

# **WRITTEN REPRESENTATIONS**

**SUBMITTED ON BEHALF OF**

**DAVID ATTWOOD**

**RELATING TO**

**LAND AT HARP FARM AND LAND AT BURHAM INCLUDED IN THE ORDER LIMIT BOUNDARY OF THE  
DEVELOPMENT CONSENT ORDER APPLICATION FOR THE LOWER THAMES CROSSING**

## EXECUTIVE SUMMARY – GROUNDS FOR OBJECTION

The impact on David Attwood, his farming business and his family, and the ecological impact from the proposed woodland planting, are the grounds for the objection. They may be summarised as follows:

- Loss of 81.9 hectares of arable land puts at risk the financial viability of the farming business, additionally affecting livelihoods of the wider family employed on the farm.
- Fixed overheads will not reduce but be spread over a smaller area, severely impacting profitability. Profitability of N&D Attwood relies on the return from the arable enterprise. Disregarding land that is rented in, offering no long term security of tenure, the land included in the DCO application amounts to approximately 20% of the arable area farmed.
- Approximately 72.3 hectares of the 81.9 hectares is at Harp Farm, one of two main holdings that are together ring fenced. The economic impact felt as a consequence of the loss of land at Harp Farm is exponentially worse than if the same applied to outlying farms.
- Modern farm buildings and grain stores will be made redundant with no prospect of alternative planning uses due to their size, specialist design and location in a rural setting, and other planning policy constraints, including the AONB designation, highways constraints and the proximity to the SSSI.
- Land acquired will be subject to anti social behaviour in the form of fly tipping and joy riding, an issue which plagues the local area. It will be difficult for National Highways to successfully manage this issue by routine security patrols given the size of the area being acquired. If part of reservoir field is included, this anti social behaviour will more easily spill over onto retained land.
- Years of environmental stewardship of the land, creating and enhancing important habitats for some endangered species, will be destroyed by the proposed tree planting.
- According to Defra's Biodiversity Metric 3.1, the proposed woodland planting may lead to a loss of biodiversity units due to the difficulty in creating a lowland mixed deciduous woodland on former arable land of high fertility.

David Attwood makes no further representations relating to any other part of the application.

## **BACKGROUND**

Since first contact on 1<sup>st</sup> February 2022, David Attwood has engaged constructively with National Highways. This culminated in the submission of a Farm Impact Report on 22<sup>nd</sup> February 2023, a copy of which is enclosed at Appendix 1.

This Written Representation draws out the key impacts on David Attwood, his family and farming business, providing the justification for his objection to the proposed Lower Thames Crossing.

Written Representations should be read in conjunction with the report at Appendix 1.

## **OBJECTIONS**

### *1) The proposed compulsory acquisition of 82 hectares of arable land would have a severe impact on the viability of the N&D Attwood farming business*

The removal of 82 arable hectares would concentrate the financial overheads of the farm business onto a smaller area. A report by Laurence Gould, attached to the Farm Impact Report, states that this loss of land would increase the cost of farming the remaining 468 ha by £11,234 per annum. In perpetuity, the value of the reduction in economies of scale is calculated to be £471,828.

It should be noted that Laurence Gould based their calculations on the current arable area farmed of 550 hectares. The arable land at Sharsted Farm has been included in these calculations and extends to approximately 80 hectares. Sharsted Farm is occupied on a year to year Farm Business Tenancy, and there are active discussions between the Landlord and David Attwood to bring this tenancy to an end, further compounding the economic impact of the proposed scheme.

The land at Harp Farm is central to the main farming operations of the N & D Attwood farming business and some of the most productive land. The loss of this land would be very difficult to replace in the locality. It is widely reported that there remains a short supply of agricultural land to the market, for both sale and rent. Furthermore, Harp Farm and Boxley Grange Farm, the principle holdings of N&D Attwood, occupy a significant portion of the land between the Medway Towns and Maidstone. There is simply very little other land capable of being farmed as part of an arable holding in the locality, irrespective of the fact the owners may be unwilling to sell or let their land. Any land bought at a distance from Harp Farm would be less economic to farm.

### *2) The proposed compulsory acquisition of 72.3 hectares of arable land at Harp Farm ruins succession plans and leaves an over equipped farm*

David Attwood is 66 years of age and attention has naturally turned to succession planning. Both Harp Farm and Boxley Grange Farm are equipped with buildings suitable for grain storage and general farm storage, as well as farmhouses. David has two children, Robert and Victoria. David has engineered a situation through a lifetime of hard work whereby his children would each inherit a residential farm, equipped with farm buildings, from which it would be possible to operate a small but viable farming business.

The area of land at Harp Farm included in the Development Consent Order application is approximately 72.3 hectares. This reduces Harp Farm to an area of 147.7 hectares of productive arable land. The balance of land at Harp Farm is of conservation grazing value only. It would not be possible to operate a viable farming business on this area of productive land.

The loss of land at Harp Farm would not simply disrupt David Attwood's succession plans, it would leave a farm with a range of modern farm buildings with no obvious alternative use in planning terms. The farm buildings are within the Kent Downs AONB, in a rural location adjoining a SSSI and served by an inadequate rural road network. This would negate any possibility of achieving a change of use of the farm buildings to a commercial or residential use.

- 3) *The proposed inclusion of part of Reservoir Field leaves no physical barrier between David Attwood's retained land and the land proposed to be acquired by National Highways, leading to an inevitable issue of anti-social behaviour.*

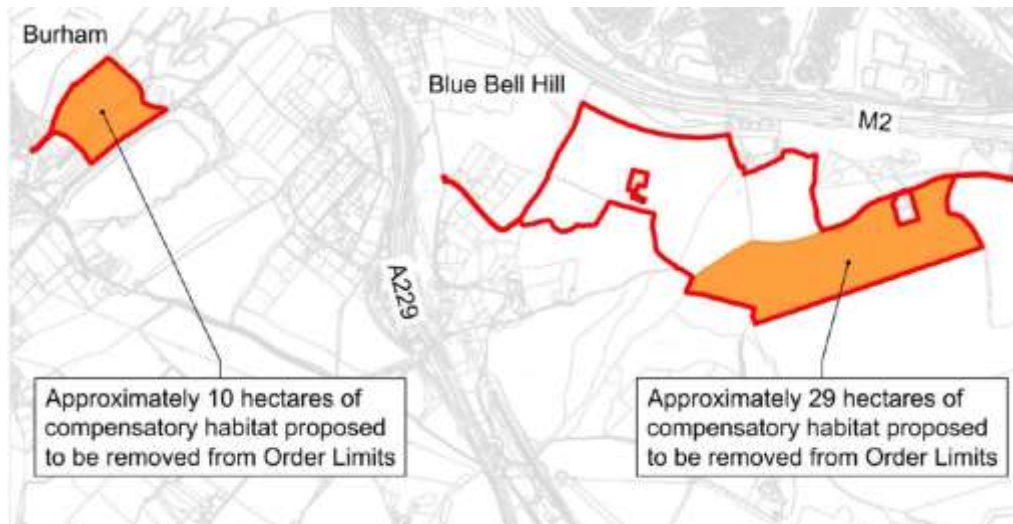
David Attwood's land and that of his neighbours is plagued by anti social behaviour. This is primarily in the form of fly tipping and joy riders running over crops. The Order Limit Boundary presently splits Reservoir Field, requiring a new physical boundary to be created.



Whilst it is acknowledged that National Highways would fence and hopefully hedge any new boundary, this will not be respected and access will be taken.

The inclusion of the Reservoir Field would also leave the boundary of Boxley Warren (around the headland of Westfield Woods) exposed and out of David's control. Significant sums, in the order of many thousands of pounds, have been invested in trying to secure and protect this important habitat from anti-social activities.

This problem will be significantly reduced if the existing physical boundary of Bell Lane is used, with its established hedgerow. This is aligned to National Highways consultation to vary the Order Limit Boundary to reduce the total area required, which resulted from the representations we submitted in the form of the attached Farm Impact Report.



- 4) *The proposed compulsory acquisition of 82 hectares of arable land for tree planting would destroy priority habitat identified in the Kent Nature Partnership Biodiversity Strategy and destroy the habitats created through successive Countryside Stewardship Scheme agreements.*

David Attwood has operated a successful commercial farming operation whilst being an environmental custodian of his land. Successive Countryside Stewardship Scheme agreements have enhanced the ecological value of the farm, creating new and enhancing existing habitats, benefiting a number of protected and endangered species. The proposed tree planting would destroy a number of these habitats.

It is worth noting that David has worked with Natural England and Kent Downs AONB for many years. This has included voluntarily creating an 85 hectare Local Nature Reserve, known as Boxley Warren. This is a SSSI and of European importance for the ancient Yew Woodland as well as being renowned for Orchids and rare grassland.

This is not the first time David has been affected by a National Highways project. In the early 2000s, the M2 was widened and David lost 8 hectares of land. The land was also taken for woodland planting and at huge expense ancient woodland trees were transplanted from Cobham. No irrigation was provided, the ancient tree roots died and no further management resulted in a burden of noxious weeds and invasive tree species. It is for this reason that there is significant concern as to the long term outcome of the proposed woodland planting.

It is submitted that newly planted trees would be smothered by acres of tall swards of invasive weeds interspersed by motorbike tracks and fly-tipping. For a significant period of time, the new planting will need to be very carefully managed and be monitored by security teams.

- 5) *The proposed woodland planting will lead to a loss of biodiversity units according to Defra's Biodiversity Metric 3.1*

It is submitted that the proposed compensatory woodland planting would need to align with the adjoining ancient semi natural woodland, in terms of their composition, design and management system, whilst supporting the landscape character of the area. It is therefore relevant to consider how

the creation of such deciduous woodland would be assessed using DEFRA's Biodiversity Metric 3.1, being the Government's formal policy tool for measuring and accounting for nature losses and gains resulting from development or changes in land management.

The woodland habitat definition, taken from UKHab Habitat Definitions Guide, is as follows:

## w1f Lowland mixed deciduous woodland

### Definition

Lowland mixed deciduous woodland includes woodland growing on the full range of soil conditions, from very acidic to base-rich; occurs largely within enclosed landscapes, usually on sites with well-defined boundaries, at relatively low altitudes, although altitude is not a defining feature.

### Landscape and Ecological Context

Includes most established semi-natural woodland in southern and eastern England, and in parts of lowland Wales and Scotland. Many are ancient woods and they include classic examples of ancient woodland in East Anglia and the East Midlands.

### Species

There is great variety in the species composition of the canopy layer and the ground flora. Pedunculate Oak *Quercus robur* is generally the commoner oak (although Sessile Oak *Quercus petraea* may be abundant locally) and may occur with virtually all combinations of other locally native tree species.

### Position in the Classification

Primary

Level 4

### Edition

Basic and Professional

### More detailed categories available

3 subset categories

### Categories at the next level

w1f5 w1f6 w1f7

### Status

Priority Habitat

### Feature Type

Area

As noted in Native Ecology's report included as an appendix to the Farm Impact Report at Appendix 1, the creation of a lowland mixed deciduous woodland will likely lead to a loss of biodiversity units due to the difficulty in establishment on fertilised arable land and the complexities that surround the need for long term management.

David has endeavoured to increase the fertility of the land over years of farming. P and K indices now sit at 3-4 and the organic matter is 8%. It is submitted that if the land is not farmed the land would allow ruderal species to rapidly establish - notably Hemlock, Giant Hogweed and Ragwort. It would be extremely detrimental if these species encroach on Boxley Warren SSSI and the retained adjoining farmland.

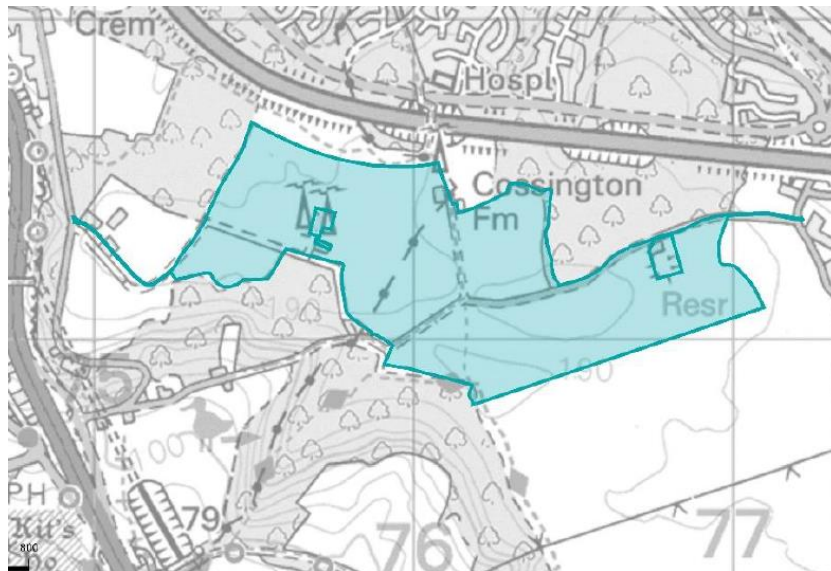
A strategy which will result in a reduction in biodiversity and potentially cause invasive weeds to negatively affect the adjoining SSSI cannot be said to effectively mitigate harm to protected habitat and is therefore an inappropriate compensation strategy according in part to the Government's own policy tool.

## Appendix 1

## LOWER THAMES CROSSING

### A REPORT ON THE IMPACT ON DAVID ATTWOOD AND HIS FAMILY AND THE FARMING BUSINESS, N & D ATTWOOD OF THE PROPOSED ACQUISITION OF LAND AT HARP FARM, BOXLEY AND LAND AT BURHAM

#### HARP FARM



#### LAND AT BURHAM



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## **INTRODUCTION**

This report has been prepared by Jonathan Booth MRICS FAAV, the Agent acting for David Attwood on the matter of the inclusion of land within the order limit boundary of the Development Consent Order application for the Lower Thames Crossing. This report will outline the impact on the Attwood family and those families that rely on the N&D Attwood business, as well as bring together the expert analysis undertaken by Farm Business Consultants, Laurence Gould, and Ecologists, Native Ecology.

## **HISTORY OF THE ATTWOOD FAMILY'S FARMING IN NORTH KENT**

David Attwood's grandfather, William Attwood, was born at Sharsted Farm, now situated within the Medway Unitary Authority, and approximately 2.5 miles north of Harp Farm and Grange Farm, the two main holdings of N&D Attwood.

William Attwood began his farming endeavours by rearing pigs in Lordswood, and then became tenant of Sharsted Farm during World War 2. William had four sons, one of which was Norman Attwood, David's father.

Sharsted Farm was purchased from the Church in the early 1950s by W T Attwood & Sons. In 1972 part of the farm was sold for development, enabling Norman Attwood to leave the farming partnership and set up on his own by purchasing Harp Farm in 1974. In 1983 David Attwood bought Cossington, and in 1984 the N&D Attwood farming partnership was created. Over the next forty years, David and Norman purchased additional land, reinvesting to grow the farming business for future generations. Norman Attwood passed in 2016 and since then David has been a sole trader.

## **FARM BUSINESS IMPACT**

Laurence Gould Farm Business Consultants were instructed by David Attwood to consider the impact on the N&D Attwood farming business of losing 81.9 hectares of arable land. The report is contained in Appendix 1.

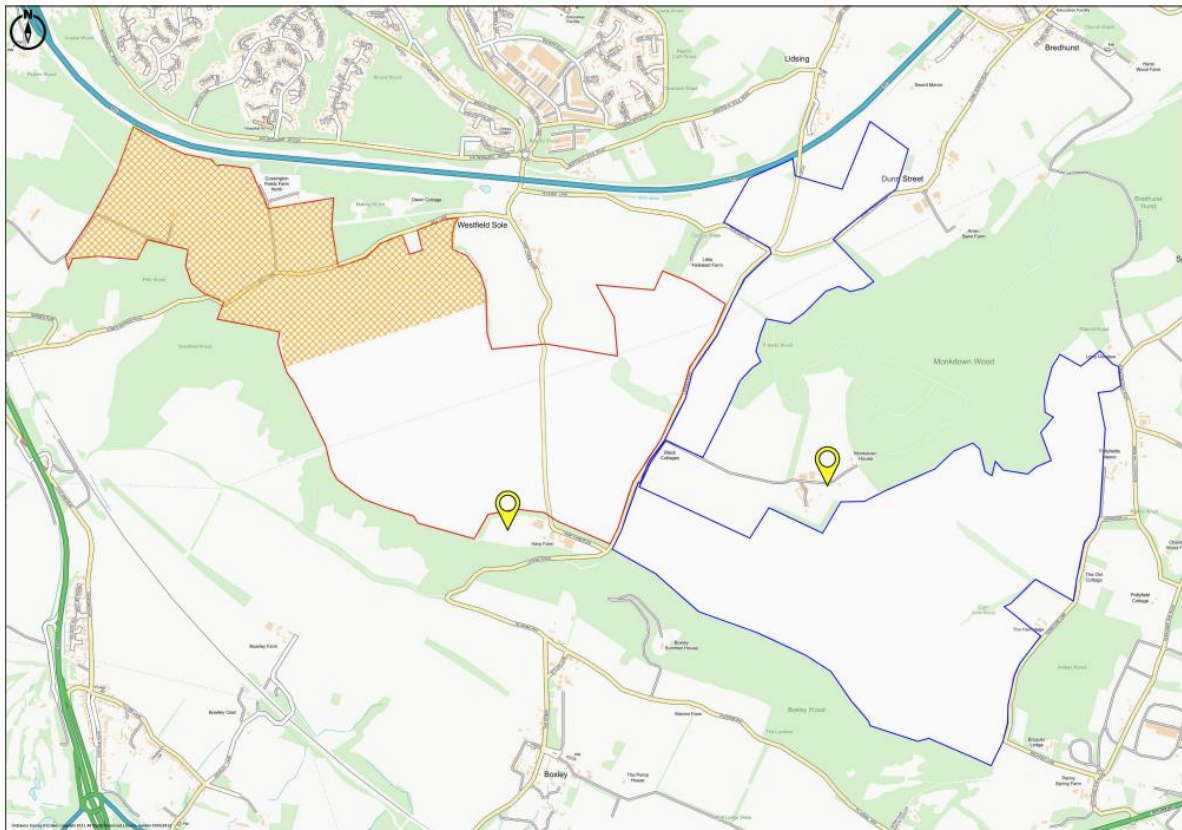
Laurence Gould's findings show the concentration of financial overheads of the farm business onto a smaller area would increase the cost of farming the balance of land by £11,234 per annum, valuing the reduction in economies of scale at £471,828.

Laurence Gould have based their calculations on the current arable area farmed of 550 hectares. The arable land at Sharsted Farm has been included in these calculations and extends to approximately 80 hectares. Sharsted Farm is occupied on a year to year Farm Business Tenancy, providing the farming business with no long term security of tenure. The farm is owned by Glenda Crumpton, sister of David Attwood and mother of Alastair Crumpton, one of the farm workers. Prior to the inclusion of the compensatory land in the proposed Scheme, the parties were considering bringing this tenancy to an end. By the time the Development Consent Order is granted, Sharsted Farm may have been surrendered, compounding further the financial impact on the farming business.

## **SUCCESSION PLANNING**

David Attwood is 65 years of age. In recent years attention has naturally turned to succession planning, both in respect of leaving viable farming businesses and managing the distribution of assets.

The main two farm holdings are Harp Farm and Boxley Grange Farm. These farms are both equipped with buildings suitable for grain storage and general farm storage, as well as farmhouses. The arable areas are shown on the below edged red (Harp Farm) and blue (Grange Farm) –



The present day area splits and availability of farm buildings suitable for modern agricultural operations are as follows:

Grange Farm

200ha arable  
25ha permanent grass  
120ha wood

800t capacity grain store  
1,200 sq m general purpose storage buildings

Harp Farm

220ha arable  
45ha wood  
35ha rough grazing in stewardship (Boxley Warren Local Nature Reserve)  
10ha grass for hay (ground water protection zone)

2,500t capacity grain storage  
720 sq m general purpose storage buildings

David has two children, Robert and Victoria. David has engineered a situation through a lifetime of hard work whereby his children would each inherit a residential farm, equipped with farm buildings, from which it would be possible to operate a small but viable farming business.

The area of land at Harp Farm included in the Development Consent Order application is approximately 72.3 hectares. This reduces Harp Farm to an area of 147.7 hectares of productive arable land. The balance of land at Harp Farm is of conservation value only. It would not be possible to operate a viable farming business on this area of productive land, especially when you take account of the loss of a direct support payment.

The loss of land at Harp Farm would not simply disrupt David Attwood’s succession plans, it would create a non-viable farm, over equipped with modern farm buildings with no obvious alternative use in planning terms. It is submitted that the farm being within the AONB, in a rural location and served by an inadequate road network would negate any possibility of achieving a change of use of the farm buildings to a commercial or residential use.

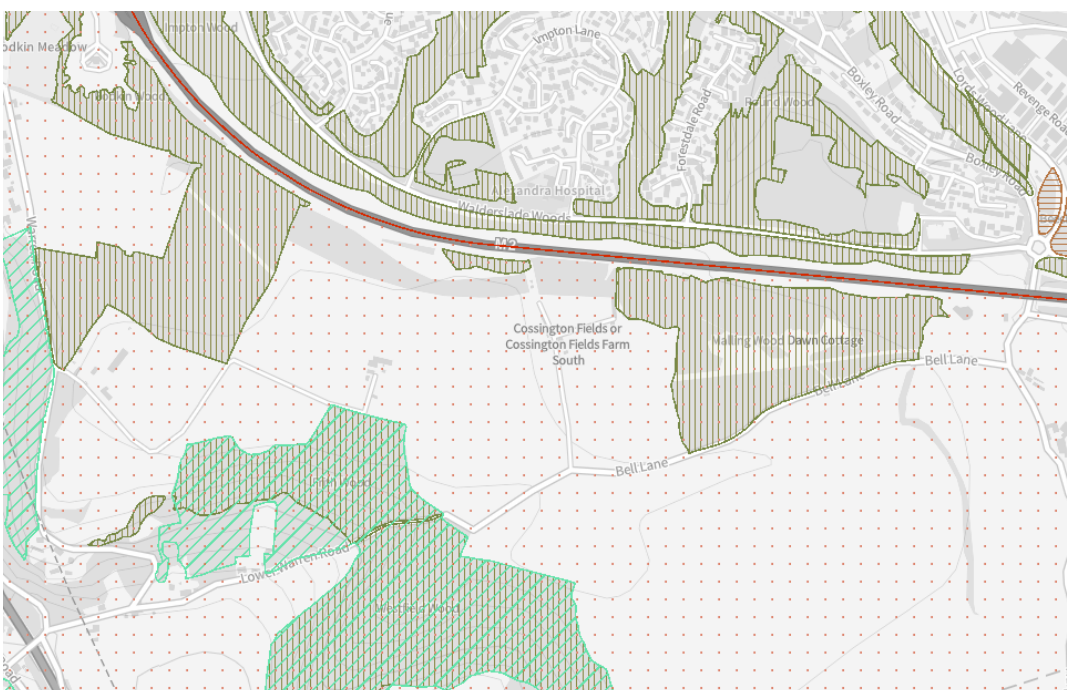
## ECOLOGICAL APPRAISAL

Native Ecology, a Registered Practice of the Chartered Institute of Ecology & Environmental Management, were instructed by David Attwood to appraise the ecological impact of the proposed scheme. A copy of the appraisal report, prepared by Cali Tardivel MSc BSc QCIEEM, is contained at Appendix 2.

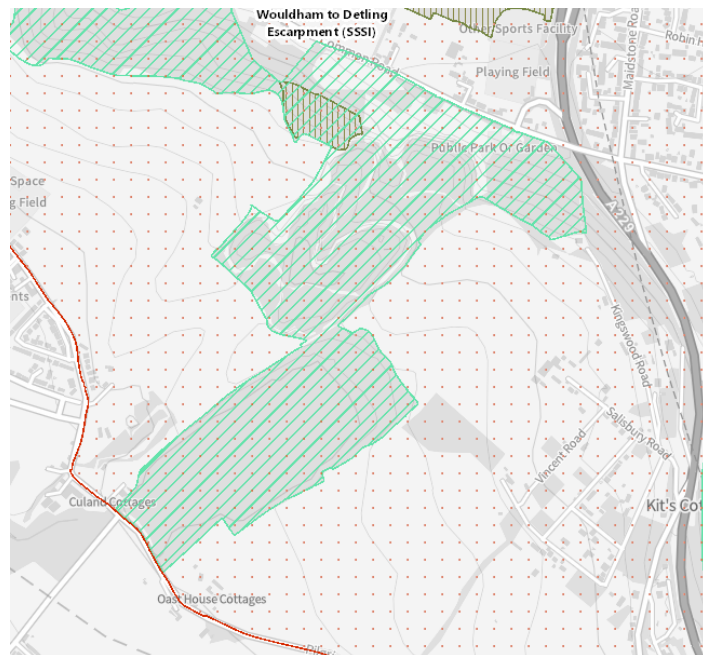
The report identifies the existing habitats and species that will be negatively affected as a result of the compensatory woodland planting scheme. The subject land being included in successive Countryside Stewardship Scheme agreements accentuates the potential losses. The report also notes the difficulty in creating new woodland habitats on land farmed intensively as part of an arable operation.

It is understood from discussions had with National Highway’s representatives prior to the Development Consent Order application being submitted that the proposed habitat for the land at Harp Farm and land at Burham would be new woodland, delivered at a “landscape scale”.

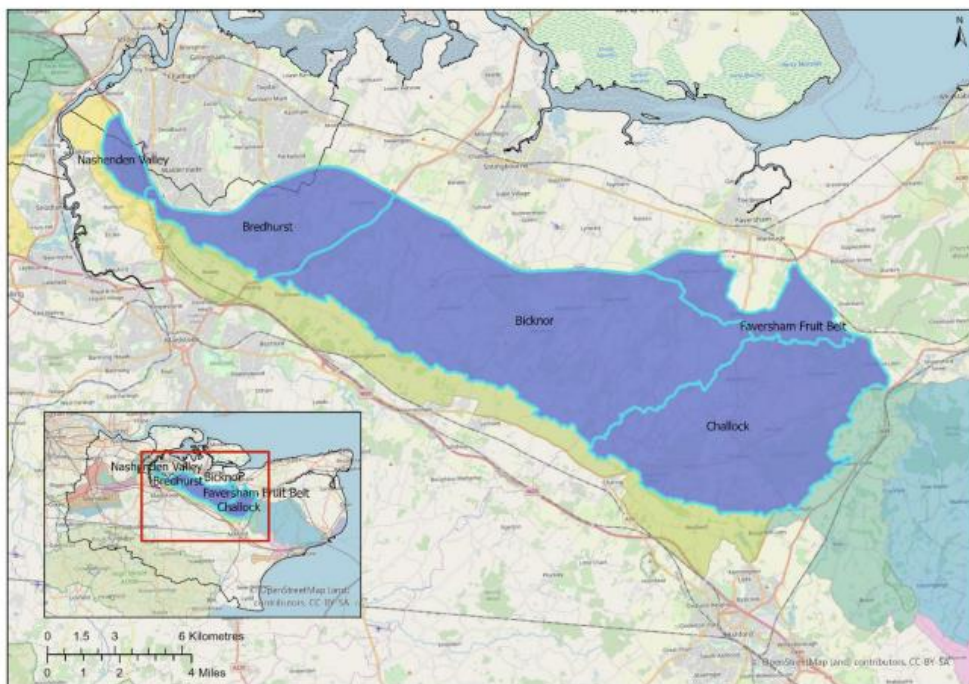
The new woodland at Harp Farm would connect the Wouldham to Detling SSSI with ancient semi natural woodland. Extracts below from Magic Map showing the SSSI line hatched turquoise and ancient semi natural woodland line hatched green –



The new woodland at Burham would abut the SSSI –



Whilst the Development Consent Order application does not specify in detail the makeup of the compensatory habitat, given their location in the Kent Downs AONB and proximity to the SSSI, the descriptions of the existing woodland habitats are relevant. Extracts copied below, with our emphasis shown in bold and underlined>, from the Landscape Character Assessment 2020, which informs the AONB Management Plan, for the “Nashenden Valley” and “Bredhurst” areas and the SSSI citation –



*Location map for West Kent Downs LCA, also showing Local Character Areas of Bredhurst, Bicknor, Challock and Faversham Fruit Belt*

## Nashenden Valley

*This is an open, sweeping landscape of large fields and **large blocks of dense, deciduous woodland. Much of the woodland is ancient, although some has been replanted,** and there are some small pastures and clearings along wooded edges. In recent years the area has seen extensive grassland restoration through arable reversion. The dominant landform and **continuity of woodland** create a strong sense of place. From the top of the ridge at the western edge of the area there are long views over the Medway Valley.*

## Bredhurst

*This landscape is a mosaic of **deciduous woodland (much of it ancient)**, large arable plateaux and steep, rolling valleys. There are also pockets of grassland (including Queen Down Warren Nature Reserve) and some surviving orchards including distinctive old cherry orchards, although many have been lost in recent years. Much of the arable plateaux are intensively farmed, with few hedges, and visually contained in the distance by belts of woodland. Traditionally woodland has been located on ridges. Roadside hedgerow species include blackthorn, field maple, hawthorn, hazel, holly and sycamore, but some field boundary hedgerows have been lost and replaced with fences.*

The citation for the Wouldham to Detling SSSI states –

*“This 10 km stretch of the chalk escarpment to the north of Maidstone includes representative examples of woodland, scrub and unimproved grassland habitats on chalk, which support a number of rare and scarce species of plants and invertebrates.... **Although most of the woodland is recent in origin, it has already acquired a rich community of plants and animals. The tree canopy is dominated by various proportions of beech, ash, whitebeam, wild cherry, silver birch and yew. Understorey shrubs include hazel, hawthorn, midland hawthorn, elder and privet, while the ground flora includes dog’s mercury, ivy, lords-and-ladies and spurge laurel.**”*

The Kent Downs AONB Management Plan sets out the main issues, opportunities and threats for woodland within the AONB. Para. 7.11 of the Plan states –

*There is a need to ensure that markets for woodland products secure sustainable woodland management which **support landscape character,** wildlife and the local economy....[and]...Restocking on woodland sites, woodland creation and tree planting needs to be resilient to future climates **mixing natural regeneration and planting schemes** use a diverse range of appropriate species which are certified as bio secure and ideally of local provenance.*

It is submitted that the proposed compensatory woodland planting would need to align with the existing habitats of ancient semi natural woodland, in terms of their composition, design and management system, whilst supporting the landscape character of the area. It is therefore relevant to consider how the creation of such deciduous woodland would be assessed using DEFRA’s Biodiversity Metric 3.1, being the Government’s formal policy tool for measuring and accounting for nature losses and gains resulting from development or changes in land management.

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### Landscape and Ecological Context

Includes most established semi-natural woodland in southern and eastern England, and in parts of lowland Wales and Scotland. Many are ancient woods and they include classic examples of ancient woodland in East Anglia and the East Midlands.

### Species

There is great variety in the species composition of the canopy layer and the ground flora. Pedunculate Oak *Quercus robur* is generally the commoner oak (although Sessile Oak *Quercus petraea* may be abundant locally) and may occur with virtually all combinations of other locally native tree species.

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### More detailed categories available

3 subset categories

### Categories at the next level

w1f5 w1f6 w1f7

### Status

Priority Habitat

### Feature Type

Area

As noted in Cali Tardicel's report, the creation of a lowland mixed deciduous woodland will likely lead to a loss of biodiversity units due to the difficulty in establishment on fertilised arable land and the complexities that surround the need for long term management, matters on which the DCO application is silent.

It is therefore submitted that a strategy which will result in a reduction in biodiversity cannot be said to effectively mitigate harm to protected habitat and is therefore an inappropriate compensation strategy according to the Government's own policy tool.

## Family Impact

N&D Attwood relies almost entirely on family for both clerical and farm work. The impact on the farming business is also therefore a direct impact on the livelihoods of multiple family members. The family members are:

David Attwood – owner

Robert Attwood (son) – farm worker

Alastair Crumpton (nephew) – farm worker

Victoria Attwood (daughter) – office manager and farm worker

Julie Attwood (wife) – office assistant

Julie Attwood and Victoria Attwood are employed on a part time basis.

David Attwood strives to operate at a profit to secure the livelihood of his family. As reported by Laurence Gould, the loss of 81.9 hectares will not allow for a reduction in fixed costs, the fixed costs will simply be spread across less area, severely impacting the viability of the business. The family understand these implications all too well which has already caused considerable worry, anxiety and stress.

In addition to the family, Brian Pye is employed on a full time basis as a farm worker. Brian has been employed by the family for nearly thirty years and it is understood that he is entirely reliant on his salary for his livelihood. Brian lives in a cottage on the farm and is key to the success of the business.



John is aware of the proposals and the implications on the business, causing him equal levels of concern.

## **CONCLUSION**

The expert analysis by Laurence Gould and Native Ecology confirms there will be a significant impact on the farming business and the existing ecology.

The concentration of financial overheads onto a smaller area calls into question the financial viability of the business. This affects the livelihoods of the family and a key worker that has been working and living alongside the Attwoods for nearly thirty years. The stress, anxiety and worry this is causing all parties must not be underestimated. The appraisal by Laurence Gould has rightly taken account of the existing farming operation. In the short term the arable area is likely to reduce by a further 80 hectares through the loss of Sharsted Farm, compounding the problem. If this same appraisal were conducted for Harp Farm and Grange Farm in isolation, to align with David's succession plans, there would be no question as to the non-viability of the future farming arrangements.

Through successive stewardship agreements, David has enhanced the natural environment on his land holdings, whilst producing food, both now key objectives of the Government, as set out in the latest Policy Paper – “Environmental Land Management (ELM) update: how government will pay for land-based environment and climate goods and services”, dated February 2023. As set out in this report, the proposed compensatory habitat may result in a reduction in biodiversity, which not only undermines all of David's hard work but also National Highways case of acting in the compelling interests of the public.

APPENDIX 1 – FARM IMPACT ASSESSMENT BY LAURENCE GOULD





**Assessment into the impact on the farm business of N&D Attwood  
of creating compensatory habitat at Harp Farm, Maidstone  
for the Lower Thames Crossing development**

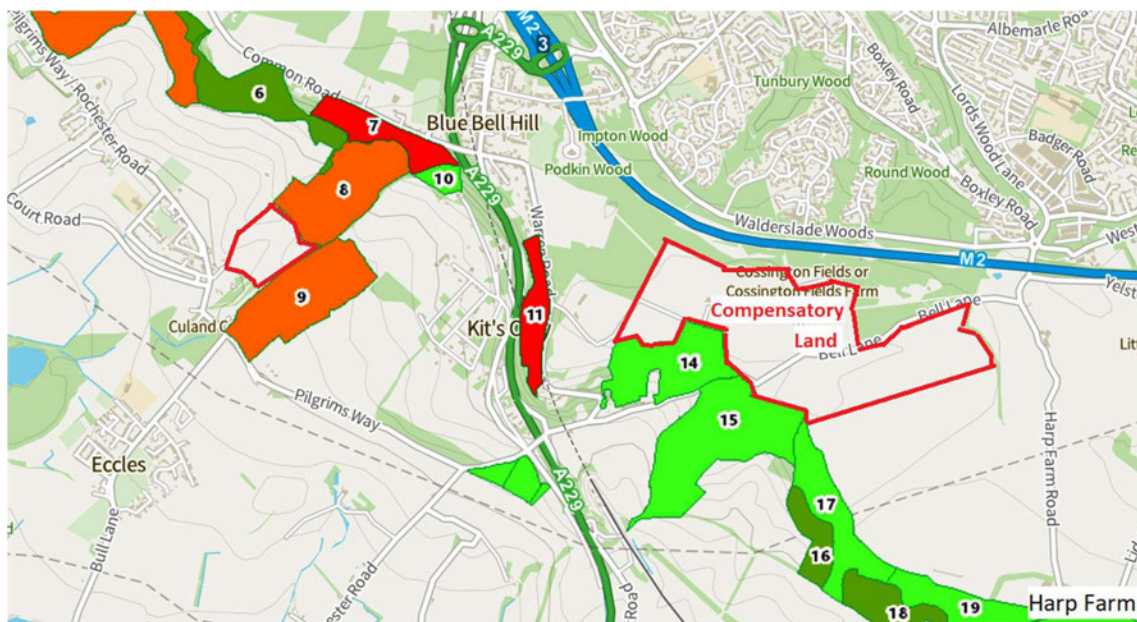


Image showing the Compensatory Land in relation to local SSSI Units (red = unfavourable – green = favourable)

Prepared by:  
Charles Baines  
Laurence Gould Partnership Ltd

7<sup>th</sup> February 2023

## **INTRODUCTION**

### **Terms of Reference**

Laurence Gould Partnership Ltd has been instructed by N&D Attwood to provide an assessment of the impact on the Attwood farm business because of the proposed compulsory purchase of 82ha of the farm ('the Compensatory Land'). This is arable land proposed for planting with trees under the assumption this will compensate for increased nitrogen deposition because of the Lower Thames Crossing ('the Scheme') and also enhance surrounding ecological designated sites. The local ecological site to the Compensatory Land is the Wouldham to Detling Escarpment SSSI.

### **Scope of the report**

The assessment will ultimately quantify the economic impact of the proposal not mitigated by compulsory purchase at market value, but will also mention in passing the ecological output of the farm that will be forfeit as a result of the compensatory scheme.

### **Status of the Author**

Laurence Gould Partnership Ltd (LGP) are the oldest private farm business consultancy in the UK having been founded by Laurie Gould in 1959. They therefore call on over 60 years of experience of advising farm businesses about the economics of agricultural production and rural development. Charles Baines is a farm business consultant employed at LGP's Newmarket office since 2010 and is experienced with the financial management of all types of farming systems in Eastern England.

### **Disclaimer**

This report is compiled using information provided by Jonathan Booth of Lambert & Foster chartered surveyors and David and Victoria Attwood of N&D Attwood from a site meeting on 19<sup>th</sup> January 2023. The report is supplied in good faith to assist the acquiring authority appreciate the impact of the compulsory purchase on N&D Attwood and should not be used for any other purpose without the consent of the author.

## BACKGROUND

N&D Attwood is a farming business owned by David Attwood in between Maidstone and the Medway towns in Kent. The business farms 550ha of arable land in a combinable crop rotation of Wheat (N:P:K requirement: 190:60:50) alternating with Oilseed Rape (190:55:45) Beans (0:45:50) Barley (150:55:40) or Rye (100:50:35). Average annual nutrient requirements for this rotation are therefore 140kg Nitrogen, 55kg Phosphorous, 45kg Potassium per hectare.

The farm employs four full time equivalents in addition to David. Full time are his son Robert and nephew Alastair Crumpton, along with a non family lead worker. David's wife Julie and his daughter Victoria share administration of the business.

The business consists of several farmsteads and land holdings: Harp Farm and Grange Farm are in one contiguous block on the North facing dip slope of the North Downs. Sharsted Farm, Scarborough Farm and land at Burham are separate holdings distant from the main two holdings. The arable area is split as follows:

Harp Farm: 220ha equipped with 2,500 tonnes of grain storage

Grange Farm: 200ha equipped with 800 tonnes of grain storage

Land at Burham and Scarborough Farm: 50ha

Sharsted Farm: 80ha

Sharsted Farm is rented off David's sister on a year to year Farm Business Tenancy. All the other land is owned and occupied by David.

The total area occupied by the farm business currently justifies a full fleet of arable machinery and equipment of a size and capacity appropriate to the existing output.

## Geology/Hydrology

Despite being over chalk bedrock the soil on the main block of Compensatory Land at Harp Farm is a thick layer of clay loam described by Cranfield Soilscales as 'slightly acid loamy and clayey soil with impeded drainage and moderate to high fertility' and is of the Batcombe series. Historically this has been difficult for tillage and was consequently graded 3b by MAFF after the War. However modern machinery has made this land readily cultivatable, and the moisture retention of the clay means that wheat can consistently yield over 10t/ha in hot weather, despite a lack of water.

The adjoining SSSI units are on the South facing escarpment of the Downs where the soil is of the Upton series. This is described in Soilscales as 'freely draining shallow lime-rich soil over chalk with moderate fertility'. The hydrology of the hill on which Harp Farm is located means that the instance of nutrients leaching from the impeded Batcombe series to the freely draining Upton series is low. Further to this, Harp Farm is on the North facing dip slope that drains away from the SSSI, not towards it. This not only negates the leaching of nutrients into the SSSI but also nullifies runoff because this flows North and away from the SSSI.

It might be suggested that both soil series share the same groundwater, but typically groundwater under chalk escarpments is more than 100m below the surface. Historical evidence of this is the fact that the settlements on the South side of the Downs are all along the spring line at the foot of the escarpment where the groundwater emerges.

The Wouldham to Detling Escarpment is a classic example: The top of the escarpment is 190m AOD; the mean height of the SSSI baseline is 130m, and the nearest village of Boxley is below 90m. Therefore the groundwater under the Down is too deep to be as source of nutrients for the SSSI.

Interestingly the Compensatory Land is not in the Nitrate Vulnerable Zone (NVZ). The NVZ does not encroach North the Southern boundary of the main Compensatory Land. This indicates that the Environment Agency are not concerned about nitrates from the Compensatory Land polluting the groundwater or local surface waters.

### **Countryside Stewardship**

A separate ecological report has been commissioned, but this assessment will nevertheless comment on the ecological output of the farm business:

The farm has been in environmental stewardship for 2 decades and is currently in a Higher Tier Countryside Stewardship agreement until at least 2026 and most likely beyond. The following management options would be displaced by the planting of trees on the Compensatory Land:

10,800m<sup>2</sup> of 4-6m buffer strips on cultivated land

10,000m<sup>2</sup> of flower rich plots

1,694m of hedgerow management

4,800m<sup>2</sup> of management of woodland edges on arable land

1,164m of new hedge planting.

These options fulfil the 3<sup>rd</sup> Statement of Environmental Objectives for the National Character Area, as follows: "Manage and enhance the productive *mixed farming landscape* of the North Downs and the mosaic of semi-natural habitats including the internationally important chalk grassland. Promote sustainable agricultural practices to benefit soils, water resources, climate regulation, biodiversity, geodiversity and landscape character *while maintaining food provision.*"

In particular, Lapwing and Redshank are Priority Target Species on the Compensatory Land which benefit from the open arable mosaic. Lapwing especially prefer to nest in low open cover in the Spring so that they can see predators approaching. Ideally this low cover should adjoin rougher vegetation for foraging. Lapwings, like Grey Partridges, are a typical indicator species that thrive in varied open habitat and would be displaced by the closed uniform habitat caused by a tree plantation. These species will have to find somewhere else to nest/forage.

That said the Higher Tier agreement also includes 480,000m<sup>2</sup> of the SSSI in a Woodland Improvement management option. This is in conjunction with the Restoration and Management of Species Rich Grassland sharing the escarpment. As can be seen on the image on the front cover of this report, the SSSI units adjoining the main block of Compensatory Land at Harp Farm are all in Favourable condition or Recovering (shaded green). This is compared to the outlying units that are Unfavourable or Declining (shaded orange or red) because they have not had the benefit of being influenced by the Attwood's management practices. It is inequitable that the farm business that has actively managed the SSSI to improve its status is having its adjoining arable land taken away when this arable land was managed in sympathy with the SSSI.

## ECONOMIC IMPACT

Despite the 82ha being taken, the farm will still need to employ the 4 full time equivalent staff in order to fulfil all the agricultural functions required by such an enterprise. The same salaries will have to be supported by a smaller area of production.

Likewise the comprehensive fleet of machinery and equipment is the optimum scale for 550ha. The fleet's current size and capacity will be slightly too big for 468ha and the difference will not be worth the cost of part exchanging equipment for only marginally smaller machines. As with the farm salaries, the non variable servicing costs and time devaluation represented by Depreciation in the farm tax accounts will have to be borne by a smaller working area.

The farm is equipped with 3,300 tonnes of grain storage. Removal of 82ha will reduce this requirement by 600 tonnes. This is storage space that therefore becomes redundant, yet still needs maintaining. It might be suggested that this vacant space could be let for non agricultural use. However planning permission would be required for this and approval cannot be assumed because the buildings are in an AONB and have poor access from the highway.

The farm tax accounts do not currently include depreciation of buildings, but given that the grain storage occupies some 1,500m<sup>2</sup>, the buildings are worth an estimated £237,600. Such buildings are assumed to have a working life of 50 years by HMRC and hence depreciate at 2% per annum – although HMRC now allow 3%. At 2% this equates to £4,750pa. The significance of these figures will become evident below.

### Recent Performance

An analysis of the farm tax accounts shows the following economic performance by the core agricultural activity of N&D Attwood over the last few years. In the following assessment the Direct Costs (seeds, chemicals, fuel, etc that change with variations in crops or area) are deducted from the turnover produced. The ex EU 'subsidy' known as the Basic Payment (BPS) is also deducted from this turnover because the BPS is received even if crops are not produced and in any case will be decreasing to zero by 2028:

YEAR TO 31 <sup>ST</sup> OCTOBER:	2018	2019	2020	2021	Average
<b>Agricultural Turnover</b>					
<b>Basic Payment</b>					
<b>Direct Costs</b>					
<b>Net Margin</b>					

Over 550ha:  
Average land price:  
Return on land value: 2.41%

By comparison, annual market rents for combinable crop land are now circa £550/ha, and arable land capital values at least £25,000/ha. This represents a 2.2% return on asset value.

Although the net margin will be forfeit over the 82ha compulsory purchased, amounting to a margin reduction of [REDACTED] this would be compensated by the acquiring authority paying the market value for the land. The market value would be a capitalisation of the net margin lost. However this does not take into account the collateral damage to the business economics in terms of reduced economies of scale.

## Reduction in Economies of Scale

Further analysis of the farm accounts reveals the following Indirect Costs or 'Overheads' that remain constant with variations in cropping and area. These would not be significantly reduced by the loss of 82ha, and therefore concentrated on the remaining 468ha:

OVERHEADS TO 31 <sup>ST</sup> OCTOBER:	2018	2019	2020	2021	Projected
<b>Wages &amp; NIC</b>					
<b>Pensions</b>					
<b>Farmer's net drawings</b>					
<b>Property Maintenance</b>					
<b>Office &amp; Telephone</b>					
<b>Subs</b>					
<b>Insurance</b>					
<b>Electricity &amp; Water</b>					
<b>Motor Expenses</b>					
<b>Advertising</b>					
<b>Bank Charges</b>					
<b>Loan interest</b>					
<b>Professional fees</b>					
<b>Annuity</b>					
<b>Machinery depreciation</b>					
<b>Building depreciation</b>			not included in tax accounts		_____
<b>TOTAL</b>					_____
				Over 550ha	
				Over 468ha	_____
				Difference:	£137/ha
				Over 82ha	£11,234pa
				Capitalised at 42YP	<b>£471,828</b>

As can be seen above, the loss of 82 arable hectares would cause a reduction in economies of scale costing the business £11,234 per annum in today's money. This may not sound significant, but that is just for one year. To put the amount into context it needs to be capitalised in the same way that the net return from farming is capitalised in the market value of land.

As demonstrated in the Recent Performance analysis, the return on the land value is 2.41%. In perpetuity this equates to 42 Years Purchase (100/2.41) hence the impact of the compulsory purchase of the 82ha is quantified at £471,828 (42 x 11,234).

## CONCLUSION

The proposal to plant the Compensatory Land with trees will cause several countryside stewardship options to be sacrificed that would otherwise benefit species that prefer a diverse open arable mosaic rather than a closed uniform tree canopy. This is the same stewardship agreement that includes woodland management options that are helping the adjoining SSSI units to recover to favourable status.

In addition to this reduction in ecological output, the removal of 82 arable hectares would concentrate the financial overheads of the farm business onto a smaller area. This would have the economic impact of increasing the cost of farming the remaining 468ha by £11,234 per annum. Although the farm would be compensated for the loss of land at market value, this does not include the increased cost of farming the remaining land. The projected return on land value is circa 2.41%, therefore it would be appropriate to capitalise the £11,234 by 42 Years Purchase. In perpetuity this values the reduction in economies of scale at £471,828 because of the Compulsory Purchase.

*Charles Baines*

Farm Business Consultant  
**Laurence Gould Partnership Ltd**

7<sup>th</sup> February 2023

APPENDIX 2 – ECOLOGICAL APPRAISAL BY NATIVE ECOLOGY





**David Attwood**

Harp Farm,  
Harp Farm Road  
Maidstone  
Kent  
ME14 3ED

Our ref: 1182\_L01

26th January 2023

Dear David,

**RE: Harp Farm, Harp Farm Road, Maidstone, Kent.**

- 1.1 This letter has been produced on behalf of David Attwood in respect of the proposed acquisition of land at Harp Farm, including the Cossington and Reservoir Fields and Land at Burham, by National Highways for the purpose of creating a nitrogen deposition compensation area.
- 1.2 Existing habitats within the proposed compensation areas include arable land, grassland and hedgerow. The farm is currently managed under a Higher Tier Countryside Stewardship Agreement with the aim of restoring species-rich chalk grassland, maintaining hedgerows and creating new and protecting existing habitats on the edge of the cultivated arable land.
- 1.3 Habitat measures undertaken within the site under the Countryside Stewardship Agreement include the creation of beetle banks, flower rich margins and 4-6m wide buffer strips. These measures will benefit a range of species including insects, bumblebees, small mammals (including harvest mouse, a Species of Principal Importance) and farmland birds (including those listed as 'red' on the Birds of Conservation Concern such as corn bunting, yellowhammer and linnet).
- 1.4 In addition, the boundary hedgerows and woodland edges are managed to increase habitat potential for invertebrates and provide a food source for over wintering birds. This will also provide and increase in opportunities for hazel dormouse, a European Protected Species.
- 1.5 Proposals from National Highways include the planting of woodland throughout the site. This could lead to a loss of the habitat type "hedgerow", which is identified as a priority within the Kent Nature Partnership Biodiversity Strategy 2020-2040 and has a high ecological value. In addition, the habitats created through the stewardship options and species associated with farmland, such as harvest mouse and farmland birds, may be lost.

- 1.6 Historically habitat within the compensation area comprised woodland. However, this was removed in the 1970s and the land has been farmed intensively for over 50 years. Creation of woodland on intensively managed, fertilised arable land will require long-term management and has a high risk of failure. As an example, according to the Natural England Biodiversity Net Gain Metric (3.1), creation of the habitat type “lowland mixed deciduous woodland”, on arable land will likely lead to a loss of biodiversity units across the site.
- 1.7 Given the presence of priority habitats within the site and current management regime, the arable land is assessed as having an existing ecological value for certain habitats, those associated with farmland in particular.

Please do contact me if you have any further questions.

Yours sincerely,



Calista Tardivel MSc BSc QCIEEM

Ecologist

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