SIZEWELL C PROJECT: PROPOSED TWO VILLAGE BYPASS

WRITTEN REPRESENTATIONS ON ECOLOGY
SUBMITTED FOR DEADLINE 2

JUNE 2021

COMMISSIONED BY

Sarah Morgan of
Farnham Parish
on behalf of
Farnham Environment Residents & Neighbours (FERN)

Written by – *Rebecca Read MCIEEM*
Approved by – *Dominic Woodfield CEcol CEnv MCIEEM*

SIZEWELL C PROJECT: PROPOSED TWO VILLAGE BYPASS

WRITTEN REPRESENTATIONS ON ECOLOGY SUBMITTED FOR DEADLINE 2

June 2021

Bioscan Report No.
E2061/R1

BIOSCAN (UK) Ltd
The Old Parlour
Little Baldon Farm
Little Baldon
Oxford OX44 9PU

Tel: (01865) 341321
Fax: (01865) 343674
E-mail: bioscan@bioscanuk.com

CONTENTS

1 INTRODUCTION AND METHODS

1.1 Introduction

1.1.1 Bioscan UK Ltd was instructed by local resident, Sarah Morgan on behalf of FERN (Farnham Environment Residents & Neighbours), to review the ecological information provided by EDF in respect of the Sizewell C Project Two Village Bypass; to consider the validity of the assessment prepared by EDF; and to provide an ecological appraisal of the alternative Two Village Bypass route option proposed by the Farnham with Stratford St Andrew Parish Council.

1.2 Purpose of Report

1.2.1 Sarah Morgan has made prior representations on ecology on behalf of the Farnham Environment Residents & Neighbours (FERN) [RR-0110, REP1-132, REP1-133, REP1-134, REP1-135], as well as personal submissions made in the context of being a resident of the parish [AS-030, RR-0112]. The current report was commissioned to provide additional information to be considered alongside those earlier submissions.

1.2.2 Concerns have been raised by various parties about the adequacy of the ecological survey baseline compiled by EDF, and consequently the robustness of the assessment based upon it. Bioscan were asked to independently review this material. The following chapters set out where inadequacies have been identified in the baseline survey methodologies (in respect of designations, habitats, and protected species), and in the evaluation of importance arising from that survey information.

1.3 Methodology

1.3.1 A desk-study review has been undertaken, covering the Environmental Statement documents submitted by EDF, and ancillary information provided by the Suffolk Biodiversity Information Service (SBIS), as well as records of wildlife provided by residents of Farnham village (including records as supplied via advice letters issued by Natural England in relation to bat roosts identified within Farnham Hall[1]).

1.3.2 In addition, the author of the current report undertook a walkover of land within the environs of Farnham Hall, on 06 May 2021. This covered the Two Village Bypass route proposed by EDF, and the alternative route option proposed by the Farnham with Stratford St Andrew Parish Council.

1.3.3 Additional survey work undertaken by the author included an inspection[2] of one of the residential properties for bats, and sampling of droppings for subsequent DNA analysis.

[1] Note that 'Farnham Hall' comprises not a single dwelling, but a loose collection of 12 separate residential dwellings.
[2] Under Natural England class survey licence reference number 2015-15454-CLS-CLS.

2 REVIEW OF ECOLOGICAL BASELINE & ASSESSMENT: HABITATS

2.1 Woodland

2.1.1 There are a number of blocks of broadleaved semi-natural woodland that fall within and adjacent to the Applicant's proposed bypass alignment, as mapped within the Phase 1 Habitat Plan accompanying the ES [Figure 7.3 of APP-427].

2.1.2 However, the information presented by the Applicant is cursory at best, and the accompanying 'Extended Phase 1 habitat survey Target Notes' for the various woodlands (Ecological Baseline Table 1.5 [APP-426]) are so poorly documented that one woodland block is described as *"An area of species-poor floodplain grassland"*.

2.1.3 One of the woodlands for which direct land-take is proposed (Nuttery Belt, see Photograph 1 below), is described by the Applicant in Table 1.5 as "not been surveyed due to not having been granted access". Yet this woodland could readily have been surveyed from the Public Right of Way which runs along its entire length. In any event, advice from the Planning Inspectorate[3] is that rights of entry can be granted where survey access is required. The Applicant has also failed to give any consideration to whether or not this woodland could be ancient in origin. Given this demonstrable absence of adequate survey information, the impact assessment is clearly deficient.

2.1.4 Further consideration is given below (at section 4.3 of this report) to the presence of woodland within the boundary of the Development Consent Order (DCO) and its Zone of Influence.

2.2 Hedgerows

2.2.1 There are a number of native species-rich hedgerows within the DCO boundary, including H46, H49, H50 within the Farnham Hall environs, by reference to the Applicant's Figure 7.3 [APP-427], which would be classed as 'Important' when assessed against the Wildlife and Landscape Criteria of the Hedgerows Regulations 1997. However, the importance-level of these habitats is further elevated by the presence of ancient and veteran trees (see section 3.3 below). This does not appear to have been taken into consideration as part of the Applicant's assessment of baseline interest (e.g. paragraph 1.6.20 of the Ecological Baseline [APP-426] report).

2.3 Ancient/Veteran Trees

2.3.1 The trees within the DCO boundary were subject to an assessment for their potential to support roosting bats. This is presented at Table 1.33 of the Ecological Baseline [APP-426] report.

2.3.2 However, this assessment misclassified and misrepresents a number of ancient and veteran trees, including those that are proposed for removal by the Applicant. To

[3] Planning Inspectorate. *Advice Note 5: Section 53*. Available from: https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/04/advice_note_5.pdf

militate against this shortcoming in the baseline information, FERN sought the advice of an expert from the Ancient Tree Forum, who visited the Farnham Hall environs to make an independent assessment of the trees. Their findings are reproduced within Table 1 below. Each of the trees given in Table 1 below is also listed on the Ancient Tree Inventory[4]. It is notable that in several instances, the Applicant failed to correctly identify even the species of the tree.

Table 1. Trees misclassified in the Ecological Baseline [APP-426] report

Tree reference	Details given in Table 1.33 [APP-426]	Independent re-classification by an Ancient Tree Forum specialist
Tree 118	Elm, Mature, DBH: 125cm, Height: 12m, Single-stem	Listed Ancient Hornbeam with Girth of 400cm
Tree 119	Pedunculate Oak, Mature, DBH: 200cm, Height: 10m, Single-stem.	Listed Veteran Oak with a Girth of 500cm
Tree 120	Ash, Mature, DBH: 115cm, Height: 10cm, Single-stem	Listed Notable Oak with a Girth of 400cm
Tree 121	Ash, Semi-mature, DBH: 30cm, Height: 8cm, Single-stem	Listed notable Oak with a Girth of 370cm
Tree 122	Ash, Mature, DBH: 85cm, Height: 12cm, Single-stem	Listed Veteran Ash with a Girth of 350cm
Unrecorded	n/a	Listed Veteran Sycamore pollard with a Girth of 400cm
Tree 98	Pedunculate Oak, Mature, DBH: 150cm, Height: 8m, Single-stem	Listed Ancient Oak with a Girth of 500cm
Tree 97	Pedunculate Oak, Mature, DBH: 120cm, Height: 8m, Single-stem	Listed Veteran Oak with a Girth of 450cm

2.4 Wood Pasture and Parkland

2.4.1 There appears to be no reference to this Priority habitat type within the Ecological Baseline [APP-426] report, despite a grove of listed ancient/veteran trees being present within the grounds of one of the Farnham Hall properties, and in proximity to the DCO boundary. Unlike much woodpasture and parkland, this remnant is grazed, including by deer (red and roe), that pass through the Farnham Hall environs from the larger expanse of at Glenham Park to the west (location shown at **Figure 3**). The proposed bypass alignment could sever this migration route, impacting on the ability of these deer populations to sustain grazing management of these Priority habitats, and potentially also leading to a significant increase in deer road traffic accidents.

[4] *Woodland Trust Ancient Tree Inventory.* Available from: https://ati.woodlandtrust.org.uk/tree-search/?v=1884824&ml=map&z=16&nwLat=52.191243073793 25&nwLng=1.4414251924275145&seLat=52.181942117141226&seLng=1.4826239228962645

2.5 Arable

2.5.1 The Ecological Baseline [APP-426] report states at paragraph 1.6.14 that *"The main habitat present is arable farmland, which is widespread in Suffolk and no botanically rich arable margins were identified".* The definition for 'arable field margins' priority habitat is 'herbaceous strips or blocks around arable fields that are managed specifically to provide benefits for wildlife'[5]. However, the Applicant's assessment fails to give any consideration to whether any botanically-valuable communities of annual weeds may be present, which is separate to and falls outside of this Priority habitat definition.

2.5.2 During Bioscan's brief walkover visit, however, a number of arable weed species were recorded, even in the fields under intensive agricultural management. These included widespread species such as common poppy and field pansy, as well as at least seven species[6] recognised by Plantlife as indicators of Important Arable Plant Areas[7]. The inability or refusal of the Applicant to distinguish between arable habitats of differing value is a theme that Bioscan and others have also noted with respect to the Main Development Site.

2.6 Summary

2.6.1 The Applicant's approach to habitat assessment has been cursory in many respects, including failing to survey woodland blocks that are proposed for direct land-take. Notable veteran trees have been overlooked, including considerable numbers that are proposed by the Applicant for removal. This failure to identify and adequately record the ecological baseline within the Zone of Influence, whether accidental or by design, has the effect of suppressing the baseline habitat interest. This renders the subsequent impact assessment unsound.

[5] BRIG, (2008). *UK Biodiversity Action Plan; Priority Habitat Descriptions*. Available from: https://data.jncc.gov.uk/data/529a621b-e1a6-4283-ba82-408744d079b4/UKBAP-BAPHabitats-02-ArableFieldMargins.pdf

[6] Byfield, A.J. & Wilson, P. J. (2005). *Important Arable Plant Areas: identifying priority sites for arable plant conservation in the United Kingdom.* Plantlife International, Salisbury, UK.

[7] These include: bugloss *Lycopsis arvensis*, bur chervil *Anthriscus caucalis*, common cudweed *Filago germanica*, common stork's-bill *Erodium cicutarium*, field madder *Sherardia arvensis*, wild radish *Raphanus raphanistrum*.

3 REVIEW OF ECOLOGICAL BASELINE & ASSESSMENT: PROTECTED SPECIES

3.1 Dormice

3.1.1 The Applicant asserts within the Ecological Baseline [APP-426] at paragraph 1.2.4 that "the site was assessed for its potential to be used by dormice *Muscardinus avellanarius* and the connectivity of the site to areas of woodland habitat in the surrounding area*".*

3.1.2 The above statement is the full extent of the Applicant's commentary on this species, and no further information is given within the Ecological Baseline report [APP-426] or Environmental Statement (ES) chapter [APP-425]. It must therefore be assumed that the potential presence of this species was disregarded by the Applicant relatively early in the scoping stages of the project.

3.1.3 However, records available via the NBN indicate that this species has since been found locally: there is a PTES-verified record of a dormouse nest found just north of Benhall Green in October 2017, potentially within 1-2km of the DCO boundary. Natural England's standing advice[8] states that once dormice have been confirmed as present in a locality, it should be assumed that they are also present within all suitable connected habitat (i.e. all connected woodland, scrub and hedgerows).

3.1.4 Given the abundance of potentially suitable wooded/scrub habitat between the record locality and the DCO boundary, there appears to be a reasonable likelihood of this European protected species being present within (and adjacent to) the DCO boundary. As such, without formal presence/absence survey data to support the Ecological Baseline, the application must be considered data deficient, and the impact assessment unreliable. Decisions made in the absence of such data must be considered unsound.

3.2 Badgers

3.2.1 The Ecological Baseline [APP-426] describes at paragraph 1.5.74 how the surveys *"recorded a single outlier badger sett within the site boundary. The sett constituted one well-used entrance (with no other field signs or fresh spoil) on the northern edge of a woodland copse, between an arable field and area of neutral grassland."*

3.2.2 This contrasts with Bioscan's findings from limited survey work of a more established badger sett, with at least three active entrances, located [redacted]. This appears to have been overlooked by the Applicant, despite being just over approx. 30m from the DCO boundary.

3.2.3 Formal direct requests for information relating to badgers [APP-428] have been made to the Applicant on three separate occasions as follows: 16 March 2021, 05 May 2021 and 25 May 2021. No response of any kind has been received from the Applicant to date, despite the obligation to supply this information on request to

[8] Natural England (29 July 2015). *Hazel or common dormice: surveys and mitigation for development projects*. Available from: https://www.gov.uk/guidance/hazel-or-common-dormice-surveys-and-mitigation-for-development-projects

interested parties. As such, it is impossible to make an independent assessment of the adequacy of the survey information and potential impacts on this species, which could include the scope for long-term elevated levels of badger mortality, dependent on that badger social group's dependence on the land crossed by the proposed road route. Problems with disclosure of ecological information by the Applicant have also been encountered by Bioscan staff attempting to review their 'net gain' claims, as discussed in the Deadline 2 Written Representation of Dominic Woodfield.

3.3 Bats

3.3.1 The Applicant's Ecological Baseline [APP-426] has focussed on consideration of the potential for trees to support roosting bats, and on monthly transect surveys and deployment of static detectors. Despite quantifying at paragraph 1.3.5 of the ES [APP-425] that *"There would also be the loss of 51 trees with the potential to support roosting bats (18 with high potential, 18 with moderate potential, 15 with low potential)",* it appears that no roost survey work has been undertaken to confirm the presence of roosts (or otherwise) within those trees, to allow potential impacts to be assessed. The Applicant puts forward a 'Precautionary Method of Working (PMoW)' that would require a licence to be sought if a bat roost was found during felling. However, this is wholly inadequate for the purposes of impact assessment and for understanding of what roost types are present, for which species, and what is their significance. Without this information the application must be considered data deficient, and the impact assessment rendered unreliable and potentially misleading.

3.3.2 With respect to the Applicant's assessment of the potential for bat roosts within buildings, including those immediately adjacent to the DCO boundary, this appears to have been limited (without justification) to a desk study, with no documented attempt at direct survey.

3.3.3 This is despite the residential properties at [redacted]l supporting breeding roosts for a number of bat species. [redacted] supports extensive evidence of use by brown long-eared bats, with the density of droppings being consistent with maternity use (see Photograph 1) and potentially year-round use. [redacted] (directly opposite [redacted]) also supports a significant roost, having been subject to a survey visit from a Natural England volunteer roost visitor in 2018, which confirmed a common pipistrelle maternity roost and highlighted possible hibernation use in addition. Further to these two confirmed roosts, most (if not all) buildings within the historical Farnham Hall enclave appear to have significant potential to support roosting bats. Despite this, the Applicant appears not to have engaged with the potential for roosts to be present in this locality in any meaningful way, beyond recognition at ES [APP-425] paragraph 7.6.73 that *"Evidence from activity surveys (specifically, the timings of the earliest recordings) indicates the likely presence of a pipistrelle roost in the area of the site."*

3.3.4 There has been no attempt to subject the buildings to direct survey in order to identify whether additional roosts could be present and impacted by the proposals, including for any of the (many) other species recorded using the nearby lane that will

be impacted by the proposals (see below); or indeed to characterise the nature of these roosts (e.g. breeding use).

Photograph 1. Evidence of brown long-eared bat maternity roost at No2 Farnham Barn

3.3.5 The results of the Applicant's bat transect survey work are shown at Figure 7.10 [APP-427]. This demonstrates that the greatest cluster of bat activity is evident on the lane outside the Farnham Hall residential properties. Other clusters of activity are seen in association with hedgerows and woodland edges, and most noticeably adjacent to Foxburrow Wood to the east of Farnham Hall. The mapped survey findings at Figure 7.10 are evidence that the Farnham Hall environs is a notable locus of bat activity, and that the ancient double-hedgerow to the east (H49 and H50) represents a well-used flight corridor for bats travelling between their roosts and feeding grounds within Foxburrow Wood. Indeed, as brown long-eared bats have a strong affiliation to woodland, they are likely to be dependent upon Foxburrow Wood to some degree for their survival. Clearly, removing this hedgerow will lead to impacts upon bats, including on significant breeding roosts. Yet the Applicant's submission documents are deficient on this point, with an absence of detailed assessment of impacts arising from severance of this ancient flight corridor.

3.4 Great crested newt

3.4.1 The Ecological Baseline [APP-426] states at paragraph 1.5.48 that *"Six ponds (P018, P019, P026, P097, P099 and P100) were not surveyed due to access issues."* No further information is given, but this statement ostensibly indicates that permission was refused by third party landowners. Bioscan understands this not to be the case

however; the owners of properties within Farnham Hall were not approached by the Applicant to request access to their ponds for survey. This is clarified within Table 2 below.

3.4.2 Furthermore, Figure 7.6 [APP-427] fails to identify all the ponds present, by cross-referencing with **Figure 3** of this report, it can be seen that at least three ponds have been missed entirely during the Applicant's survey process, as highlighted at Table 2 below. Two of these are located immediately adjacent to the DCO boundary, as shown on **Figure 3**.

Table 2. Ponds excluded from survey without valid justification

Pond reference - as per Figure 7.6 [APP-427]	**Survey permission request made to landowner by EDF?**
P018	Access not requested.
P019	Access not requested.
P099	Access not requested.
P100	Access not requested.
2 Farnham Barn. (No pond reference provided by Applicant).	Pond not identified on Figure 7.6; & access permission not requested.
Farnham Hall Farmhouse. (No pond reference provided by Applicant).	Pond not identified on Figure 7.6; & access permission not requested.
Pond Wood third pond (ephemeral). (No pond reference provided by Applicant).	Unknown; ephemeral pond not identified on Figure 7.6.

3.4.3 Surveys of ponds within the Two Village Bypass DCO boundary and buffer relied entirely on environmental DNA (eDNA) sampling techniques. These are not infallible, and from Bioscan's experience this method may fail to detect the presence of great crested newts when present at low densities and/or in relatively large waterbodies such as those within the Farnham Hall environs.

3.4.4 Survey for this species is therefore considered incomplete, and the impact assessment arising from this cannot be considered robust.

3.5 Reptiles

3.5.1 The Ecological Baseline [APP-426] states at paragraph 1.4.9 that *"no surveys were undertaken for reptiles as the extended Phase 1 habitat and protected species survey identified habitats within the site boundary to be sub-optimal for these species"*. However, local residents report regular sightings of slow-worm and grass snake within the grounds of the Farnham Hall properties, including in close proximity to

(and potentially within) the DCO boundary. The baseline survey for this species group must therefore be considered incomplete.

3.6 Birds

3.6.1 A substantial number of barn owl pellets were noted on the ground beneath a barn owl box affixed to a tree in the grounds of one of the Farnham Hall properties, immediately overlooking the DCO boundary. The ES [APP-425] acknowledges at paragraph 7.4.31 that *"barn owl (Tyto alba) is considered likely to breed in the vicinity of the site."* However, no assessment has been made of potential impacts on this species, including in relation to road collision impacts arising from the A12 being re-routed immediately adjacent to this regularly used tree-roost (and potential breeding site).

3.6.2 Local residents also report the presence of swifts and cuckoos; neither species has been recorded by the Applicant's breeding bird surveys.

3.7 Summary

3.7.1 The Applicant's approach to survey has fallen well short of expected standards: there is insufficient information available on the presence of dormice to allow the scheme to be assessed; surveys for bats have failed to address the question of whether roosts will be directly impacted (i.e. by tree removals) or indirectly impacted (by severance of flight-lines for breeding roosts); and surveys for great crested newt and other taxa are at best incomplete and at worst irresponsibly deficient.

4 ALTERNATIVE ROUTE ALIGNMENT

4.1 Consideration of Alternatives

4.1.1 Avoidance of impacts, including by consideration of alternative sites, is the first principle within the mitigation hierarchy. Consideration of alternatives is therefore fundamental to the process of project design, ecological impact assessment and decision making, as set out within industry guidance on best practice approaches.[9]

4.1.2 Suffolk County Council (SCC) has long been invested in exploring A12 traffic relief options, and has commissioned various studies since 2006[10] to explore the feasibility of route options that would enable traffic to bypass the villages of Marlesford, Little Glemham, Stratford St Andrew, and Farnham.

4.1.3 SCC commissioned a 'Four Villages Bypass Study' in 2013 and 2014, which gave consideration to matters of ecology and impacts on nature conservation designations[11] but by its own admission it identified "*several survey limitations"* which *"included that the survey was only carried out on publically* [*sic*] *accessible land. Another limitation that should be highlighted is that dedicated species surveys have not been carried out."*

4.1.4 This study concluded that further ecological survey work was needed, but nonetheless singled out EDF's selected bypass alignment as having the greatest potential impacts on ecology. Indeed, the study concluded that *"The least favourable route option is SB5 (Blue Route)* [i.e. the route now adopted by the SZC Applicant] *which may lead to the risk of directly impacting the Ancient Woodland of Foxburrow Wood. This can lead to irreparable damage if mitigation measures are not correctly adhered to".*

4.1.5 Possible alternative options for A12 road improvements at Farnham are described by the Sizewell C May 2020 'Alternatives and Design Evolution' chapter [APP-414], which sets out the four potential options presented as part of the Stage 2 consultation as follows:

- Option 1: no change (no physical interventions proposed);
- Option 2: road widening at the Farnham bend, involving demolition of properties;
- Option 3: a Farnham bypass (also known as the one village bypass); and
- Option 4: a Stratford St Andrew and Farnham bypass (also known as the two village bypass, i.e. the SB5 Blue Route 'least favourable route option' described at 3.1.2 above).

4.1.6 The 'Alternatives and Design Evolution' chapter [APP-414] summarises the consultation outcomes, stating at paragraph 3.2.31 "*It was noted that this option* [the

[9] Chartered Institute of Ecology and Environmental Management (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (version 1.1). CIEEM, Winchester.
[10] Faber Maunsell (December 2006). *A12 Four Villages Study, Final Report.* Prepared for Suffolk County Council.
[11] AECOM (June 2014). *A12 Four Villages Executive Summary: Feasibility / Route Options Study*. Prepared for Suffolk County Council.

two village bypass] *would have some negative effects on biodiversity, due to the loss of habitat …. Overall, whilst Options 3* [the one village bypass] *and 4* [the two village bypass] *would impact a wider area and potentially increase impacts on the landscape character and biodiversity, these options would reduce traffic-related impacts within the village and improve existing air quality and noise levels."*

4.1.7 It goes on to state at paragraph 3.2.41 that *"SCDC and SCC considered that, while the two village bypass is more extensive than the one village bypass, having a much larger total footprint, the ecological and landscape sensitivity of the receiving land is, for the most part, less than that of the one village bypass route."* No detailed justification is given to support this latter point, i.e. that the ecological and landscape sensitivity of the ~2.5km two village route is lower than the ~0.5km one village route, and certainly there is no evidence of a quantitative comparison of the relative magnitude of impacts between the two schemes set out within this document [APP-414].

4.1.8 Indeed, it might appear that the Applicant has simply inherited SCC's previous two village bypass route, and having gone through the motions of considering alternative designs, the Applicant does not appear to have fully re-engaged with the question of route alternatives, or considered afresh what the potential options might be, and has failed to fully quantify and critically evaluate the relative impacts on ecological receptors arising from the alternative options.

4.2 Alternative Route Proposed by Farnham with Stratford St Andrew Parish Council

4.2.1 An alternative route alignment has been drawn up by Farnham with Stratford St Andrew Parish Council.[12]

4.2.2 For ease of reference, this is shown within the current report at **Figure 1.** Despite having been provided with the proposals for an alternative route alignment prior to the application stage, EDF have failed to fully engage with consideration of this alternative, seemingly dismissing this potential option on the basis of a desk-based assessment. Indeed, the Applicant states at paragraph 3.3.30 [APP-414]:

"*Farnham with Stratford St Andrew Parish Council have questioned the validity of the ancient woodland designation of Palant's Grove based on reports undertaken in 1994 analysing the origin of the woodland. However, both the Department for Environment, Food and Rural Affairs, and Natural England confirm that the entirety of Foxburrow Wood and Palant's Grove are designated as ancient woodland, as they are both on the Ancient Woodland Inventory. In any event, both Foxburrow Wood and Palant's Grove are a County Wildlife Site. Therefore, any permanent loss of Palant's Grove would be a loss of important habitat resulting in irreversible harm. The bisecting of Palant's Grove would also reduce ecological connectivity. It was therefore considered that the proposed SZC Co. route for the two village bypass is preferable to that proposed by Stratford St Andrew Parish Council."*

[12] Farnham with Stratford St Andrew Parish Council (27 March 2019). *Response to EDF Stage 3 Pre-Application Consultation for Sizewell C Nuclear Power Station.* Available from: http://farnhamwithstratfordstandrew.onesuffolk.net/assets/Uploads/Farnham-with-Stratford-PC-Stage-3-Consultation-Response-FINAL3.pdf

4.2.3 Reasons as to why the above statement is factually incorrect are set out at sections 4.3 and 4.4 below.

4.3 Ancient Woodland Assessment

4.3.1 There are a number of blocks of broadleaved semi-natural woodland that fall within and adjacent to the Applicant's proposed bypass alignment, as mapped at Figure 7.3 [APP-427]. These include Nuttery Belt (Photograph 2 below), The Belt, Pond Wood (Photograph 3), Foxburrow Wood (Photograph 4), the 'link-strip'[13] (Photograph 5-6 below), and Palant's Grove. The location of these woodlands is as shown at **Figure 3** of this report and listed in Table 2 below.

Photograph 2. Nuttery Belt woodland

[13] The 'Link-Strip' is the name given in this report to the small triangular strip of woodland between Foxburrow Wood and Palant's Grove.

Photograph 3. Pond Wood, showing mature trees on former boundary bank

Photograph 4. View into Foxburrow Wood showing ancient boundary bank

4.3.2 No attempt has been made by the Applicant to distinguish in their mapping [APP-427] between woodlands that are 'ancient' or otherwise, nor has any independent assessment of the woodlands been provided.

4.3.3 However, a document prepared on behalf of the Highways Agency in 1994 (attached at **Appendix 1** to this document) assists by providing a historical assessment of Foxburrow Wood and Palant's Grove, along with a landscape regression analysis detailing the period between 1783 and 1883.[14] This assessment reached the conclusion that Foxburrow Wood has always been physically separate from Palant's Grove and the 'link-strip' (or 'western tongue' of Palant's Grove, as that report describes it). The report also concluded that Foxburrow Wood (see Photograph 4) is likely to be ancient (i.e. pre-1600 in origin) whilst Palant's Grove appears to have its origins at the end of the 18th century. Indeed, this differential in the relative ages of these woodlands is reflected in the counts of ancient woodland indicator (AWI) species noted during Bioscan's recent May 2021 walkover survey (see Table 3 below).

4.3.4 A more recent report on this matter was issued by Natural England in March 2020 (reproduced at **Appendix 2** to this report)[15], giving further consideration to the origin of these woodlands, with reference to additional historical map reference sources. Natural England determined that the 'link-strip' to the west of Palant's Grove (see Photographs 5-6) "would have originated from planting between 1803 and 1837"; and considered the evidence sufficient to conclude that the link-strip between Foxburrow Wood and Palant's Grove should be removed from the ancient woodland inventory.

4.3.5 Indeed, the decision to exclude the link-strip between Foxburrow Wood and Palant's Grove from the ancient woodland inventory is now reflected in the latest available version of the inventory (via the Defra / Natural England partnership database MAGIC[16]). The current status of the inventory is as shown at **Appendix 3** to this report.

4.3.6 None of the other woodlands are given specific consideration in the above documents. However, it is noted that Pond Wood (see Photograph 3) has been formally identified as ancient woodland within Natural England's inventory (as shown at **Appendix 3** to this report), which is a point that the Applicant has failed to recognise.

[14] Anthony Walker and Partners, (1994). *A12 Wickham Market to Saxmunham Improvement, Suffolk. Brief Historical Assessment of Foxburrow Wood and Palant's Grove, East of Farnham Hall.*

[15] Dr Marion Bryant (6 March 2020). *Amendment to the Ancient Woodland Inventory: "Palant's Grove" – (grid reference TM372599).* Natural England, Polwhele, Newquay Road, Truro, TR4 9AD.

[16] Multi-Agency Information for the Countryside (MAGIC). Available via: https://magic.defra.gov.uk/MagicMap.aspx

Photograph 5. The 'link strip' at its widest extent

Photograph 6. The 'link strip' at its narrowest extent

Table 3. AWIs recorded during brief walkover visit (May 2021)

Ancient Woodland Indicator Species (AWI)[17]	AWIs identified within the woodland parcels within / adjacent to the Two Village Bypass DCO alignment*					
	Nuttery Belt	The Belt	Pond Wood	Foxburrow Wood	Link-strip[+]	Palant's Grove
Acer campestre Field maple		x	x			
Adoxa moschatellina Moschatel			x		x	x
Allium ursinum Ramsons			x	X		
Anemone nemorosa Wood anemone			x	X		
Carpinus betulus Hornbeam				X		
Conopodium majus Pignut				X		
Crataegus laevigata Midland hawthorn	x					
Hyacinthoides non-scripta Bluebell	x	x	x	X	x	x
Ilex aquifolium Holly				X	x	
Malus sylvestris Crab apple	x			X		
Primula vulgaris Primrose	x		x	X		
Prunus avium Wild cherry	x		x			

*Note that these lists are intended to be representative rather than comprehensive, as the woodlands were not exhaustively searched.

4.3.7 In addition to the presence of AWIs as listed in Table 3 above, it is notable that Pond Wood contains ash trees of more than 100 years in age, the older specimens of which appear to be suffering very little from ash dieback, if at all. This resilience is potentially of significant value, and is under investigation by the Conservation Science team at Royal Botanic Gardens Kew, as part of a study into ash dieback tolerance. Despite this, Pond Wood is given only a passing reference in the Applicant's Ecological Baseline [APP-426], and no recognition is given to the identification of Pond Wood as ancient woodland, despite the proximity of the proposed DCO boundary to this feature.

4.3.8 Nuttery Belt (see Photograph 2) is a smaller woodland which has not been formally identified as ancient woodland, although during Bioscan's walkover survey a number of AWIs were recorded (see Table 3 above) in addition to the presence of a boundary bank. This was not considered by the Applicant, who failed to directly survey the woodland at all (see paragraph 2.1.3 above). Similarly, no consideration is given to

[17] Taken from Table 2 of: Francis Rose (April 1999). *Indicators of ancient woodland. The use of vascular plants in evaluating ancient woods for nature conservation.* British Wildlife, v10, pp241-251.

the potential for this woodland to be ancient in origin, despite the presence of AWIs. This is especially critical in view of the proposals for direct land-take from this woodland block.

4.4 Non-statutory Nature Conservation Designations

4.4.1 Non-statutory designations have been mapped by the Applicant at Figure 7.2 [APP-427]. However, this appears to rely upon old data, now superseded, and does not take account of the revised County Wildlife Site (CWS) inventory for Suffolk. The most recent designation is 'Pond Wood', which was notified as a CWS in 2021, as shown at **Figure 2** of this report. Its notification as a County Wildlife Site is based upon its inclusion in Natural England's ancient woodland inventory (as shown at Appendix 3), in accordance with the adopted CWS selection criteria for Suffolk[18].

4.4.2 By contrast the removal of the 'Link-Strip' from Natural England's ancient woodland inventory could potentially diminish the justification for its inclusion within the Foxburrow Wood CWS boundary, albeit this remains to be given consideration by the Applicant.

4.5 Farnham Hall Environs 'Wildlife Corridor'

4.5.1 In the view of the information set out at sections 2 and 3 above, Farnham Environment Residents & Neighbours (FERN) consider that the Farnham Hall Environs should be recognised as part of a woodland wildlife corridor, stretching from Glemham Hall in the west to Foxburrow Wood and Palant's Grove in the east, with the diverse habitats of Farnham Hall (comprising ponds, veteran trees, and ancient hedgerows) at its core. These features are highlighted in the plan presented at Figure 3 of this report.

4.5.2 At present wildlife is able to move relatively freely through this wooded landscape, but re-routing the A12 through its central portion would fragment the corridor (see particularly in relation to bats at section 3.3 above), and create a void at the core of it. It is in the context of this assessment that the alternative alignment (as shown at **Appendix 1**) proposed by the Farnham with Stratford St Andrew Parish Council should be viewed; it would route the bypass away from the locus of ecological interest at Farnham Hall.

4.6 Alternative route options impact assessment

4.6.1 The alternative route alignment proposed by Farnham with Stratford St Andrew Parish Council is considered to minimise impacts on ancient hedgerows, veteran trees, and on protected species, such as bats and potentially badgers, which are resident in the Farnham Hall environs. The disbenefit of this alignment would be the resulting direct land-take from the 'link-strip' woodland but by contrast the route would avoid direct land-take from Nuttery Belt and would bring the road alignment further from Pond Wood. Furthermore, there is scope to restore connectivity

[18] Suffolk Country Wildlife Site Panel (01 March 2010). *County Wildlife Site Selection Criteria*. Suffolk Biodiversity Information Service. Available from: https://www.suffolkbis.org.uk/sites/default/files/CWS/Public%20Web%20Docs/CWSSelectionCriteria.pdf

between Foxburrow Wood and Palant's Grove by embanking the road slightly in this location and installing an underpass for wildlife beneath it, so as to reduce potential impacts on woodland wildlife further.

4.6.2 In addition, the more gentle gradient of the alternative route (indicated by levels marked on **Figure 1**) could potentially lead to a reduction in indirect impacts on surrounding habitats. For example, potentially lessening hydrological impacts on Foxburrow Wood, which is understood to be suffering from poor water availability, particularly along the western margin where a ditch has been freshly excavated (see Photograph 7 below). Minimisation of steep gradients may also minimise noise and air pollution caused by traffic having to climb up the slope, with a corresponding reduction in impacts on the surrounding ecological (and other) receptors.

Photograph 7. Recently re-excavated ditch at western margin of Foxburrow Wood

4.7 Summary

4.7.1 An alternative route option has been proposed (as reproduced at **Figure 1** of this document) which the Applicant has failed to critically evaluate beyond a cursory desk-based view, itself based upon inadequate baseline woodland survey information.

4.7.2 To date the Applicant has not given full consideration to evaluating the potential impact of the alternative, and in failing to do so, it fails to meet the sequential processes of the mitigation hierarchy. This is a major flaw in the ecological assessment that must therefore be considered unsound.

5 SUMMARY & CONCLUSIONS

5.1 Summary & Conclusion

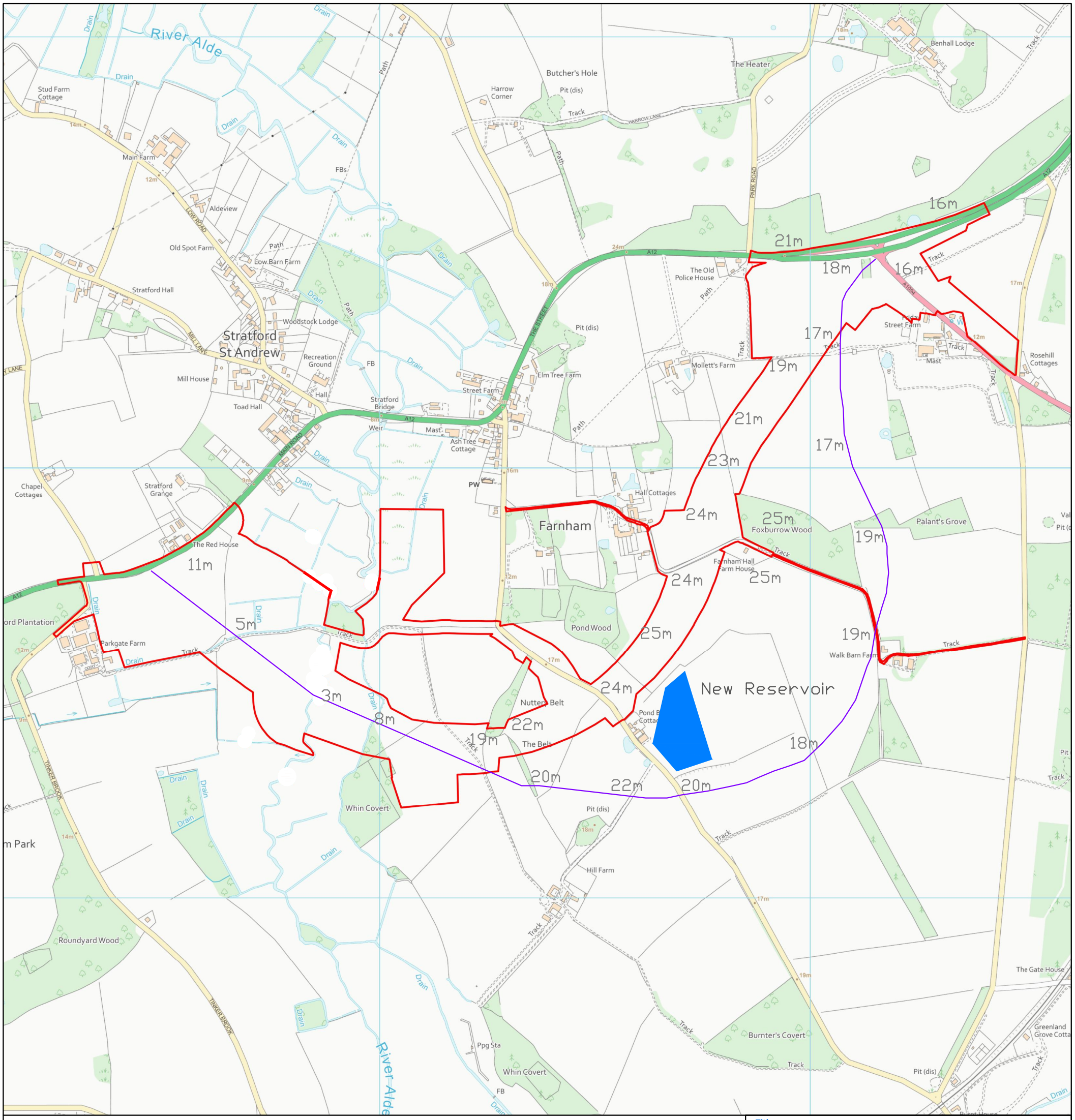
5.1.1 Bioscan UK Ltd was instructed by local resident, Sarah Morgan on behalf of FERN (Farnham Environment Residents & Neighbours), to review the ecological information provided by EDF in respect of the Sizewell C Project Two Village Bypass; and to consider the alternative Two Village Bypass route option proposed by the Farnham with Stratford St Andrew Parish Council.

5.1.2 The assessment found that the Applicant's approach to surveying, understanding and documenting the baseline habitat condition has been cursory in many respects, even failing to survey woodland blocks that are proposed for direct land-take. Notable veteran trees have been overlooked, including considerable numbers that are proposed by the Applicant for removal. This failure to identify and adequately record the ecological features within the Zone of Influence; whether accidental or by design, falls far short of industry standards and has the effect of artificially suppressing the baseline habitat interest. This renders the subsequent impact assessment unreliable and unsound.

5.1.3 Furthermore, the Applicant's approach to survey of protected species has similarly fallen well short of expected standards: there is insufficient information available on the presence of dormice to allow the scheme to be assessed; surveys for bats have failed to address the question of whether roosts will be directly impacted (i.e. by tree removals) or indirectly impacted (by severance of flight-lines for breeding roosts); and surveys for great crested newt and other taxa are at best incomplete and at worst irresponsibly deficient.

5.1.4 To date the Applicant has also not given full consideration to evaluating the potential impact of alternative options, and, in failing to do so, it fails to meet the sequential processes of the mitigation hierarchy that is central to environmental assessment processes. There are clear arguments that less ecological damaging alternatives exist and have been inadequately considered. The ecological assessment must therefore be considered unsound.

Figure 1
Farnham with Stratford St Andrew Parish Council
Alternative Two Village Bypass Route Alignment



Key

- Sizewell C Two Village Bypass DCO boundary
- Farnham with Stratford St Andrew Parish Council Alternative Indicative Two Village Bypass Route Alignment
- X m Indicative heights above sea level

DO NOT SCALE

Title

Farnham with Stratford St Andrew Parish Council Alternative Two Village Bypass Route Alignment

Project	Client
Sizewell C Two Village Bypass	FERN

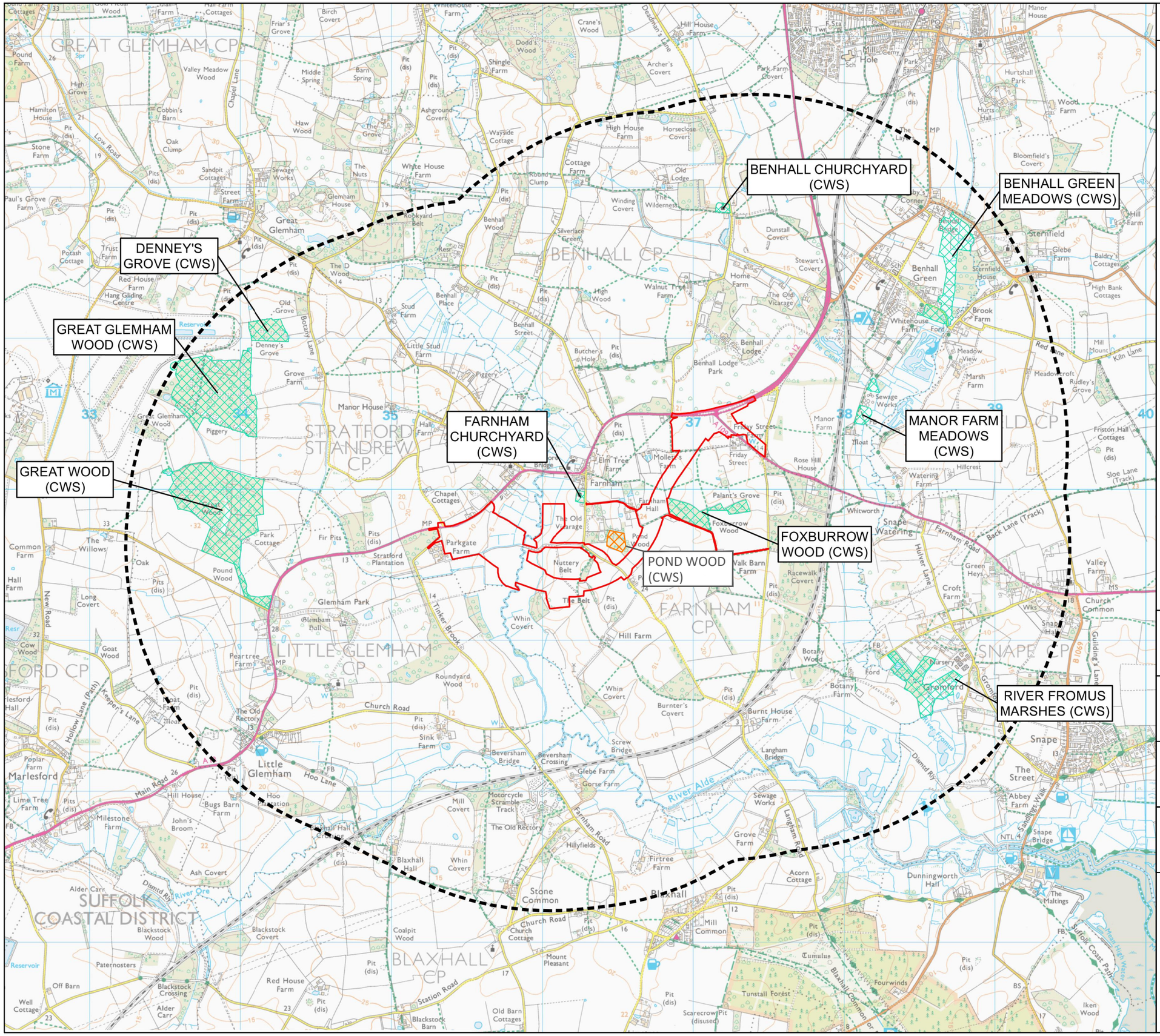
Drawing No.	Revision	Project No.
Figure 1	-	E2061

Drawn	Checked	Date
CD	RR	May 2021

Bioscan (UK) Ltd
The Old Parlour,
Little Baldon Farm,
Little Baldon,
Oxford,
OX44 9PU.

T: +44 (0) 1865 341321
F: +44 (0) 1865 343674
bioscan@bioscanuk.com
www.bioscanuk.com

Figure 2
Figure 7.2 of ES [APP-427], revised to show recent CWS designation



Key

- Two Village Bypass development site boundary
- 2km study area
- County Wildlife Sites (CWS)
- New CWS, notified 2021

DO NOT SCALE

Title

Figure 7.2 [APP-427] revised to show more recent data

Project	Client
Sizewell C Two Village Bypass	FERN

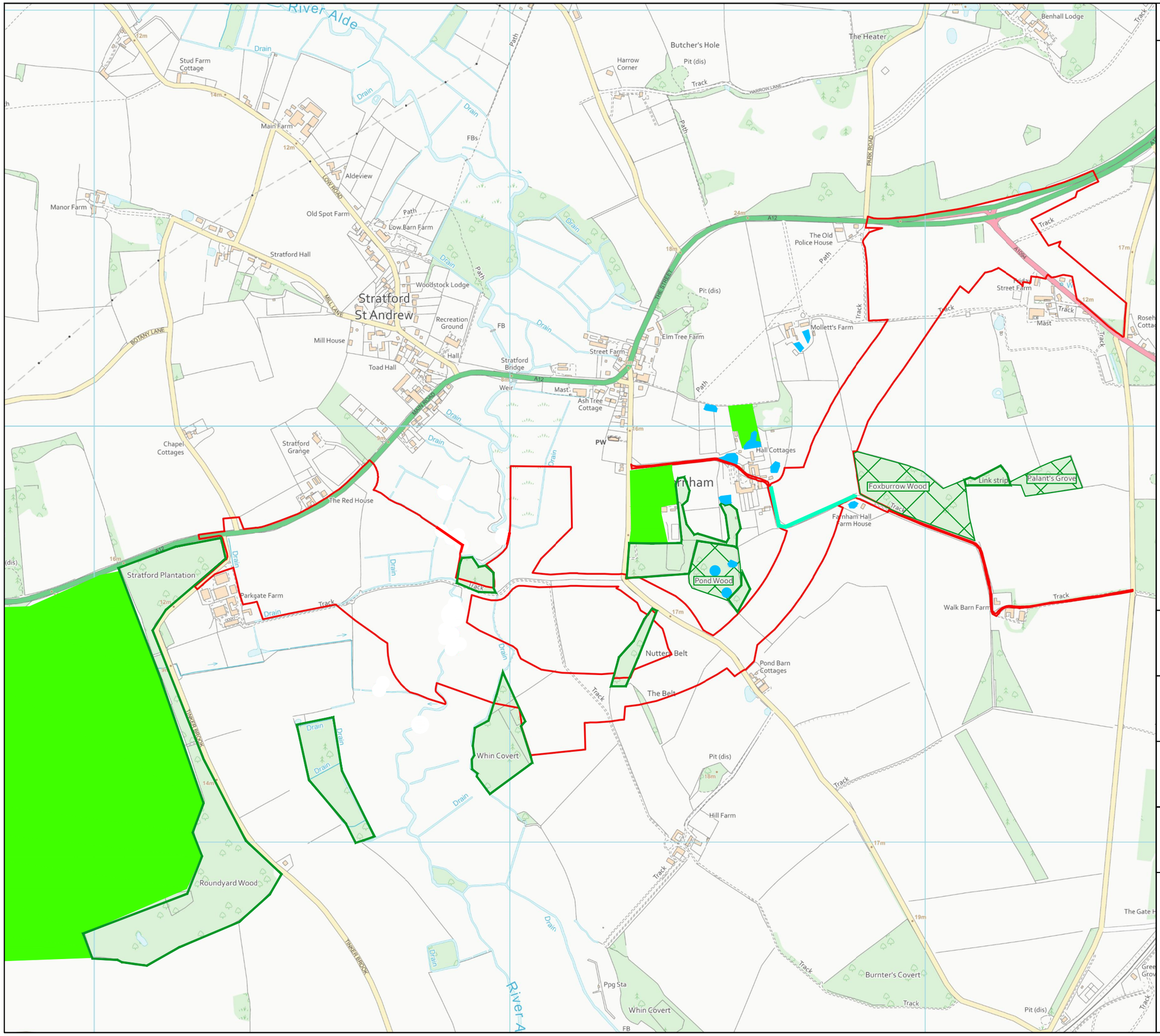
Drawing No.	Revision	Project No.
Figure 2	-	E2061

Drawn	Checked	Date
CD	RR	May 2021

Bioscan (UK) Ltd
The Old Parlour,
Little Baldon Farm,
Little Baldon,
Oxford,
OX44 9PU.

T: +44 (0) 1865 341321
bioscan@bioscanuk.com
www.bioscanuk.com

Figure 3
Farnham Hall Environs Wildlife Corridor



Key

- Two Village Bypass Development Site Boundary

Habitats comprising the Farnham Hall Environs Wildlife Corridor

- Wood Pasture and Parkland Priority Habitat*
- Ancient Woodland*
- Lowland Mixed Deciduous Woodland
- Ponds
- Ancient Double-Hedgerow

* *Following Natural England's inventories*

DO NOT SCALE

Title

Farnham Hall Environs Wildlife Corridor

Project	Client
Sizewell C Two village Bypass	FERN

Drawing No.	Revision	Project No.
Figure 3	-	E2061

Drawn	Checked	Date
CD	RR	May 2021

Bioscan (UK) Ltd
The Old Parlour,
Little Baldon Farm,
Little Baldon,
Oxford,
OX44 9PU.

T: +44 (0) 1865 341321
bioscan@bioscanuk.com
www.bioscanuk.com

Appendix 1

A12 Wickham Market to Saxmundham Improvement, Suffolk.

Brief Historical Assessment of Foxburrow Wood and Palant's Grove, East of Farnham Hall.

By Anthony Walker and Partners, (1994)

RPS Planning, Transport and Environment

INDEX DATA	RPS INFORMATION
Scheme Title A12 Wickham market - Saxmundham Improvement	Details Brief historical Assessment
Road Number A12	Date
Contractor	
County Suffolk	
OS Reference	
Single sided ✓ Double sided A3 1 Colour 0	

A12 WICKHAM MARKET TO SAXMUNDHAM IMPROVEMENT, SUFFOLK

BRIEF HISTORICAL ASSESSMENT OF FOXBURROW WOOD AND PALANT'S GROVE, EAST OF FARNHAM HALL

1 Introduction

1.1 A historical assessment of two areas of woodland to the east of Farnham Hall, named Foxburrow Wood and Palant's Grove, was carried out on 16-17 November 1994 by Anthony Walker and Partners. This work, which was commissioned by the Highways Agency, was to attempt to define the ecological and/or historic interest of the woodland.

1.2 The work comprised an initial search through the published documentary and cartographic evidence available at the Ipswich branch of the Suffolk County Record Office (SRO), and a site inspection.

2 Historical background

2.1 There is little published historical material on Farnham and its immediate area. A brief account of the manorial history and landownership is, however, contained in Copinger (Copinger, W A 1910 The Manors of Suffolk volume 3, 127-130) while other more general county works provide some background information (eg. Dymond, D & Martin, E (eds) 1988 An Historical Atlas of Suffolk; Dymond, D & Northeast, P 1985 A History of Suffolk).

2.2 In 1086 the present parish of Farnham was divided between two manors, Farnham and Claydon. The Domesday Book records that the manor of Farnham had previously been held by Edric of Laxfield and was now held by Robert Malet. The manor is described as comprising 1 carucate of land, 10 acres of meadow, a ploughteam held in demesne and a mill, all valued at 20 shillings.

2.3 Robert Malet was one of the largest Norman magnates in Suffolk, holding some 220 manors centred on the castle and borough of Eye. In 1110, his son Robert plotted against the King and his lands were taken into royal ownership; the manor of Farnham was subsequently given to Sir Robert de Sankville or Sackville as part of the Honor of Eye. The manor passed to William de Glanville by marriage and in 1171 Ralph de Glanville gave it to the newly founded Augustinian Priory at Butley, east of Orford. It remained in monastic hands throughout the medieval period until the suppression in 1513, after which it was owned by Sir John Glemham. In the late 17th century the manor passed from the Glemham family to Sir Dudley North and his descendants.

2.4 The village of Farnham was always small. It has its origins before the 11th century, when it is named as a hamlet in 1086. In 1428 it is recorded as comprising less than 10 households while in 1674 the Hearth Tax notes that, although this had risen to some 30, over half were classified as poor. The present Farnham Hall dates to 1602.

3 Documentary and cartographic research

3.1 As noted above, the manor of Farnham is poorly documented in terms of readily available published material, although it is possible, and even likely, that there are specific references to the manor and the various land parcels within it in unpublished and untranslated medieval documents, such as court rolls held either locally and nationally.

3.2 The Domesday survey generally refers to woodland when describing the components of a manor. However, in Suffolk, woodland is listed in terms of the number of pigs that were supposed to fatten on their acorns; none are listed for Farnham. Rackham has undertaken a limited assessment of the medieval woods in Suffolk and concludes that only some 9% of the county was woodland in the 11th century. Although his list is not exhaustive, he suggests that there is no woodland of medieval origin in Farnham (Dymond, D & Northeast, P 1985 (eds) An Historical Atlas of Suffolk, 50-51).

3.3 In the absence of any readily available documentary material, evidence for the presence of woodland within the parish has to come from cartographic sources. From these, a simple landscape regression analysis can be compiled (see figure 1). The arrow at the north-west corner of Foxburrow Wood provides a fixed reference point for each plan.

3.4 The earliest map which is at a scale appropriate to identify isolated areas of woodland is that printed by Hodkinson in 1783 (SRO S912). This shows Foxburrow Wood (not named) as an approximately square block of woodland divided by a straight sections of road leading from Farnham Hall. Although the scale of the map makes it difficult to be absolutely certain, it is assumed from adjacent road junctions and other topographical features that the northwest-southeast section of the road passing through the wood is that which survives today. A second road is depicted to run north-south on the east side of Foxburrow Wood. A building, later named as "Walk Barn" on the Ordnance Survey 1:25,000 scale map (Pathfinder sheet 986), is also shown, adjacent to the south-east corner of the wood. An area of woodland corresponding to Palant's Grove is not shown, neither is the present north-south road to the east of Palant's Grove which currently runs from Burnt House Farm to Manor Farm; the road that is depicted follows the present north-south footpath to the east of the railway line. A similar arrangement of roads and woodlands is shown on an Ordnance Survey map of 1798 (SRO MR28).

3.5 An estate map of 1803 titled "A view of the parish of Farnham in Plomesgate Hundred, Suffolk..." (SRO HA408/B/74) shows "Foxburrow Wood" on both sides of the road. However, it is clear that the southern part of the wood has been reduced in size by approximately one-half, the south-east corner of the wood now joins the road at the point at which it turns to the south, to the north of "Walk Barn". The north-south road no longer continues to the north. "Pallants Grove" is also shown to the east; its boundaries correspond to the present woodland although it extends further eastwards as far as the present road and it is physically separated from

Foxburrow Wood by the line of the former road. An isolated rectangular house within an enclosure is shown to the east of Pallants Grove; this corresponds to a building known as Monks Valley. The map indicates that this house belongs to John Pallant and it is likely that he is the originator of Pallants (now Palant's) Grove. The fields to the south of Palant's Grove are named as "old enclosed ground".

3.6 The Ordnance Survey 1" map of 1837 (sheet 50SE) depicts Foxburrow Wood (again not named) with the road passing through its centre. The southern boundary of the wood is shown as stepped with an area marked as "Sand Pits" encroaching on the south-west corner. No north-south road at the east end of Foxburrow Wood is depicted. Palant's Grove is shown as an unnamed area of woodland to the east with its area being the same as in 1803. Two parallel north-south roads are now shown, one corresponding to the earlier road to the east of the railway line and now named as "Snuff Lane", and one at the east end of Palant's Grove, corresponding to the existing road.

3.7 The 1841 tithe map, titled "Plan of the parish of Farnham, Suffolk, 1841" (SCR P461/95) depicts a similar arrangement, although at a larger scale. The wood to the north of the road is named simply as "Grove" while the triangular area to the south is "Foxburrow". Palant's Grove is still named as "Pallants Grove" and all the woodland is owned by William Long, who also owned but did not occupy Farnham Hall at this time. It is interesting to note that, although owned by William Long, Pallants Grove does not lie within the Farnham Hall estate.

3.8 The Ordnance Survey 6" map of 1883 (sheet 59NE) shows that the woodland to the south of the road from Farnham Hall has now disappeared although two "Old Sand Pits" and the southern field boundary remain. The name "Foxburrow Wood" now applies only to the remaining northern section of woodland and a track is shown running east-west through it. The former north-south road running between Foxburrow Wood and Palant's Grove is also shown as a footpath. Otherwise, all is as shown on the 1841 tithe map, although the house occupied by John Pallant is now named as "Monkey's Hole".

4 Field evidence

4.1 A site inspection of the two areas of woodland was carried out on 17 November 1994 during light and sunny conditions. In places, the two areas of woodland were heavily vegetated with bracken and other undergrowth which made the identification of any internal earthwork features impossible.

Foxburrow Wood

4.2 The Detailed Ecological Assessment Report (Anthony Walker and Partners 1992 A12 Wickham Market to Saxmundham Improvement: Detailed Ecological Assessment: Preferred Route, 38) notes that a considerable number of canopy trees have been lost in Foxburrow Wood through recent storms. The wood is dominated by ash, oak, hornbeam and beech, with an

understorey of hazel, elder, field maple and silver birch. The ground flora includes ramsons, bluebell, dogs mercury, ground ivy, early purple orchid, lesser celandine, bramble, nettle and red campion. Replanting has been undertaken in open areas with introduced species such as sycamore and horse chestnut. The wood is classified in the Nature Conservancy Council's provisional list for Suffolk as being ancient.

4.3 The site visit showed that Foxburrow Wood is surrounded by an earthwork bank with an external ditch of varying dimensions. Along its southern boundary, adjacent to the track from Farnham Hall, the bank is between 0.25-0.50m high with an external ditch of similar dimensions, although in places this has silted up. A number of mature oak trees and oak stumps stand on the top or sides of the bank. The bank is more substantial on the east side of the wood, with a well developed but rounded profile up to 1m high and 1m wide. On the north and west sides the bank and ditch are still visible although it has been disturbed and possibly accentuated by modern dredging to facilitate drainage. The north side contains a large pollarded oak, positioned at the angle of the boundary (see figure 1).

4.4 There were no internal features visible in Foxburrow Wood apart from an apparently modern rectangular pit approximately 7m by 4m in a central eastern location; this was filled with modern debris and rubbish. There were also no obvious remains associated with the former track and footpath shown on the historic maps as passing through this part of the wood. However, given the presence of bracken and other vegetation, the presence of other internal features cannot be discounted.

Palant's Grove

4.5 The Detailed Ecological Assessment Report (Anthony Walker and Partners 1992 A12 Wickham Market to Saxmundham Improvement: Detailed Ecological Assessment: Preferred Route, 38) notes that Palant's Grove is of poor structure, with much dead and fallen timber. However, the ground flora is of good quality and includes dogs mercury, bluebell, red campion, hazel, ash, elm, oak, nettle, ground ivy, elder, horse chestnut, lesser celandine, larch, cuckoo pint, blackthorn, field maple and ramsons.

4.6 As with Foxburrow Wood, Palant's Grove is also surrounded by a bank and ditch. Significantly, a bank approximately 0.5m high curves around the western tongue of the wood, confirming the cartographic evidence that Palant's Grove and Foxburrow Wood are two separate areas of woodland. The intervening ground, which was formerly a track in the late 18th century, remains as a grass footpath, although a slight earthwork bank across the path remains from a former field boundary.

4.7 The enclosing bank is best preserved on the southern side of the western tongue. This is 1m high and 2m wide and lies parallel to but inside the present field boundary. Once again, there is an external ditch and a number of oaks on the top and sides of the bank. The bank and ditch continue along the south side, running into the existing east-west field boundary which originally formed part of the wood. The bank and ditch is not so

prominent on the north side of the wood; in places it has been disturbed by a modern ditch while in others it has been ploughed out and incorporated into the adjacent fields.

5 Conclusions

5.1 The cartographic research suggests that Foxburrow Wood and Palant's Grove were always two separate areas of woodland divided by a north-south track and later footpath. Foxburrow Wood was in existence by 1783 but Palant's Grove is first shown on a map of 1803, possibly associated with a landholding to the east occupied by John Pallant. Both areas of woodland were originally larger; Foxburrow Wood extended for some distance to the south of the track from Farnham Hall and Palant's Grove extended to the east to the line of the present north-south road.

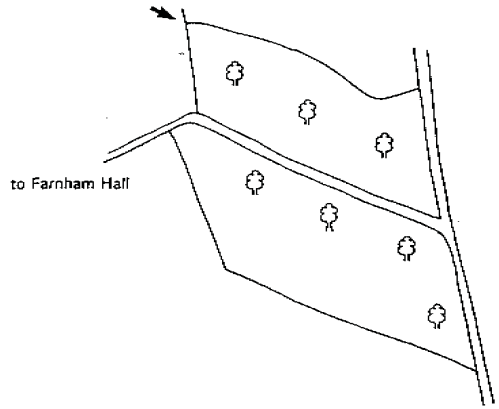
5.2 The field evidence broadly confirms the cartographic evidence. The curving boundary bank in the western tongue of Palant's Grove confirms that the two areas of woodland were always physically separate. Both woods are surrounded by boundary banks and ditches, although in places it has been disturbed by modern intervention. Well preserved sections of both earthworks remain and it appears that that surrounding Foxburrow Wood has a more rounded profile, suggesting, although not proving, an earlier date relative to the Palant's Grove bank. However, the fact that neither boundary bank is particularly massive implies that they are of fairly recent creation.

5.3 The question of whether Foxburrow Wood can be classified as "ancient", defined by the Nature Conservancy Council as having been in existence before 1600 and representing areas of former medieval wildwood, is problematic and almost impossible to prove without further detailed research to identify specific documentary references which may or may not exist. Rackham suggests that the Oxlip *(Primula elatior)* occurs in almost every wood in Cambridgeshire, Suffolk and Essex known on documentary or topographical grounds to be ancient (Rackham O, 1983 Trees and Woodland in the British Landscape, 124-125) and its absence in Foxburrow Wood may be significant.

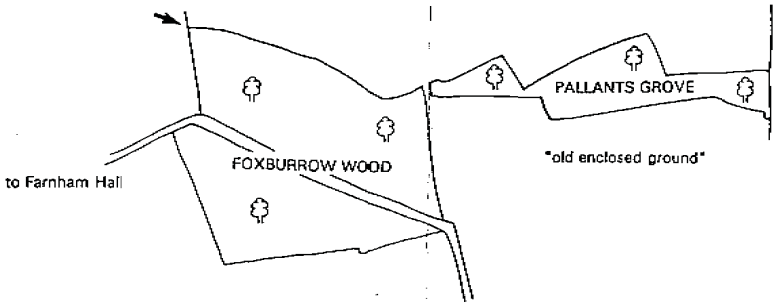
5.4 The boundaries of the original extent of Foxburrow Wood, as shown on the 1793 map, appear to be regular and directly aligned with a section of track leading from Farnham Hall. The course of the track from Farnham church to beyond Walk Barn is actually made up of several wide and straight sections. This all suggests that this particular area of landscape was laid out at one point in time, rather than being the result of gradual landscape development over centuries when more curvilinear alignments and boundaries would be expected to survive. Based on current research, the evidence points to an enclosure landscape, brought about by the regularisation of earlier land holdings into a more uniform and rectangular field pattern characterised by straight boundaries. Many new wide and straight roads were created and areas of woodland planted as part of this process.

5.5 There are, however, no records of enclosure in Farnham, implying that this was a piecemeal process undertaken by agreement rather than deliberate Act of Parliament. This process may have taken place at any time during the 16th or 17th centuries, but is unlikely to have occurred while the manor was in monastic ownership (ie. pre 1513); the map of 1803 notes the fields to the south of Palant's Grove as being "old enclosed ground".

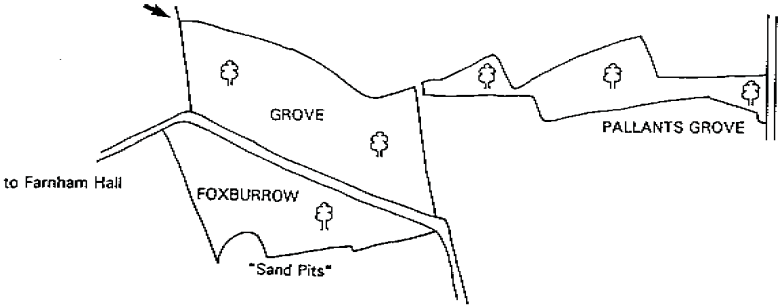
5.6 In conclusion, therefore, it is only possible to say that, while Palant's Grove has its origins at the end of the 18th century, Foxburrow Wood was already in existence at that time. The cartographic evidence shows that the track from Farnham Hall was an integral part of the wood, originally passing through its centre, and it is likely that both originated at the time of enclosure, possibly in the late 16th or 17th centuries. This may suggest that the wood is ancient (ie. pre 1600) but it is unlikely, on the basis of the records consulted as part of this survey, to represent an area of earlier, medieval, woodland.



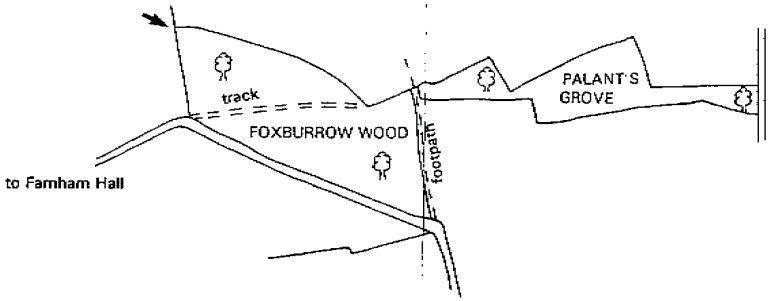
1783



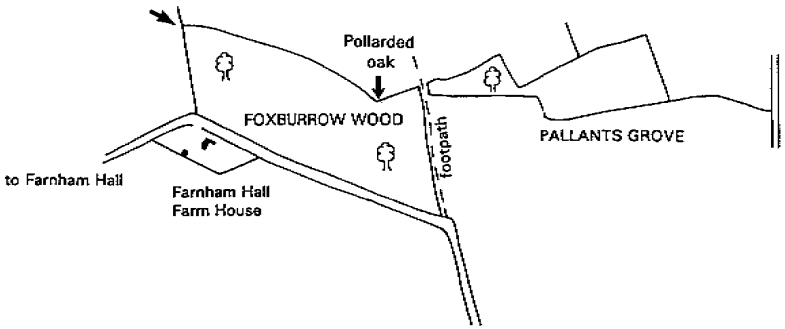
1803



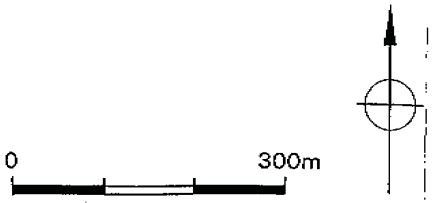
1841



1883



1992



PROJECT: FOXBURROW WOOD AND PALANT'S GROVE, FARNHAM

TITLE: LANDSCAPE REGRESSION ANALYSIS

SCALE | DRAWN BY | CHKD BY | DATE

ANTHONY WALKER AND PARTNERS

SHEET NO. FIG 1

Appendix 2

'Amendment to the Ancient Woodland Inventory:
“Palant’s Grove” – (grid reference TM372599).'
by Dr Marion Bryant, Natural England (6 March 2020).

Amendment to the Ancient Woodland Inventory: "Palant's Grove" – (grid reference TM372599)

Dr Marion Bryant, Natural England, Polwhele, Newquay Road, Truro, TR4 9AD.

6 March 2020

Ancient woodlands are defined as woods that have existed continuously since 1600AD (Spencer and Kirby 1992). Ancient woodland covers approximately 2.6% of England and includes two categories, ancient semi-natural woods (ASNW), which are predominantly native trees and shrubs, and plantations on ancient woodland sites (PAWS), where the natural tree canopy has been felled and replanted with plantation species. PAWS are valued because they retain interest and can be restored back to ancient semi-natural woodland.

Ancient woodland is protected under the National Planning Policy Framework (MHCLG 2012), which gives planners guidance on how to consider ancient woodland and veteran trees in development decisions.

Natural England and Forestry Commission's standing advice on ancient woodland and veteran trees (Defra 2018) aims to help planners in their decision-making and can be found online (see references below).

The Ancient Woodland Inventory represents Natural England's best assessment of the extent and distribution of ancient woodland, but revisions may occur as and when new evidence is brought forward. Natural England have been asked to amend the Ancient Woodland Inventory to remove an area of woodland described as Palant's Grove at TM372599. This document summarises an assessment of the evidence presented to Natural England. Evidence was presented in the RPS Planning Transport and Environment report entitled Brief historical assessment of Foxburrow Wood and Palant's Grove, east of Farnham Hall, 1994.

For inclusion in the inventory the evidence must meet Natural England's evidence standard.

Palant's Grove – current situation on the inventory

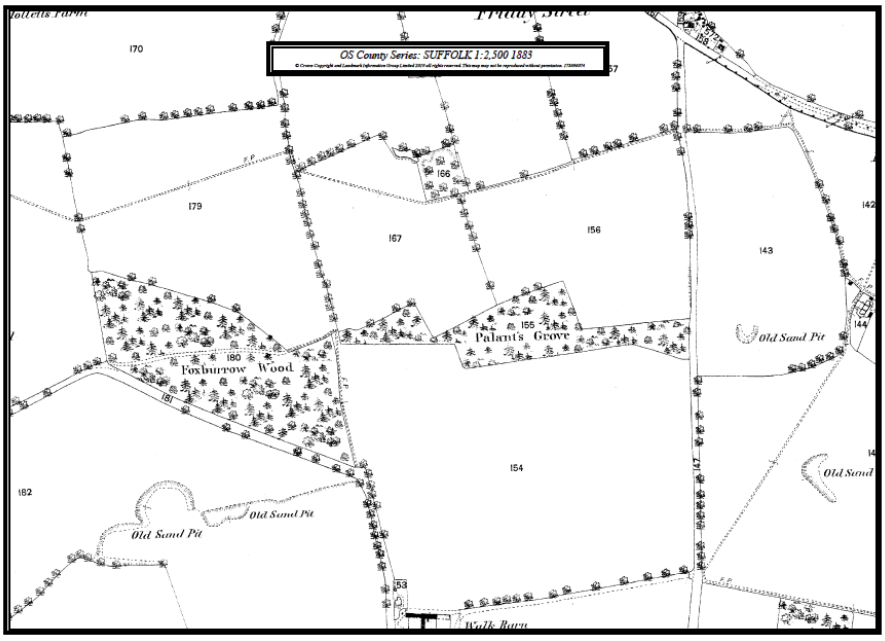
Palant's Grove is currently included on the inventory, and classified as ancient semi-natural woodland.

Location map showing current AWI

Assessment of the map and historical evidence

Palant's Grove (TM372599) is included on the all map sources on www.old-maps.co.uk between 1883 and 1990. The consistency of its presence between these times is not in question. However, its area has been reduced on the eastern side sometime between 1972 and 1978. From 1978 we see it in the form that exists today, shown on the above location map.

OS County Series: Suffolk 1883.

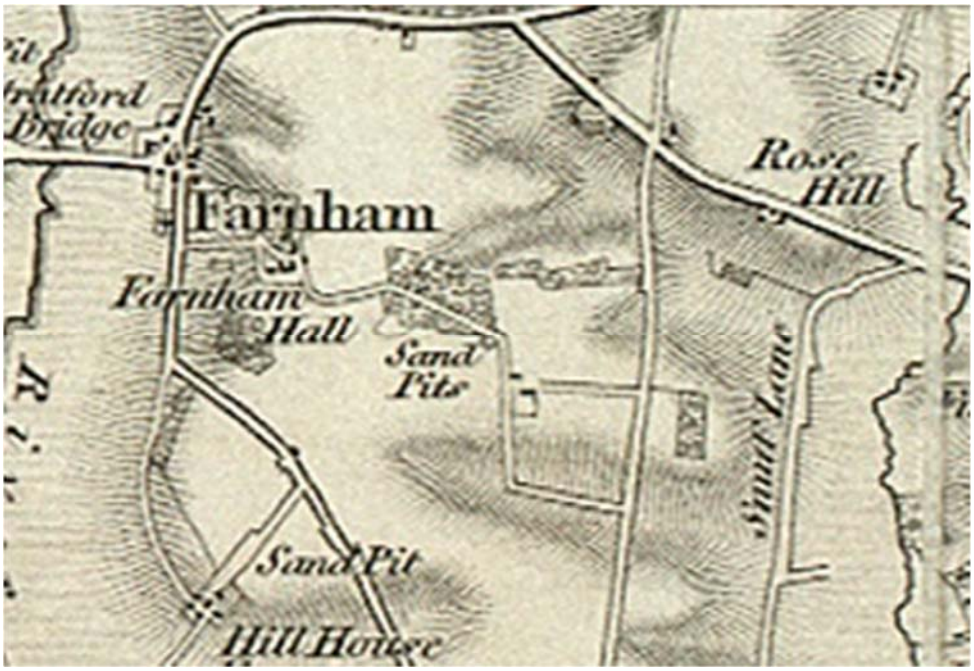


The main question, in this case, arises from pre-Epoch 1 (i.e. before 1883) mapping. The map series is shown, in chronological order and discussed below.

Hodskinson's map of Suffolk 1783

Estate map 1803: A view of the Parish of Farnham in Plomesgate Hundred, Suffolk.

First Series OS map 1837



Tithe map 1841

Hodskinson's map of Suffolk 1783 shows an apparent absence of Palant's Grove. However, this map is not at a scale to have recorded small woods and the approximate location of at least part of the wood is heavily hachured. Hachuring on this map appears to denote topography. Therefore absence on this map is not conclusive evidence of absence of the wood at that time.

Palant's Grove is on the Estate map of 1803. However, its form only equates to the eastern half of the extant woodland. The exact location of the southern boundary is unclear on this map and the area is presumed to equate with the current eastern half of Palant's Grove. Therefore the eastern half of Palant's Grove existed in 1803.

Both the First Series OS map of 1837 and the Tithe map of 1841 show Palant's Grove at its largest extent. The areas to the east and to the west of Palant's Grove as depicted on the estate map of 1803 would have originated from planting between 1803 and 1837.

The assertion that Palant's Grove as shown on the Estate map of 1803 is a plantation is not supported by the evidence. The depiction on this map is not an obvious plantation, having the same woodland symbology as the adjacent Foxburrow Wood ancient woodland, and the 1783 map is not evidence of the wood's absence at that time, as previously discussed. The ancient woodland inventory methodology is inclusive rather than exclusive (Bannister and Sansum, 2018).

This evidence is a clear indication that the eastern half of Palant's Grove existed from 1803, in the same location as today, and is likely to have been extant earlier.

Historical documentary evidence indicates a paucity of woodlands in the general area, but is not sufficiently detailed to indicate locations of smaller woods. Therefore the mapping evidence is the only historical evidence which is informative evidence in this case.

Field surveys

A field survey was undertaken by Anthony Walker and Partners in 1992: A12 Wickham Market to Saxmundham Improvement, detailed ecological assessment, preferred route 38, and is cited in the RPS report. The RPS report shows that four ancient woodland indicator species were present in both Foxburrow Wood and Palant's Grove; ramsons, bluebell, dogs mercury and early purple orchid; and ramsons, bluebell, dogs mercury and field maple, respectively. While this is a relatively low number, these woods are both relatively small and isolated in an intensively manged landscape and have some history of over-planting. Therefore one would not necessarily expect to find significantly higher numbers in such circumstances. The ancient woodland indicator species evidence does not show a difference between Foxburrow Wood and Palant's Grove, which one might expect if Palant's Grove were not ancient.

A site survey by RPS Planning Transport and Environment on 17/11/94 found that both Foxburrow Wood and Palant's Grove were bounded by woodbanks with a ditch. This evidence indicates that the two woodlands are separate distinct woods divided by a north-south track which is now a footpath.

The field survey evidence (both archaeological and ecological) does not show a significant difference between the two woodlands of Foxburrow Wood and Palant's Grove.

Conclusion

Foxburrow Wood and the eastern half of Palant's Grove are ancient woodland and will remain on the ancient woodland inventory. However, there has been sufficient evidence submitted, which follows Natural England's evidence standard, for removal of the western half of Palant's Grove from the Ancient Woodland Inventory. Therefore the site will be removed from the inventory.

The woodland area to be removed is shown, with red hatching, on the map below.

Please note that there may be a delay in amending the Magic database to reflect this decision. The amendment has been made to the inventory and should appear on Magic in mid-March 2020. However this woodland area may be regarded as removed from the ancient woodland inventory from the date of this report.

References

MHCLG (2012) National Planning Policy Framework https://www.gov.uk/guidance/national-planning-policy-framework/11-conserving-and-enhancing-the-natural-environment#paragraph_118

Defra (2018) Ancient Woodland and Veteran Trees: protecting them from development. https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

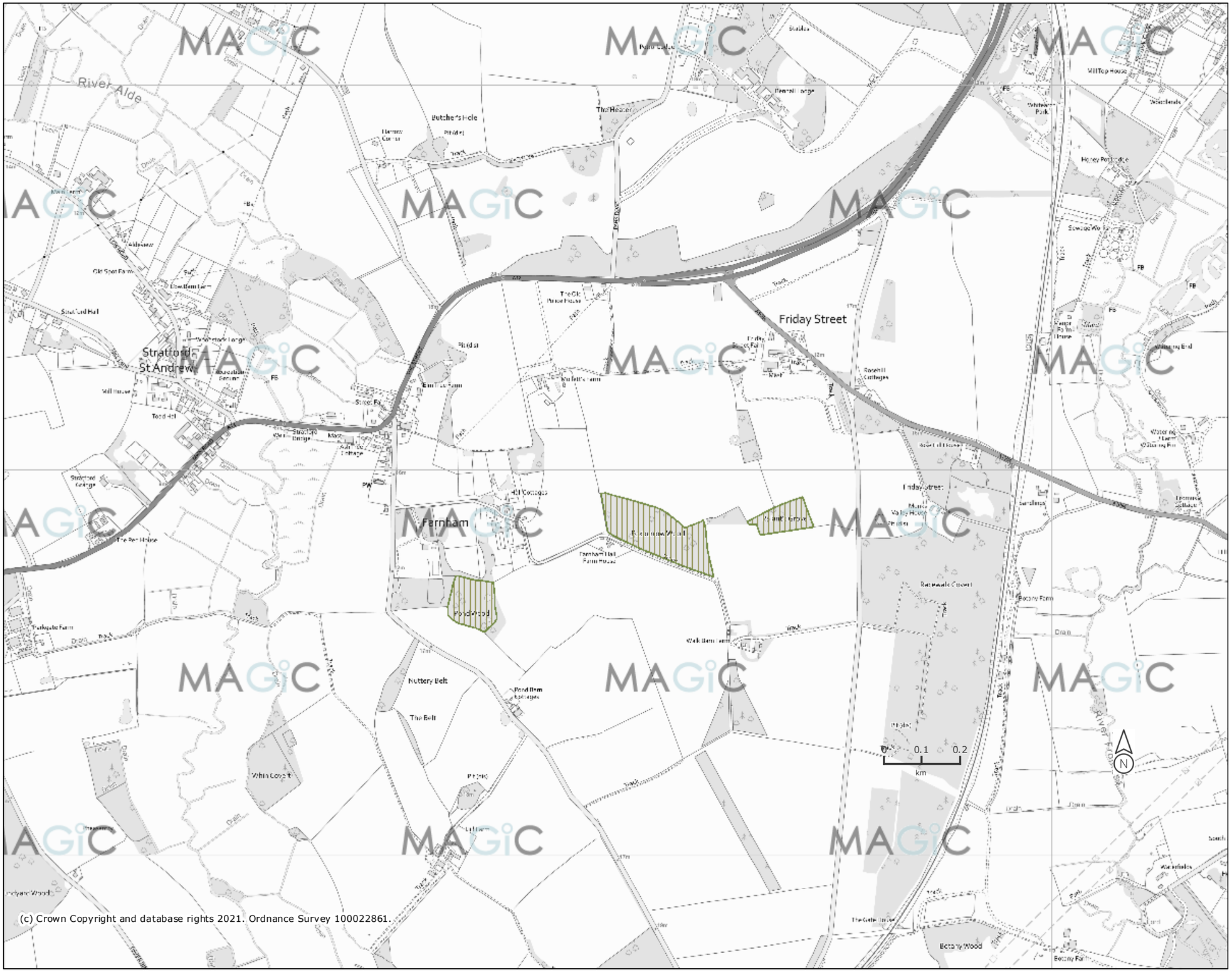
Sansum, P. and N.R. Bannister (2018) Ancient Woodland Inventory Handbook for England. Natural England. NECR248.

Spencer, J.W. and Kirby, K.J. (1992) The Ancient woodland inventory. Biological Conservation.

Appendix 3

Natural England ancient woodland inventory, via MAGIC

Natural England ancient woodland inventory



Legend

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36
xmin = 634300
ymin = 258700
xmax = 639400
ymax = 261200

0 0.15 0.3
km

Map produced by MAGIC on 26 May, 2021.

Bioscan (UK) Ltd
The Old Parlour
Little Baldon Farm
Oxford
OX44 9PU

Tel: +44 (0) 1865 341321
Fax: +44 (0) 1865 343674

bioscan@bioscanuk.com
www.bioscanuk.com