 are too schematic and lacking in detail to be of use in assessing the historic development of the landscape, but Davis's 1797 map of Oxfordshire shows the field boundaries to the south of Fullamoor Farm very largely as they survive today. The field pattern therefore seems to belong to the Inclosure period, although it also seems to have incorporated elements of the medieval land use pattern. An area of ridge and furrow survives immediately to the south of the farmhouse, for example, and aerial photographs show that more existed until recent times (see Figure 7, and below). A wide strip of land along the north bank of the Thames was meadowland until the late 20th century, almost certainly having been in that usage during the medieval period. Figures 9-14 present map and aerial photographic evidence for the form of the historic landscape, with brief commentaries on each map.

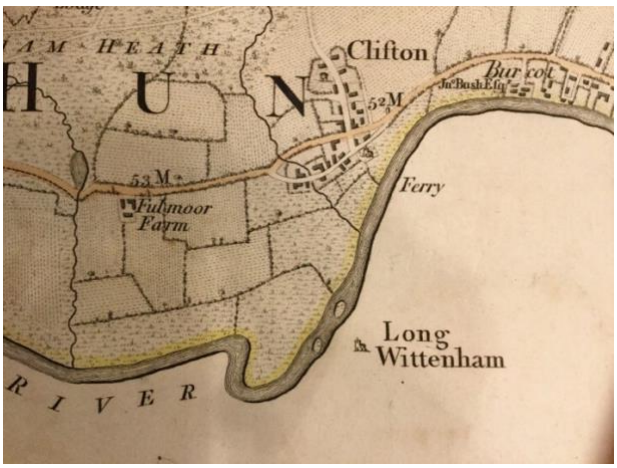

Figure 9: An extract from Richard Davis's 1797 county map of Oxfordshire showing the field pattern to the south of Fullamoor Farm. The division between meadow/pasture and arable is shown very clearly. It is interesting to note that Davis seems to show the direction of ploughing in the arable fields – this reflects the direction of the surviving and former ridge and furrow. It is possible that the field boundaries are remnants of the earlier system.

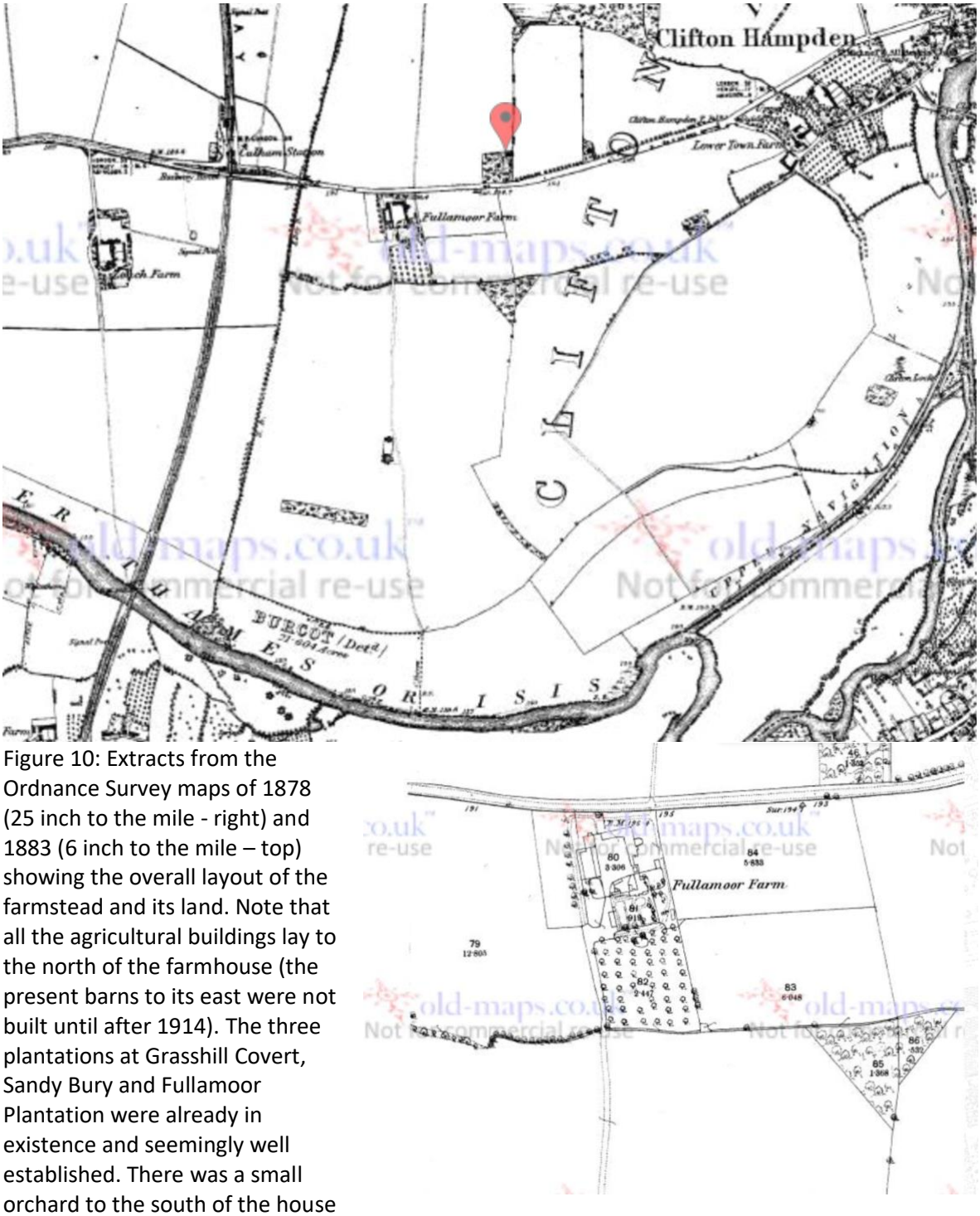

Figure 10: Extracts from the Ordnance Survey maps of 1878 (25 inch to the mile - right) and 1883 (6 inch to the mile – top) showing the overall layout of the farmstead and its land. Note that all the agricultural buildings lay to the north of the farmhouse (the present barns to its east were not built until after 1914). The three plantations at Grasshill Covert, Sandy Bury and Fullamoor Plantation were already in existence and seemingly well established. There was a small orchard to the south of the house (this field retains medieval ridge and furrow).

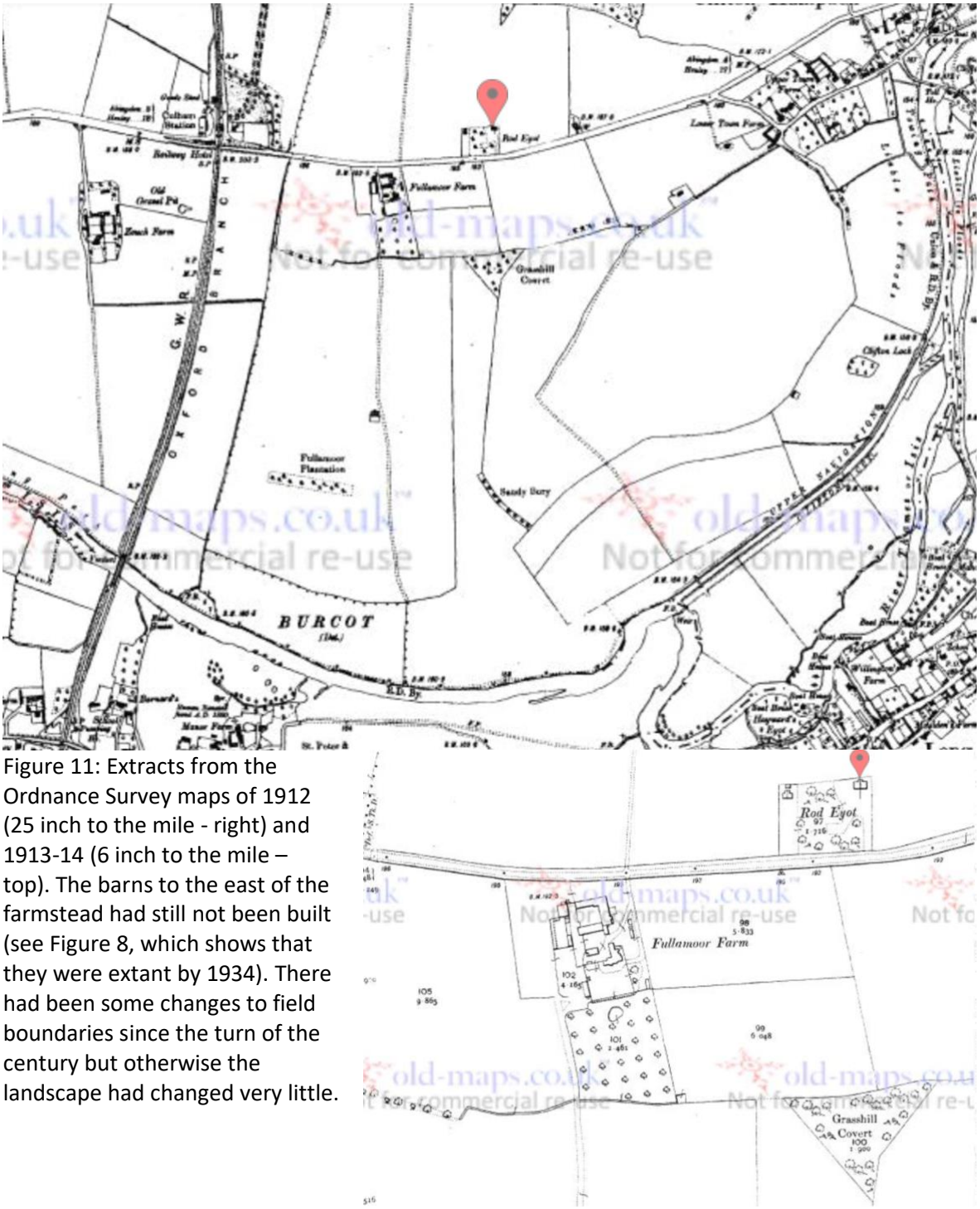

Figure 11: Extracts from the Ordnance Survey maps of 1912 (25 inch to the mile - right) and 1913-14 (6 inch to the mile – top). The barns to the east of the farmstead had still not been built (see Figure 8, which shows that they were extant by 1934). There had been some changes to field boundaries since the turn of the century but otherwise the landscape had changed very little.

Figure 12: US military aerial photograph taken on 13 December 1943, with construction of Culham airfield under way. Fullamoor Farm features prominently. There are hints in this and other aerial photographs of the time that some areas of former ridge and furrow fields had only recently come under deep ploughing. The land alongside the River Thames, however, was still very much under pasture as managed meadowland. It remained so until the 1970s, but the 1980s sale particulars (and contemporary aerial photographs) show that all but a narrow area (Weir Field – Pt 6600 & 9500 on Figure 3) had recently come under the plough – see also Figure 14. Photograph reference US/7PH 6822 7006.

Figure 13: Fullamoor Farm photographed on 12 February 1952. There had been no substantive post-war changes. Photograph reference RAF/540/673 15636 3344.

Figure 14: Aerial photographs taken in 1975 (left) and 1989 (right) with the Fullamoor Plantation barrow cemetery visible – but also demonstrating the change from meadow to arable cultivation between these dates. Photograph references 5394/29 823 97 (left) and 5394/49 4453 80.

Surviving historic landscape features include a small pocket of the once much more extensive medieval ridge and furrow open fields in Fullamoor Orchard immediately to the south of the

farmhouse's gardens. This orchard can be seen clearly on the early OS editions and several of the aerial photographs. Figure 15 shows the orchard today, with the ridge and furrow still prominent and well preserved. Hedgerows, plantations and veteran trees, paths/tracks and the overall pattern of field boundaries are also all of demonstrably historic origin, marking a clear continuity of land use while also acknowledging modern changes in agricultural tenure and practice. The small area of surviving meadowland alongside the River Thames already mentioned falls into this same pattern. Figure 16 presents a modern aerial photograph of the farmland, showing how the landscape still closely resembles that shown in the 18th to earlier 20th centuries.

Figure 16: The former orchard to the south of the farmhouse, where the pronounced ridges of the medieval fields are still clearly visible.

Figure 18: Modern aerial photograph of the landscape at Fullamoor Farm – compare with Figures 9-14.

The landscape to the south of the farmhouse continues to be an important part of its setting. The same used to be true of the area to the north of the Abingdon Road as well, and there are still some links there (principally with the farm buildings erected in the 1970s). As figures 12 and 16 show, however, the construction of an airfield to the north of the road during World War II, and the conversion of this into government buildings and then a science park, have wrought considerable changes on the landscape. Abingdon Road is also a busy arterial traffic route, not least for the science park but also locally between Abingdon and Dorchester on Thames. The landscape still has some value and character, but it is not as immediately important to the setting of the farmhouse as the land towards the Thames. As Figure 19 shows, planting along the Abingdon Road provides some screening of views to the north at the moment; this limits the visual impact of the Science Park on the farmhouse.

Figure 19: View looking north from the farmhouse's driveway. The Abingdon Road is immediately beyond the hedge border.

3 Significance of the farm, the farmhouse and their settings

This part of the report identifies the significance of the farmhouse, its former farm, and their setting. The assessment follows standard professional guidance, such as Historic England's *Conservation Principles*. The primary concern is not simply to say that something is important; that rarely helps. Rather, it is to define and determine a hierarchy of significance – *how* important is a site or a part of it? A simple sequence of **high** (national), **medium** (local/county) and **low** (slight) significance is used, as well as **neutral** (not important but also does not detract from a site's value) and **detrimental** (where something has a negative effect on significance) or **visually intrusive**. These assessments

cover the four *Conservation Principles* criteria of historic, evidential, aesthetic and community values of the heritage asset in question as appropriate.

Statutorily designated heritage assets such as Scheduled Monuments and listed buildings (of any grade) are by definition of national significance. They cannot be so designated unless they meet this criterion. They will usually be defined as having **high significance** because of this. Their setting (eg the context in which they are experienced and appreciated) may not have the same high level of significance, however, and requires careful assessment in its own right.

Fullamoor Farmhouse was designated as Grade II listed building in 2017. It has **high significance** for its historic, evidential, and aesthetic values. It is a private property, now in purely residential use, and as such community value is no more than **medium** (this is the lesser of the four *Conservation Principles* criteria for evaluating a building of this sort)**.** The two Scheduled Monuments (the Bronze Age barrow cemetery at Fullamoor Plantation and the settlement site to its west) are also of **high significance** in evidential and historic/prehistoric terms, and **medium significance** for community (as important repositories of memory for the past), and aesthetic (for the aerial photographic evidence) values.

Fullamoor Farm is no longer an extant agricultural entity. The older farm buildings immediately to the east of the farmhouse were converted to domestic/residential use some years ago. The modern farm buildings to the north of the A415 Abingdon Road, and the greater part of the farmland, were sold to other local farmers early in the new millennium. Mr and Mrs Mason retain the 13 acre field to the west of the house (the Furlong mentioned in 1408); this is rented to a local farmer for grazing cattle and sheep. The farm as such is therefore of **medium significance** even though it is no longer a separate going concern, because all its elements continue in active use alongside each other within their original landscape and setting. They demonstrably represent the history of medieval, post-medieval and modern land use in this area.

The farmland around the farmhouse provides an important setting for the building and its grounds. The archaeological evidence for prehistoric and Roman settlement is of **medium** to **high significance** evidentially, historically and for community value. The surviving physical remains and documentary evidence for the medieval landscape are similarly of **medium significance** evidentially, historically and for community value, as well as aesthetically. It is notable that the medieval field systems can be shown to directly overlie and cut across the prehistoric/early historic landscape in some areas. This suggests that there was a degree of discontinuity between them. This is also suggested by the absence of earthwork remains at the barrow cemetery: seemingly the mounds themselves were not respected enough to be left in situ within a developing arable landscape, as was sometimes the case in the countryside. The remaining elements of the historic landscape – field boundaries, tracks and paths, and other features – are also of **medium significance** for their contribution to the setting of Fullamoor Farmhouse, and for visual/historic character of the landscape generally.

4 Views, setting analysis and vulnerabilities

The images and text on the previous pages demonstrate that the landscape around Fullamoor Farmhouse provides a clear and obviously associated historic context for the building. It may now be a farmhouse in name only, but it is clearly rooted in the long history of the land use around it. The two cannot be divorced from one another. This historic landscape is the frame for the impressive views south from the farmhouse and its curtilage today, as Figures 4 and 19-24 show. Figures 25 and 26 present views back towards the farmhouse from the landscape to the south.

Figure 19: View south-east from the farmhouse with Grasshill Covert just to the left of centre.

Figure 20: View south from the terrace walk in front of the orchard. Fullamoor Plantation can be seen to the right.

Figure 21: View south-west from the terrace walk, with the railway embankment visible in front of Didcot Power Station.

Figure 22: View south from the first-floor.

Figure 23: View south-east from the farmhouse’s attic window.

Figure 24: View south and south-west from the attic window.

Figure 25: View from the farmland to the south-east of the farmhouse looking back towards it. The house is prominent in many views from the south and south-east despite the historic plantations.

Figure 26: View from the Thames Path looking north to Fullamoor Farmhouse. The building is clearly visible and prominent in this view.

The positioning of the Grasshill Covert and Fullamoor Plantation is interesting, and cannot have been accidental. Both are likely to have originated at about the time of the farmhouse's major extension in c 1769-70, and they were well established by the time of the earliest Ordnance Survey editions. The prominence of and exceptional views from the farmhouse are clear enough, but how did the plantations operate within this? At a simple level they provide focal points within views from the house, garden and terrace walk down towards the Thames. The dip slope immediately to the south of the terrace walk means that the orchard, though a valuable feature, probably would not have impeded views to any substantial degree. Could the positioning and orientation of the two main plantations have served other purposes in views? Grasshill Covert is the more substantial block, and has fared better as a feature in the modern landscape. It is closer to the house, and certainly the more prominent in views. Fullamoor Plantation is just as interesting, however, because its east-west axis so clearly cuts across longer views to the south. The earlier Ordnance Survey maps suggest that this would have been more pronounced 100-150 years ago than it is now, as more recent plantings have placed trees across this view. The simple map exercise in Figure 24 suggests that the positions of Grasshill Covert and Fullamoor Plantation was very deliberate, and subtle: not only do they frame views, but they also shield them. Grasshill Covert lies directly in the way of views south-east to Long Wittenham and Wittenham Clumps. Fullamoor Plantation does the same in views south towards Appleford. The trees may have been eye-catching landscape features: they also served to block some views and make the immediate landscape around Fullamoor Farm into a very private affair.

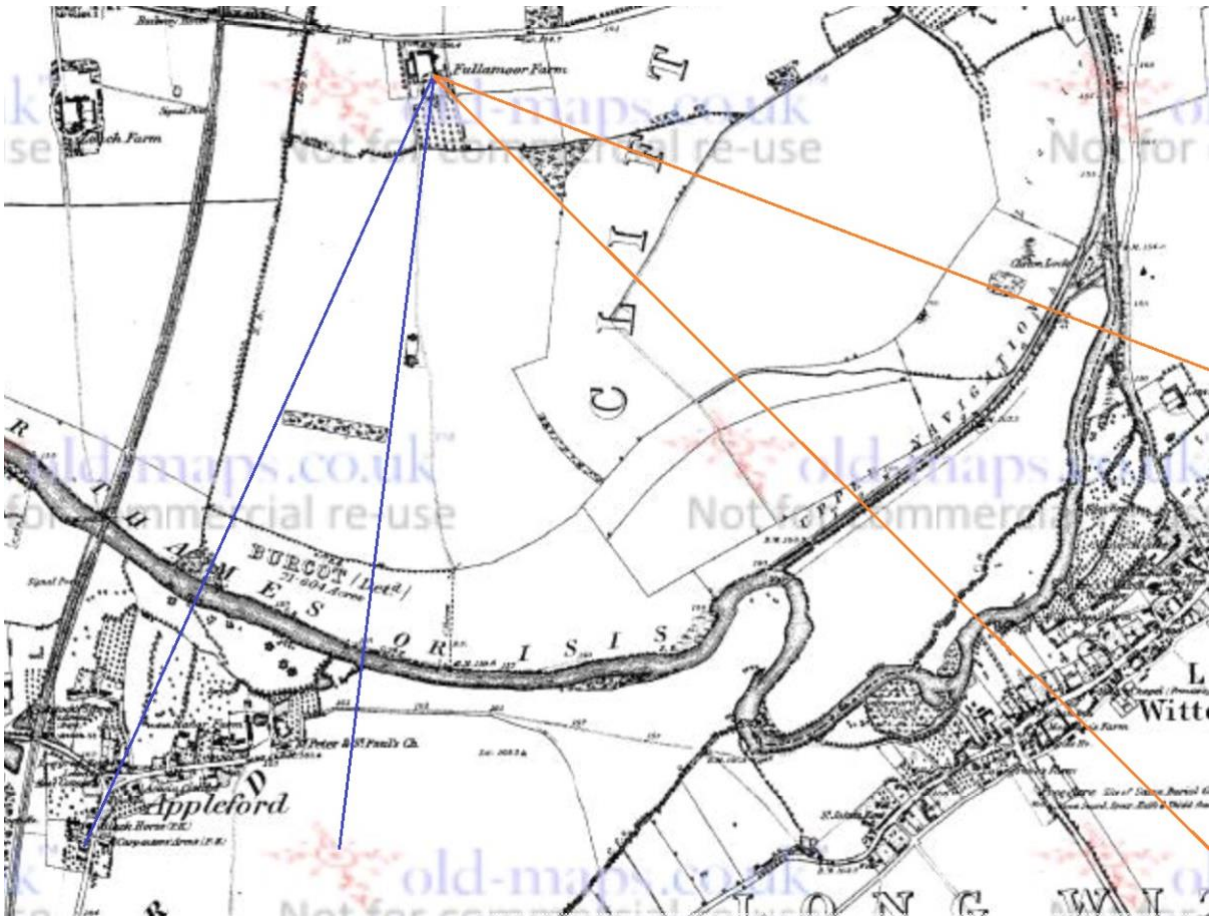

Figure 27: The 1883 Ordnance Survey 6 inch map with view cones marked looking from Fullamoor Farmhouse south and south-east, showing how Fullamoor Plantation and Grasshill Covert impeded views in these directions – especially towards Long Wittenham and Appleford.

The evidence points to a surprising degree of deliberate design in the placing of the farmhouse and tree coverts/plantations within their contemporary agricultural environment, which itself seems to

have been strongly rooted in its medieval past. It is difficult to understand why other villages should have been blocked in medium to longer views, and of course it is even harder to envisage exactly what the landscape would have looked like 200 years ago. Even so, this level of design and careful setting out would not be out of place in formal landscaped parks rather than a rural agrarian landscape. The designed landscape is an important element of the farmhouse's setting. It is an essentially private landscape, although there is some community value for walkers and other nearby residents.

Our analysis of the physical, archival and archaeological evidence demonstrates that the landscape around Fullamoor Farm presents clear evidence for development across several thousand years of human activity and land use. This includes prehistoric and/or Roman settlement, agriculture and ritual activity, medieval settlement and agriculture, and later land management through to the modern era. The landscape is not a wholly modern creation, as some have suggested, but represents a continuum of interaction between people and their environment over centuries and millennia. It is clear that modern agricultural practice has changed many aspects of the farmed landscape, but the historic (and indeed prehistoric) framework survives largely intact – with important remnants of original features such as ridge and furrow field systems, hedges and trees, and tracks/paths. It is critically important that the linkage between these features and Fullamoor Farm are recognised. The farmhouse is of course later than many of these historic features but it was built within a landscape which had evolved carefully and gradually. That process continues to this day. The historic and present landscape are inexorably and indisputably part of the setting of Fullamoor Farmhouse. Damage to either will damage the other.

Recent events have shown that the landscape around Fullamoor Farmhouse is prone to the threat of development. There have been two recent development proposals. Firstly for a new road link and bridge over the River Thames was proposed.[3] This would have passed north-south through the farmland between Fullamoor Plantation and the farmhouse, running very close to the latter. There is no doubt that this would have been severely detrimental to the house and its setting physically, visually, and through noise. Secondly, major mineral extraction was proposed for virtually the whole of the Fullamoor/Warren Farm land to the south of the farmhouse (Oxfordshire County Council mineral planning reference MW.0039/16; South Oxfordshire District Council planning reference P16/S1192/CM). Despite attempts by the developer's consultant team to suggest that this would not have harmed the setting of Fullamoor Farmhouse, the destruction of the greater part of the historic landscape between the house and the Thames would plainly have caused substantial harm to the setting of the listed building, and would therefore have been contrary to the National Planning Policy Framework (especially paragraphs 132-3). This type of development would have created drastic and irreversible changes in the long and ongoing history of the landscape, and no amount of post-extraction 'restoration' could mitigate this. The historic landscape would be lost permanently. Refusal of the application was welcome.

Substantial growth of Culham Science Centre would occur if current plans by the United Kingdom Atomic Energy Authority proceed. This appears to involve proposals to build on the current grassed entrance apron. It is probably too early to assess the potential impact of the proposed development but its effect on the setting of the listed building must be considered in detail. Recently announced plans to build c 3000 new homes at Culham would also require a setting assessment for Fullamoor Farm.[4]

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[3] http://www.oxfordmail.co.uk/news/15188413.VISION_2033__Thousands_of_homes_and_new___100m_Thames_bridge/

[4] https://www.saveculhamgreenbelt.org/latest-updates/

5 Conclusions

This study demonstrates that the landscape around Fullamoor Farmhouse is demonstrably a vitally important part of the setting of the Grade II listed house. The building and its landscape are inexorably linked by more than two hundred years of mutual inter-dependence and development. While it is acknowledged that the farmhouse no longer functions as the managerial centre of the agricultural land, it clearly sits within it, literally and conceptually. The setting of designated heritage assets such as listed buildings is recognised internationally and nationally in planning law and practice as a material factor in the consideration of planning proposals affecting them. In the United Kingdom this is now enshrined in the National Planning Policy Framework (2012). It is therefore right and proper that any development proposals within the vicinity of Fullamoor Farm must take full account of the listed building and its setting when applications are determined.

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Appendix 1: Extracts from the National Heritage List description for the farmhouse

Name: Fullamoor Farmhouse
List entry Number: 1449039
Location: Clifton Hampden, Abingdon, OX14 3DD

Grade: II. Date first listed: 16-Nov-2017

Summary of Building: House, probably originating in the C17, with a major enlargement in 1769, a Victorian extension, and subsequent additions.

Reasons for Designation: Fullamoor Farmhouse, an C18 house with earlier origins, is listed at Grade II for the following principal reasons:

> **Architectural interest**: A multi-phase building that retains a significant proportion of fabric from its principal stages of development, which pre-date 1840; The north/south range retains

timber framing, and so has the potential to provide evidence of the date and the vernacular tradition for this type of construction; The early plan forms remain legible and clearly illustrate the development of the building, reflecting the changing modes of use of domestic buildings from the C17 onwards.

Historic interest: The high-quality construction of the east/west range may reflect the prosperity of the farm during the mid to late C18, and so has the potential to contribute to our understanding of the historic agricultural economy of the region.

History

Fullamoor Farmhouse is a multi-phase building, originating, probably, in the C17. The Victoria County History states that the farmhouse dates from the late C18, however, the building fabric suggests earlier origins: the north/south range of the farmhouse appears to have originally been a two-cell, timber-framed building, and there is evidence of a ladder hatch to the attic, suggesting that the central stair may be a later insertion. This range was encased in brick in 1769, evidenced by two date inscriptions. Similarity in the style and form of brickwork suggests that the east/west range is contemporary with the 1769 encasement of the north/south range; this is supported by the 1786 estate map, which clearly shows these two main ranges.

The estate map shows ancillary agricultural buildings adjoining the north/south range of the house, and there were further agricultural buildings to the north-west. On the 1830 1" Ordnance Survey, Fullamoor is named Clifton Farm. The late-C19 and early-C20 Ordnance Survey maps show the development of the farmstead; by the time of the 1972 map all of the C18 farm buildings have been removed, leaving only the farmhouse, which remained in use as the principal farm residence until the 1990s. There is a heavily-altered range to the north-west of the farmhouse, possibly once a cartshed, which was present by maps of the late C19, and the garden walls to the south also appear to date from this period. Sections of the walls have been rebuilt, and openings have been inserted, though the general layout survives. There is a small, square-plan, late-C19 structure with a pyramidal roof built into the north-east corner.

The grey-brick-faced south-eastern extension is first shown on the 1878 map; a large modern conservatory (excluded from the listing) has been built on the south elevation. The main porch, and the outshuts on the west elevation were present by 1878, though have been heavily altered. An undated aerial photograph, probably mid-C20, shows a pitched porch on the southern elevation of the east/west range; on a photograph taken in 1980, this had been removed. There has been internal reordering to the east/west range, including the removal and repositioning of the stair and reconfiguration of the first floor.

Details

House, probably originating in the C17, with a major enlargement in 1769, a Victorian extension, and subsequent additions.

MATERIALS: constructed from red brick laid in Flemish bond, with some elevations including blue brick headers. A section is built in rubble stone in the earlier part of the building, and one elevation of the Victorian addition is built in grey brick. Roofs are covered in clay tiles and there are brick chimneystacks.

PLAN: the building has two main ranges forming an L-shaped plan, and various outshuts and additions have been built on the north and east sides. The first phase of the building appears to be that which is orientated north/south, and which meets the east/west range at the south-east corner; there is a Victorian addition at the junction of the two. There are various single-storey outshuts on

the east elevation of the north/south range, and double-height additions on the north elevation of the east/west range.

EXTERIOR: the north/south range is single storey with a tall attic, with a pitched roof and central chimneystack. The west elevation has two windows to the ground floor; they are wide with segmental-arched heads, and form the stylistic basis for those found elsewhere on the building. All windows are modern replacements, replicating the earlier glazing pattern. There is brick storey band, and two dormers – that to the right being much larger – to the attic. The north gable end is constructed from rubble stone at ground-floor level with brick above, indicating where it was once enclosed by ancillary agricultural buildings, as shown on the 1786 map. An external brick stack (not original) has been removed from the gable end, leaving scars in the brickwork and exposing bricks inscribed 'EC 1769' and 'EL 1769'. The east elevation of this range has been built upon in various phases; two lean-to outshuts have been linked together as part of the C21 reconfiguration.

The south elevation of the east/west range is a polite composition: it is of two storeys with an attic, symmetrical, with a central doorway with wide, segmental-arched windows to either side on both floors, and a narrower pair of casements above the door. There is projecting brick storey band, as on the northern range. There are two pitched dormers to the attic. The doorcase and door are modern. The northern elevation of this range is dominated by two gabled extensions, heavily altered; that on the right has a modern double-height oriel window lighting the stair. To the right of this is the original elevation of the east/west range, which has a wide, segmental-arched window to each floor, as per the south elevation.

At the south-east corner is the Victorian extension. On the south elevation it is visible only at first-floor level, owing to the addition of the conservatory (excluded from the listing); it is built in grey brick and has a large pitched dormer, with a wide window with a hood moulding. The east gable end is in red brick; it is blind and has an external stack.

INTERIOR: on the ground floor of the earlier range there is some evidence of a timber frame, which has been replaced by, or encased in, the brick elevations. In the study, the floor-frame to the attic is exposed: there is a deep spine beam supporting roughly-hewn joists. A timber at the south-west corner of the room suggests there may have been a ladder hatch to the attic, and hence the stair, which rises between the two ground-floor rooms, may be a later insertion. The drawing room, to the south of the stair, was the only room to be heated in this part of the building; the chimneybreast remains, and has a reproduction chimneypiece. The spine beam is exposed in this room, though the rest of the floor frame has been boarded over. Upstairs, parts of two curved principal roof trusses are exposed, as is the wall plate and purlins.

The east/west range has been reconfigured from its original plan of two rooms with a central stair. On the ground floor, the stair hall and eastern room have been opened up to create a large kitchen, with the stair repositioned in the hall to the north. In the sitting room, to the west, the floor frame is exposed, and is made up of roughly-hewn timbers, previously plastered over. There is a cellar, reached by well-worn brick steps, beneath this room. On the first floor, originally two rooms, the fireplaces have been removed, and a bathroom has been inserted into the former stair hall. In the attic the queen post trusses are exposed, and have been adapted and infilled to form two attic rooms accessed by a central stair. The easternmost of these rooms has tightly curving studs beneath the deep purlins.

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