**Application no: 18/00484/OUT**

**Location:** Land North And Adjoining Home Farm Banbury Road B4100 Caversfield

**Archaeology Schedule**

**Recommendation:**

Objection for the following reason/s:

The submitted desk based assessment fails to appropriately assess the archaeological potential of the site in general and these earthworks in particular. This assessment therefore is not considered to be an appropriate desk based assessment as set out in the NPPF paragraph 128.

This development is therefore likely to have an impact on both known and previously unidentified archaeological features. There is currently insufficient information on significance of these impacts on these features and a programme of archaeological investigation will be required ahead of the determination of any planning application for the site.

**Comments:**

The site is located in an area of archaeological interest immediately south west of the C10th/C11th Church of St. Lawrence. The church has been added to in the medieval period but retains some of its original pre- conquest features. The earthwork remains of a shrunken medieval village have been recorded to the north of this church. The proposed site itself contains a number of earthworks along the eastern side of the site, closest to the church, which may also relate to shrunken medieval settlement.

Without further information on the nature of these earthworks, which would be impacted by the proposed community orchard, the significance of this impact cannot be assessed. There is also a likelihood that the development could impact on previously unrecorded archaeological deposits.

We have previously provided advice on this application site as part of a pre- application consultation (17/00363/PREAPP) where we advised that a desk based assessment would need to be produced for the site.

We also advised that this assessment would need to be undertaken in line with the Chartered Institute for Archaeologists standards and guidance for desk based assessments including the submission of an appropriate written scheme of investigation to agree the scope of the assessment.

A desk based assessment has been submitted with this application but this was not undertaken in line with these standards and there was no attempt to agree the scope of the assessment with us as set out in these standards. As a result important sources of information has been omitted from this assessment and there is a lack of evidence within the assessment to support its conclusion.

The assessment does not include any appraisal of the aerial photographic collection held by Historic England and appears to rely solely on Google Earth. A number of cropmarks have been recorded within the vicinity of the site and the DBA should have included a full assessment of photographs for the area. Online images are not a suitable substitute for this archive and the low-resolution images held on Google Earth cannot be taken as a reliable source of information for the historic environment.

A hillshade visualisation of Lidar data has been included, presumably from the Environment Agency’s 2011 1m survey although the source for the Lidar is not listed in the assessment. Hillshade images are a common computer visualisation where the Lidar data is virtually lit from a specified direction and angle to emphasise any earthworks. The direction of the virtual light is very important and different light directions (azimuth) will highlight different earthworks depending on their alignment.

It is considered best practice to include a range of hillshade images from different directions to ensure that the full range of earthwork data is considered. This has not been done for this statement and the Lidar image included does not even contain any information as to the angle and direction it has been taken from. This is not in line with best practice.

The assessment concludes that these earthworks relate to a filter bed system visible on the C19th OS maps. The filter bed is visible on the second edition OS map, dated 1899, but this occupies an area of 16m by 6m. the earthworks themselves however cover an area 170m long by 65m wide and are not directly aligned with this filter bed. This assessment therefore fails to demonstrate that these are indeed related to this filter system.

The assessment also concludes that the earthworks are not visible on a 1947 aerial photograph and therefore must post date this. There is no source for this aerial photograph listed but the included image does appear to be the very low-resolution image included on Google Maps. It is very unlikely that earthworks would be discernible on such an image and the earthworks of the deserted medieval village to the north of the site are also not visible.

Then assessment appears to confirm this as it also states that these earthworks are not discernible on the most recent Google Earth imagery. That the earthworks are visible on the 2011 1m Lidar data held by the Environment agency highlight that they certainly were in existence before the most recent, higher resolution, Google Earth images. That they are not discernible on either of these images cannot be argued to demonstrate that they post-date the image.

The assessment also adds that these earthworks also relate to modern features shown on recent images but no supporting images are included to support this statement. None of the features shown on any of the modern aerial photographs either included in this report or on Google Earth appear relate to the earthwork features identified for Lidar.

The desk based assessment then concludes that ‘It is implausible that they represent

vestiges of surviving earlier earthworks which have been consistently avoided by later ploughing.’ This is totally unsupported in the assessment and both the County and the Country contain numerous examples of earthworks surviving as denuded earthworks in ploughed fields. This section of the site also appears to be under grass in all of the photographs included in the assessment including the earliest 1947 image.

This assessment therefore fails to appropriately assess the archaeological potential of the site in general and these earthworks in particular. This assessment therefore is not considered to be an appropriate desk based assessment as set out in the NPPF paragraph 128.

This development is therefore likely to have an impact on these earthworks and on any previously unidentified archaeological features. There is currently insufficient information on significance of these impacts on these features and a programme of archaeological investigation will be required ahead of the determination of any planning application for the site.

In accordance with the National Planning Policy Framework (NPPF), we would therefore recommend that, prior to the determination of this application the applicant should therefore be responsible for the implementation of an archaeological field evaluation. This must be carried out by a professionally qualified archaeological organisation and should aim to define the character and extent of the archaeological remains within the application area, and thus indicate the weight which should be attached to their preservation. This information can be used for identifying potential options for minimising or avoiding damage to the archaeology and on this basis, an informed and reasonable decision can be taken.

**Planning Conditions:**

None at this stage as further information will be required prior to the determination of any planning application.

**Officer’s Name:** Richard Oram

**Officer’s Title:** Planning Archaeologist

**Date:09-04-2018**