NORTH DORSET LOCAL PLAN 2011 – 2026 PART 1

EXAMINATION

Inspector's requests and points arising during hearing sessions

Issue 7: Blandford

Note on the ecological issues surrounding development at Blandford and the impact on the SSSI.

May 2015

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1. Recommendations

1.1 The recommendations arising as a result of this note are:

- That Policy 16 be amended to require a mitigation package to be agreed and implemented to the satisfaction of Natural England prior to development taking place on the Land at Bryanston Farm site.
- That the site West of Blandford Forum, Crown Meadows, remains excluded from designation for residential purposes on heritage grounds.
- That the site West of Blandford St Mary, Dorchester Hill, be excluded from designation for residential development until appropriate evidence and a mitigation package is agreed to the satisfaction of Natural England.

Contents

2. Introduction

2.1 At Hearing Session 7 (18th March 2015) the issue was raised of the impact of proposed development on the Bryanston SSSI. The main concern related to the removal of Greater Horseshoe Bat foraging ground as a result of the development of sites at West of Blandford and West of Blandford St Mary.

2.2 During the discussion, Mr Gale (Representor ID 873) suggested that there had been an application lodged with the EU to designate the site as a Special Area of Conservation (SAC) under the Habitats Directive. The Inspector requested that the Council prepare a short note setting out what the position is in relation to the site, including a statement from Natural England.

3. Sites of concern

3.1 The sites were first identified through the SHLAA process as reported in the 2010 SHLAA. This process identified three greenfield sites within a 2km radius of the Bryanston SSSI site where there was considered to be potential for an impact on the bat population and particularly the juvenile bats, resulting from a loss of suitable foraging land. These sites, shown in Figure 3.1, were:

- Land west of Blandford St Mary (Lower Bryanston Farm) (2/06/0541)
- Land west of Blandford St Mary (Dorchester Hill) (2/04/0540)
- Land west of Blandford Forum (Crown Meadows) (2/03/0397)

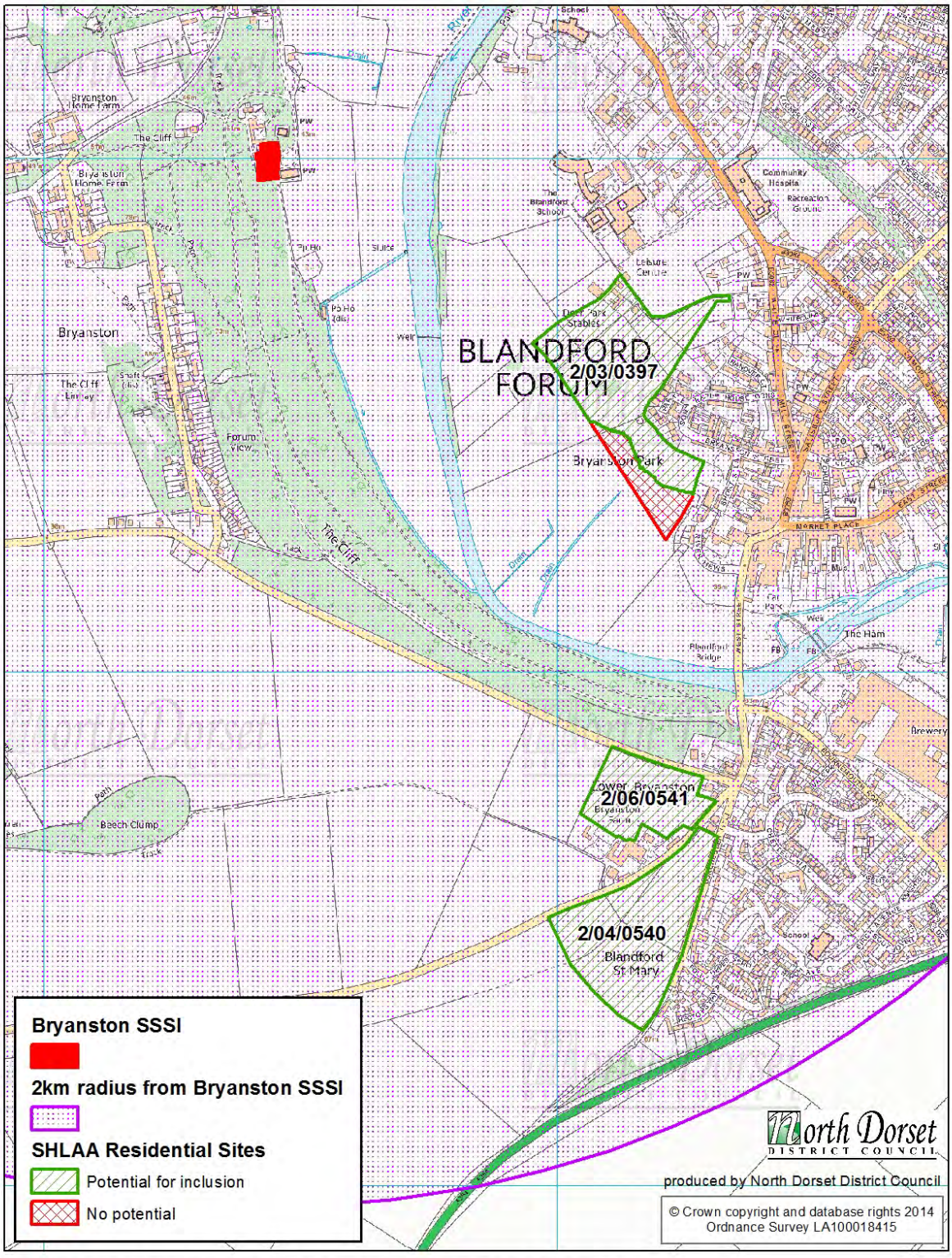
Discussions with Mr Gale

3.2 Having spoken to Mr Gale, he has indicated that there had not been a formal request for the EU to designate the site as a SAC but that there was a process by which an application, supported by robust valid evidence, could be made. Mr Gale indicated that Colin Morris of the Vincent Wildlife Trust had made contact with a representative of the EU. Mr Gale has prepared a summary of his understanding of the position in relation to the designation status of the Bryanston SSSI. This is included in Appendix A of this report.

3.3 The main points in Mr Gales note indicate that he believes there are grounds for the Bryanston SSSI to be designated as a SAC. The process to achieve this would be to write a letter of complaint to the EU.

3.4 Mr Gale also suggests that the development of the sites within 2km of the Bryanston SSSI would have a negative impact on its status and that there are no details available of the mitigation package that is being proposed by The Crown Estates. Mr Gale also suggests that the mitigation plan '*must run concurrently with the existing habitats to ensure sustainability. This process will take a minimum of 15-20 years*'.

Figure 3.1: Relationship between Local Plan residential sites and Bryanston SSSI



Response from the Vincent Wildlife Trust

3.5 Colin Morris of the Vincent Wildlife Trust has provided a short statement of his understanding of the situation in relation to development in and around Blandford. This note is included in Appendix B of this report. It also includes a summary of his correspondence with Mr Gale.

3.6 In his note Mr Morris pointed out that at the time of Hearing Session 7 (18th March), he had not been in contact with the EU regarding the designation of the Bryanston SSSI as a SAC. However, subsequently he had contacted Mr Vassen who indicated that only a Member State of the EU can nominate a site as a SAC. If an individual believes that the EU legislation has not been properly implemented by the Member State, a complaint can be submitted to the EU to this effect. Mr Morris stated that he is unaware of any complaint being made in relation to the Bryanston SSSI site.

3.7 Discussions with Mr Morris indicated that there was some historic evidence of the bats from Bryanston SSSI travelling to the Chilmark Quarries SAC in Wiltshire. The records of this were not readily available but Mr Morris provided a contact who may still be in possession of these.

3.8 A request was made of Mr Morris to outline what he considered would be an appropriate mitigation package. The main points of this were:

- The key elements of a mitigation package should include grazed pasture, hedgerows and woodland edge.
- Any mitigation features need to be in place and providing mitigation prior to the loss of the existing features.
- Hedgerows connected to existing flight-lines and foraging corridors are relatively easy to establish within a timeframe of 10 to 12 years.
- The establishment of replacement food bio-mass (cockchafer beetles and dung beetles) habitat may take longer (15 to 20 years) and would be achieved through transfer of arable land to grazed land.

Evidence submitted by The Crown Estates

3.9 The Crown Estates, landowners of the sites Land west of Blandford St Mary at Lower Bryanston Farm (2/06/0541) and Land west of Blandford Forum at Crown Meadows (2/03/0397) have undertaken detailed species specific ecological surveys of their sites. These have looked at the potential impacts of development on the site and specifically the impacts on the bat population at the Bryanston SSSI. In addition, as stated earlier, The Crown Estates' agents AMEC have been in discussions with Natural England about a mitigation package for the Lower Bryanston Farm site. The additional material submitted on behalf of The Crown Estates is included in Appendix D of this report.

3.10 In summary:

- The evidence submitted on behalf of The Crown Estates suggests that there is a small population of cockchafer beetles living on the Lower Bryanston Farm site and therefore mitigation would be required to maintain the local beetle population.
- The survey results for the land west of Blandford Forum at Crown Meadows (2/03/0397) did not identify the site as supporting a population of cockchafer beetles. However, there was bat activity recorded over parts of the site and this is thought to be associated with the dung from the animals currently grazed on the site.

3.11 The report also identified a suite of measures across The Crown Estates 'extensive Blandford Estate' which could form part of the comprehensive mitigation strategy to accompany site development. It is suggested that the mitigation strategy will be tailored through further discussions with Natural England.

4. Response from Natural England

4.1 Natural England has been kept informed in the run-up to the submission of Local Plan Part 1, on progress throughout their development of the proposals for the sites in the areas close to the Bryanston SSSI. A meeting was held on 22nd May 2014 with representatives from Natural England. In this meeting a specific questions was asked about the Bryanston SSSI and any intentions to designate the site as a SAC.

4.2 The response received indicated no intention to designate the site as a SAC. Natural England highlighted that its concern was the level of use of the sites for foraging bats and the potential for securing sufficient alternative feeding opportunities should the sites be developed. At the time (May 2014) the applicants had not submitted sufficient information to enable a judgement to be made on this issue.

4.3 Since the hearing session where this issue was raised, Natural England has met on-site with the Agents representing The Crown Estates. It has also had a chance to review the additional ecological information submitted to support the promotion of the site. Its response in relation to the three sites identified is included in Appendix C of this report. The main points are that:

- Natural England is unaware of any further designation proposals related to the Bryanston site.
- Although the SAC designation would give greater legal protection to the site, it would not alter this position.
- Natural England will seek to ensure that proposals in the vicinity of the site do not harm the designated interest features i.e. the population of Greater Horseshoe bats.
- Specifically in relation to the Land west of Blandford St Mary (Lower Bryanston Farm):
  - The area is species-poor grassland and supports a modest population of cockchafer beetles.
  - The mitigation package proposed by The Crown Estates if implemented in full and maintained, has the potential to provide ecological gains that will help secure the future of the Bryanston bat population.
- Specifically in relation to the Land west of Blandford St Mary (Dorchester Hill):
  - There is no information available on the quality of the site and its suitability for supporting a cockchafer beetle population.
  - Without more information on the ecological value of this site, Natural England cannot have any confidence that the development of the site would not lead to the loss of important foraging grounds for the bat population.

  - The site should only be allocated if it can be demonstrated that it is of low ecological value and does not support a population of cockchafer beetles, or that appropriate mitigation can be secured
- There is a need for the mitigation package to be implemented and the populations of cockchafer beetles to become established. This could take a number of years and therefore these sites could come forward at the end of the plan period (i.e. nearer to 2031) provided that appropriate mitigation is put in place early on.

4.4 The Council has issued pre-application discussions with the agents promoting the Land west of Blandford St Mary (Dorchester Hill) (2/04/0540). This advice included specific mention of the potential for impact on the bat population associated with the Bryanston SSSI. The capability of the site to act as a feeding ground for the bat population was highlighted in the advice issued to the agent.

5. Conclusion

5.1 Having considered all of the relevant information as set out in this note, the Council is of the opinion that the sites to the west of Blandford St Mary at Lower Bryanston Farm (2/06/0541) and at Dorchester Hill (2/04/0540) can be allocated for residential development in the Local Plan Part 1 providing that adequate mitigation is put in place to minimise and where possible enhance long term prospects of the bat population.

5.2 Any mitigation package should be agreed by Natural England and should be given sufficient time for the measures to be established. The implementation of the mitigation measures should be monitored by the landowners to ensure their effectiveness. Development should only take place once it can be demonstrated that the mitigation measures are established to Natural England's satisfaction. For example it will be essential that hedgerows have been given time to mature and that cockchafer beetle populations are at a reasonable and stable level.

5.3 If a package of mitigation measures such as those proposed in The Crown Estates Technical Note in Appendix D of this report are agreed by Natural England and implemented, the site to the west of Blandford St Mary at Lower Bryanston Farm (2/06/0541) should be allocated for residential development. The site would be phased to commence in the latter part of the plan period once the mitigation package is fully established.

5.4 The site to the west of Blandford St Mary at Dorchester Hill (2/04/0540) is not currently supported by any detailed ecological appraisals nor by an adequate mitigation package. Once this information is submitted, and adequate mitigation measures are proposed, an informed decision on the implications of the sites development can be made. It is currently Natural England's view that the site should only be allocated once this information is available.

5.5 The mitigation proposed by The Crown Estates to support the development of the site west of Blandford St Mary at Lower Bryanston Farm (2/06/0541) is likely to also be sufficient to mitigate the impact of the development of the Land west of Blandford Forum at Crown Meadows (2/03/0397). However, due to the significant impact identified on the heritage assets adjacent to the site, the Council's position that the Land west of Blandford Forum at Crown Meadows (2/03/0397) should not be allocated for development remains unchanged.

5.6 The policy for Blandford will require some additional text to explain the requirement for an acceptable mitigation package to support the development of sites in the vicinity of the Bryanston SSSI. These changes (to Policy 16) will be proposed as part of the Main Modifications stage of the Local Plan Examination process.

Appendix A – Response from Mr Gale

The following is a note prepared by Mr Gale.

From: Chris and Jacoba Gale <[redacted]>

Sent: 21 April 2015 18:58

To: Terry Sneller

Subject: SSSI Status GHB at Bryanston from C R Gale

[redacted]

Mr T Sneller
NDDC
Nordon
Salisbury Road
Blandford Forum
Dorset

Dear Sir

I have researched the question of the status of the Bryanston SSSI for Greater Horseshoe Bats. Only the State can propose a Special Area of Conservation (SAC) unless the EU Commission deems that this is a necessary upgrade to protect a species specified in Annex II of the 1994 Directive. The procedure to instigate this is a "Letter of Complaint" to the Commission.

The Criteria for this would be;

1/ That the current SSSI status fails to protect the habitat and breeding potential of the Greater Horseshoe Bat under the meaning of the Directive and Hab Regs.

2/ That there would be a danger of overall degradation of sustainability of the species from its current level of status as "Stable" (UK declaration to the Commission).

The following considerations would have to be taken into account;

1/ This colony is the furthest East of the GHB due mainly to previous loss of habitat. There is no possibility, at present, of the GHB recolonizing areas from which it has been lost.

2/ There is a recorded connection (tagged bats) between this colony and the SAC at Chilmark in Wiltshire. This contributes to gene diversity as well as sustainable habitat. It will need an in-depth scientific assessment as to the long term effects on this SAC.

3/ There is little scientific evidence available as to what constitutes a “critical mass” for the viability of a maternity roost. Even a relatively small reduction in numbers followed by a difficult winter season could significantly reduce the viability of this colony.

4/ A small reduction in feeding habitat for Bat pups within a 2 kilometre radius of the SSSI can have a significant effect.

5/ The Crown Estate (TCE) has, so far, only disclosed vague indications as to their plans for Habitat Mitigation. The statement that they own “large areas” without specifying any they intend to use is unacceptable. The Vincent Wildlife Trust (VWT) can see no viable possibilities within the 2 kilometre

2/

radius that would be acceptable. Plans to set up “feeding stations” is, at best, experimental and lacks scientific validity.

6/ The life span of a GHB is up to 30years and they do not breed until they are 3-4 years old. Bat pups are taught by their Mothers where their feeding grounds are and the routes to them. Most GHBs have regular routes that are used by them and these would seem to be passed on to future generations. Any disruption of these routes could significantly affect the numbers at the SSSI. Feeding stations do not meet this criteria.

7/ There has been no indication of a full monitoring system being put into place. VWT have consistently stated that any mitigation attempts must run concurrently with the existing habitats to ensure sustainability. This process will take a minimum of 15-20 years.

It must be pointed out that TCE itself has reasoned that a viable plan should have been in place to present to the Public Inspector (Freedom of Information) as there was sufficient reason for this element of the Local Plan to be “struck out” if this was not submitted. This failure to produce plans has led to delays throughout this procedure.

A decision on whether to submit a Letter of Complaint will be taken when TCE have finally disclosed these plans and whether they will satisfy Natural England, The Compliance Officer at DEFRA and the full extent and meaning of the EU directive.

Ultimately, the EU commission will determine the status of the Bryanston SSSI based on scientific data or, in this case, lack of substantiated evidence that the current planning proposals will not fail the legal requirements of the EU Directive.

I hope this clarifies the situation.

Yours sincerely,

C R Gale

Appendix B – Response from the Vincent Wildlife Trust

The following is email correspondence received from Mr Morris of the Vincent Wildlife Trust.

From: Colin Morris [redacted]
Sent: 15 April 2015 15:49
To: Terry Sneller
Subject: Bryanston.

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Terry, thank you for your email and earlier telephone call.

I can confirm that when Mr Gale suggested at a local plan hearing that someone had been in contact with Mr Vassen of the EU, it was not me. I have subsequently corresponded with Mr Vassen, who informed me of the SAC designation process, and the complaints procedure should an individual believe a legal provision of EU Environmental legislation was not properly implemented. A summary of this email was sent to you (copy below), I have nothing more to add on this front.

I am not aware that Mr Gale, or any other individual is making a complaint against the process. The only grounds I believe a complaint on the failure of the EU to recognise and designate this site is, it is recognised that the colony is at the edge of its range, both in the UK and NW Europe and therefore has a vitally important role to play in conservation. Loss, or degradation of site on the edge of a species range is detrimental to the overall status of these animals in both the UK and Europe and these grounds alone, are probably sufficient to secure SAC status. I believe this was not given due consideration at the time. An individual therefore, could make a complaint based on these grounds.

It was some 25-30 years ago when I occasionally visited RAF Chilmark in Wiltshire with Dr Stebbings, we recorded overwintering bats there that flew from Bryanston. I'm afraid I am not party to the information on how many bats from Bryanston were recorded; whatever the number, in scientific terms it should be recognised that only a few bats were ringed at Bryanston, and the other greater horseshoe bats seen at Chilmark may well have flown from Bryanston as well. The number of animals identified as coming from Bryanston is likely therefore to be under-represented. You will have to contact Dr Stebbings directly for any records and the extent of any links between the sites. He lives in Peterborough.

The mitigation requirement is somewhat complex, from what I understand, mitigation measures should increase, improve and enhance what is already available. If there is a loss of recognised habitat, grazed pasture, hedgerows, woodland edge etc., then

more of each should be put in place, and shown through research, to be working before the loss of any of the original habitat. Correctly managed hedgerows, if/when planted are not too difficult to implement; a tall 'mushroom-shaped' hedge can mature within about 10 - 12 years. It is important that any proposed hedgerow(s) should be connected to existing foraging corridors and flight-lines; isolated flight-lines will not be used.

The most difficult part will be trying to ensure there is not an overall loss of the food bio-mass and specific species, particularly the cock-chaffer *(Melolontha melolontha),* and dung beetles *(Geotrupes spp),* both require grazed pasture for differing reasons.

In correspondence I have had with Professor Blackshaw, when I questioned him about the likelihood of any new land becoming suitable for the cock-chaffer…*he said 'not very long' however, this didn't answer my question which was….'**How long it would take for numbers to grow until there is a viable and sustainable food source for the bats;** his answer…*

*…"There is no easy answer but, what is definite is that any eggs laid this year would not result in available adults for bat dinners for three years; though I suspect that the attractiveness of the grass may depend on sown varieties **(definitely not ryegrass!).** So the first point is that you will have a minimum three years without this food source. The next aspect is population growth up to environmentally limiting levels. This will take much longer than 3 years and I suspect maybe 10-20 years. None of this accounts for any regulatory effect the bats and other predators (birds, badger, foxes etc.,) might have on the cockchafer population size by feeding on them. At low numbers of cock-chaffers, it is conceivable that predation by bats and the other predators, could drive them to local extinction. 10 - 20 years could become a lot longer. Thus although we cannot be precise in terms of the extent of possible effects, if the bats are highly dependent on this particular food source at a critical development stage, it would be reasonable to assume that the proposed land swap would be deleterious and have at least short to medium term consequences.*

It is also important to recognise that this does not take into account that any proposed land is likely to come from an arable background thus, is likely to be contaminated by residue pesticides. It might be, that no cock-chaffer larvae will survive until the chemicals have been purged from the soil. We should also consider that if the larvae do survive, they do not become carriers of pesticides that might harm the bats,

Research in Europe, (on the prevention of injury in pasture and cultivated land near Torny-le-Grand, in the Swiss canton of Fribourg) on the density of cock-chaffer adults in soil samples taken in March and April were found about a foot beneath the surface, the population averaging 11.3 with a maximum of 59 per sq. yard**.** Emergence from the soil was studied by netting sample plots, and began on 20th April, reached peaks on 29th April and 5th-7th May and was completed by 20th. If I was asked to suggest a suitable population density that I would be happy with, on any allocated land, I say anything between these two figures would be adequate and sufficient.

The grazed pasture also throws open the problem of having to have both the original site, and any proposed site, being simultaneously grazed at the same time, more cattle (organic) will be necessary.

As for a time to get the mitigation measures in place, the hedges will require around 10 - 12 years to become mature and viable however, the cock-chaffer situation is more difficult to estimate, this will require more research; If the land isn't rendered uninhabitable through chemical contamination, ten years is likely to be an underestimate, ten to 15 years, optimistic; fifteen to 20 years (or more), a realistic one. Research may reduce or increase these estimates. If the land is uninhabitable for the larvae, then other sites or a way to clean-up or neutralise the chemicals in the ground will be required.

One thing that has not yet been discussed is the 'lighting' on any development; lighting has a detrimental effect on the activities of foraging bats (particularly horseshoe bats).

I think that covers everything,

Thank you once again for your email.

Yours sincerely,

Colin Morris.

Dear Colin,

Thank you for speaking to me this morning and for agreeing to provide me with a short note relating to the Bryanston SSSI.

There are four main points that I need you to cover in your note however please feel free to include any additional information that you feel is relevant.

The first point relates to the correspondence that you have had with the EU. Mr Gale suggested at the Local Plan hearings that there had been correspondence with (Dr Frank Vassen) the EU regarding the designation of the site as a SAC. From our phone conversation this morning, you indicated that this was not the case but that you had subsequently contacted Dr Vassen and received a reply. Would you be able to include a summary of this correspondence with the EU regarding the issue.

The second point that I feel would be important is linked to the first and relates to the complaint about/nomination of the SSSI as a SAC as suggested by Mr Gale. Can you include some commentary as to whether you are aware of any

reason to designate the Bryanston SSSI site as a SAC and whether you feel there are any grounds for a complaint to be made.

The third point relates to the links with Chilmark Quarries SAC. You suggested in our conversation this morning that there were some historic records of bats from Bryanston being sighted at the Chilmark SAC. Would you be able to let me know what you feel the extent of the links are between the two sites.

The fourth point needs to be a bit more detailed as it relates to any mitigation that would need to be put in place. There have been suggestions that any mitigation would take a reasonable amount of time to establish. Would you be able to include a note on what you would like to see in any mitigation plan including:

1. The types mitigation that may be necessary to mitigate any impact from the development of the Bryanston Farm site (hedgerows, grazed land etc)
2. The scale of this mitigation having regard to the attached map (PS not all of the sites on the map will be developed. The sites in question are those labelled Blan2 and Blan3 at Lower Bryanston Farm)
3. The time needed to get this mitigation established (a year range would be fine eg 5 to 10 years).

If at all possible, having a note early next week (w/c 20th April) would be appreciated as we need to get a statement to the inspector before the end of the month.

Kind regards and thank you in advance,

Terry

Terry Sneller BSc Hons, MSc, MSc, MRTPI
Planning Policy Officer
North Dorset District Council
Email: [redacted]
Direct line: [redacted]

From: Colin Morris [redacted]
Sent: 27 March 2015 08:22
To: Terry Sneller
Subject: RE: Bryanston SSSI

Dear Terry, thank you for your email. I am currently on leave but came in to deal with your enquiry.

As far as I am aware only a Member State of the EU can put forward a site to be designated; I do not believe the current Government has done so or I'd have been consulted on the matter. An individual can submit a complaint to the European Commission, if he/she believes a legal provision of EU Environmental legislation is not properly implemented by a Member State but again I am not aware of anyone submitting a complaint.

On the SAC front, and if my memory serves me correctly, I'm sure there are records of bats from Bryanston travelling to the SAC at Chilmark in Wiltshire to hibernate, it could be construed therefore, that a loss of animals from Bryanston is likely by association to damage the SAC in Wiltshire.

I'll be back in the office next Monday if you wish to talk to me.

Thank you once again for your email.

Yours sincerely,

Colin Morris.

Colin Morris PGA
Nature Reserves Manager
The Vincent Wildlife Trust

Appendix C – Response from Natural England

The following is a statement received from Natural England in relation to the sites and mitigation package proposed by the Crown Estates.

From: Stobart, John (NE) [redacted]
Sent: 16 April 2015 17:02
To: Terry Sneller
Subject: RE: Blandford St Mary and Greater horseshoe bats

Follow Up Flag: Follow up
Flag Status: Flagged

Terry

Many thanks for your email and forwarding the additional information provided by amec foster wheeler and comments from Colin Morris of the Vincent Wildlife Trust.

Regarding your previous question relating to the possible designation of the Bryanston SSSI as an SAC, I can only reiterate our previous comments that we are unaware of any further designation proposals. That said, while a SAC designation would give considerably greater weight to the protection of the site, it would not alter Natural England's position. That is, whether the roost at Bryanston is an SSSI or if in the future it ever became an SAC, we would in both cases wish to ensure that any proposals coming forward in the area do not harm the designated interest features, namely the population of greater horseshoe bats (GHB) roosting at the Bryanston.

With regard to the proposed allocated sites at Lower Bryanston (SHLAA Site 2/06/0541) and at Blandford St Mary (SHLAA Site 2/04/0540), Natural England has concerns relating to the following:

- Lower Bryanston (SHLAA Site 2/06/0541) is an area of species poor grazed pasture that has been demonstrated to support a population (albeit modest in scale) of cockchafers, an important GHB food source.
- Blandford St Mary (SHLAA Site 2/04/0540) is an area of pasture with no available information on either the quality of the grassland, or its suitability for cockchafers.

The following comments relate to the Lower Bryanston (SHLAA Site 2/06/0541) proposed allocation:

I can confirm that I have had a meeting with representatives of the Crown regarding their proposed allocations and have visited the Lower Bryanston site. The need for mitigating the loss of potential bat foraging was discussed and the provisions outlined in the submitted document entitled, "Technical note: Opportunities for Enhancing The Landscape Around Blandford Forum for Greater Horseshoe Bats" reflects these discussions. Based on the relatively modest populations of cockchafers on the Lower Bryanston site, it is my view that provided a sufficiently robust mitigation and enhancement package was provided then it would be possible to ensure that bat foraging in the vicinity of the Bryanston SSSI was not only maintained, but over time improved. The technical note sets out how this might be achieved.

As Colin has pointed out newly recreated pastures will however take time to mature and the populations of cockchafers to build up. The longer local plan period is therefore helpful in this regard as if the proposals come forward towards the end of the plan period then newly established bat foraging features will have greater time to mature. However, given the relatively low levels of cockchafers on the Crown's proposed sites it should be possible to provide sufficient alternative bat foraging in a shorter time frame through implementation of a range of short to long term enhancement measures. For example, improving the condition of existing pastures (eg conversion to low inputs /

organic and appropriate grazing should allow a build up of cockchafers and other important insect sources far quicker than would be expected on a newly created grassland).

Given the wide scope of the mitigation measures that are possible on the critical Crown land holdings around the Bryanston SSSI and the relatively low level of cockchafer populations currently present in the allocated sites I am satisfied that, provided the necessary mitigation is secured, the proposed allocations would be unlikely to harm the Bryanston SSSI GHB population. Furthermore, if an agreed comprehensive mitigation package were implemented in full and maintained then the proposals have the potential to provide substantive ecological gains that will help secure the long term future of the Bryanston bat populations.

The following comments relate to the Blandford St Mary (SHLAA Site 2/04/0540) proposed allocation:

Natural England is concerned that the proposed allocation at Blandford St Mary is not supported by any ecological assessment. At this stage we have seen no information on either the quality of the grassland that would be lost, or its value for cockchafers. I am also concerned that no provision has been made for providing any necessary mitigation to ensure foraging opportunities for GHB are maintained and enhanced. Without this information Natural England cannot have any confidence that the allocation will not lead to the loss of an important feeding source for the Bryanston bats. In our view the site should only be allocated if it can be demonstrated that the grassland is of low ecological value without a high potential for cockchafer, and or provision is made for securing appropriate additional mitigation measures.

I would be happy to discuss these comments further, however, please note I am on annual leave now until 27th April.

Regards

John Stobart
Planning and Conservation Lead Advisor
Natural England
[redacted]

Please note that my working days are now Monday to Thursday

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We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

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From: Terry Sneller [redacted]
Sent: 16 April 2015 15:02
To: Stobart, John (NE)
Subject: RE: Blandford St Mary and Greater horseshoe bats

Hi John,

Can you give me an update on how you are progressing with this issue. I need to start pulling together the note on this issue and hence having your note would be useful.
Associated with this, I have attached the note from AMEC (The Crown Estates' agents) and a note I have received from Colin Morris of the Vincent Wildlife Trust. These will form part of the appendix to the note I will send to the Inspector. I have yet to receive anything from Mr Gale.

On another issue, the Inspector questioned why a Habitats Regulations Assessment was required for the Gillingham Southern Extension Master Plan Framework (MPF). The request from the Inspector was that we contact you (NE) to seek your view as to whether an HRA was required. Would you be able to provide me with a short statement to this effect. The MPF will set out detail as to how the Southern Extension to Gillingham would be developed. The policy for the Southern Extension (Policy 21 of the plan) sets out what the MPF should contain. We included a requirement for the HRA of the MPF as a recommendation of the HRA that accompanied the Local Plan (see link below pages 27 & 28).
If the Local Plan policy sets out what the MPF should contain, is it necessary to undertake an HRA especially as all relevant habitats surveys and an EIA will be prepared to accompany the site?

Thanks
Terry

Terry Sneller BSc Hons, MSc, MSc, MRTPI
Planning Policy Officer
North Dorset District Council
Email: [redacted]
Direct line: [redacted]

From: Stobart, John (NE) [redacted]
Sent: 26 March 2015 12:29
To: Terry Sneller
Cc: Claire Walker
Subject: RE: Blandford St Mary and Greater horseshoe bats

Terry

Many thanks for this – just to note I am in the process of arranging a site meeting with the applicant for next week – hopefully 1st or 2nd April.

Will respond asap after that meeting but will be after the Easter break.

Regards

John

John Stobart
Planning and Conservation Lead Advisor
Natural England
[redacted]

Please note that my working days are now Monday to Thursday

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We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

From: Terry Sneller [redacted]
Sent: 25 March 2015 14:21
To: Stobart, John (NE)
Cc: Claire Walker
Subject: RE: Blandford St Mary and Greater horseshoe bats

Hi John,

Further to our telephone conversation, the relevant information regarding the foraging bats associated with the Bryanston SSSI is as below.

Attached is a note of a meeting we had with Charles Routh and Alison Appleby. In this meeting we specifically asked about the site including whether there was any intention to designate the site as a SAC. The response can be found in section 8 of the note, on the last page.

The Habitats Regulations Assessment (HRA) undertaken to support the production of the Local Plan discusses the bats at Bryanston at paragraph 2.10.

The report produced by NDDC discussing the implications of the HRA for the Local Plan further examines the issue in Section 3.

The Crown Estates have made a submission in relation to the sites around Blandford which outlines the work they have undertaken on Ecology. You may find this useful however they are also in the process of preparing a note for us. The Crown have also undertaken some additional survey work which is being processed at the moment. Once this is done, they have indicated that they will share the results with us. Our contacts for the Crown Estates are both at AMEC and are Neil Hall (unfortunately I do not have his contact details) and Stuart Williamson (01926 439054 stuart.williamson@amecfw.com). Anything we receive from the Crown on this issue I will forward on to you for your information.

The issue of the impact on the Bryanston SSSI was raised by Mr Gale on the Blandford day of the hearings for the Local Plan and the Inspector has requested that we produce a note outlining the Council's and your (Natural England's) position. The main points of the discussion were whether the site would/could be designated as a SAC. Mr Gale was suggesting that the UK Government had not fulfilled its obligations under the Habitats Directive and that he was pursuing the designation of the site as a SAC directly with Europe.
My questions to you are therefore:

1. What criteria are used to assess whether a site qualifies for designate as a SAC and on what basis does the SSSI at Bryanston not qualify?
2. Is it possible for an individual to request the designation of a site as a SAC? Can Europe initiate the designation of a site as a SAC without it being proposed by the member state?

In addition to a response to these questions, would you be able to send me a short statement on the development of the sites (as submitted through SHLAA and shown on the attached map). As indicated in our phone conversation, the

site does not definitely need to be developed in the next few years but could form part of the longer term supply. Clearly there have been statements made about the length of time it takes to establish suitable mitigation if the site was to be developed and therefore an indication from you what this timeframe may be and what monitoring/process would be required to establish when the development of the site could be successfully mitigated.

We need to respond to the inspector within a relatively short timeframe so if you could get a response to me as soon as you can after the Easter break, that would be helpful.

I'm sure we will talk again on this.

Kind regards
Terry

Terry Sneller BSc Hons, MSc, MSc, MRTPI
Planning Policy Officer
North Dorset District Council
Email: [redacted]
Direct line: [redacted]

From: Stobart, John (NE) [redacted]
Sent: 18 March 2015 16:55
To: Terry Sneller
Subject: Blandford St Mary and Greater horseshoe bats

Hi

Could you forward me a copy of the proposed allocations around Blandford St Mary (I did look at the website but couldn't find the allocation boundaries) – along with any supporting info regarding potential impacts on foraging bats and or habitat assessments. I'm concerned that we do not appear to have provided a response on implications to foraging bats from the Bryanston SSSI. In a particular the potential loss of permanent pasture in close proximity to the roost.

Do call if you'd like to chat this through

Regards

John

John Stobart

Planning and Conservation Lead Advisor

Natural England

Appendix D – Additional material submitted by The Crown Estates

The following Technical Note the additional ecological material submitted on behalf of The Crown Estates regarding the sites at Lower Bryanston Farm and Lower Bryanston Farm (2/06/0541) and Land at Crown Meadows (west of Blandford Forum) (2/03/0397).

The Crown Estate Sites near Blandford Forum: Summary of 2014 Biological Survey Work Related to Greater Horseshoe Bat and Implications for Development

1. Introduction

1.1 Background

The Crown Estate has been promoting two Sites through the North Dorset Local Plan preparation as potential residential development sites; West Blandford Forum and West Blandford St Mary (see Figure 1 for site locations). A programme of biological survey work was completed at both Sites during 2014 in order that the potential for effects on biodiversity due to future development of the Sites can be assessed. Given the potential for development of the Sites to affect the nationally important population of greater horseshoe bats that roost in the Bryanston Site of Special Scientific Interest (SSSI) (location shown on Figure 1), particular attention has been paid to undertaking comprehensive bat surveys of the proposed Sites.

In addition, a favoured seasonal food source for breeding female greater horseshoe bats is the adult form of the common cockchafer[1], the larvae of which are found underground within permanent pasture (which occurs at both sites). However, because the adult cockchafers migrate towards woodland as soon as they emerge, foraging by bats may not necessarily be detected at the larval emergence site. Given the rarity of these bats, the relative scarcity of permanent pasture in the vicinity of the Bryanston roost, and the fact that cockchafer larvae require 3-4 years underground before emerging as adults, a soil survey for the presence of cockchafer larvae was carried out at both Sites, in order to determine whether loss of the larval habitat has the potential to affect the local greater horseshoe population adversely.

The SSSI is afforded protection through the *Wildlife and Countryside Act 1981* (as amended). Greater horseshoe and all other bat species in the UK are protected under the same Act, and also under *The Conservation of Habitats and Species Regulations 2010* (SI 2010 No. 490) (the 'Habitats Regulations'). In addition, five species of bat, including the greater horseshoe bat, are listed on Annex II of the Habitats Directive. A summary of relevant protected species legislation is provided in **Appendix A**.

Using the survey data, a comprehensive mitigation strategy will be implemented as part of any development scheme, in order to avoid any significant effects on protected or notable species, including the greater horseshoe bat, prevent any breach of the legislation protecting greater horseshoe bats, and to enhance the area around the roost for bats.

1.2 Purpose of this report

This report provides a brief summary of the findings from the bat surveys (focusing on greater horseshoe bat) and cockchafer surveys of the Blandford sites to date. The implications of the survey findings in relation to the potential future development of the site are then discussed. This note also reflects discussions between Natural England and Amec Foster Wheeler at a site meeting held on 2 April 2015.

[1] Flanders, J. and Jones, G. (2009). Roost use, ranging behaviour, and diet of greater horseshoe bats (*Rhinolophus ferrumequinum*) using a transitional roost. *Journal of Mammalogy* 90(4): 888-896.

2. Summary of survey methods

2.1 Greater horseshoe bat activity

A robust programme of ecology work has been undertaken to support the potential allocation of the Sites. In 2010, AMEC undertook a baseline ecological survey of the two potential development Sites. During 2014, AMEC carried out detailed surveys for bats and other protected species on these two Sites, based on (for bats) the most up-to-date guidelines produced in 2012 by the Bat Conservation Trust[2]. Surveys were undertaken by experienced and (where appropriate) Natural England-licensed ecologists. Walked bat detector transect surveys of the Sites were carried out at least twice monthly between April and October, from 15 minutes before sunset to 3 hours after sunset. Static bat detectors were also deployed at both sites to record throughout the night at certain periods between April and October.

The survey data will be supplemented by radio-tracking data on greater horseshoe bats, as well as roost counts, provided by the Vincent Wildlife Trust. Information can be independently verified by Natural England and Dorset County Council.

2.2 Cockchafer survey

Soil samples 0.5m x 0.5m wide and 0.4m deep were dug across the two sites and were examined by an experienced entomologist. 25 samples were taken on the West Blandford St Mary site and 38 on the West Blandford site.

3. Summary of results and implications for site development

3.1 West Blandford St Mary

Very low levels of greater horseshoe bat activity were found during the 2014 surveys of the Site, with bats appearing to use the site primarily as a commuting corridor utilising the hedgerows around the site. Mitigation in the event of the Site being developed would therefore include retention and enhancement of these hedgerows, as well as hedgerow enhancement and tree planting along the local hedgerow network to provide/improve alternative commuting corridors for bats.

A population of cockchafer larvae was found on the Site (in 20% of the pits dug). It is known that this species often forms a substantial part of the diet of the greater horseshoe bats from the Bryanston roost for a few weeks in April/May[1]. As such, any development proposals would incorporate appropriate mitigation/compensation for the loss of pasture on the Site.

Discussions will be held with Natural England and the Vincent Wildlife Trust, as well as other experts such as Professor Rod Blackshaw (soil invertebrate expert, Plymouth University), over the coming months with a view to developing the scheme in such a way that it would not have an adverse effect on the conservation status of any bat populations. This will build on the general mitigation strategy already agreed in principle with Natural England.

3.2 West Blandford Forum

This Site does not appear to provide a source of cockchafer larvae as prey items for greater horseshoe bats. However, moderate levels of greater horseshoe bat activity were recorded at certain times of the year, most notably in the north of the site in early spring, when possibly other invertebrate prey resources were scarce and the dung associated with animals grazing in paddocks near the stables may have provided such a food source. However, a new school sports pitch with floodlighting has been constructed adjacent to the northern boundary of the site since the 2014 surveys were completed. As horseshoe bats are highly light-averse, it is possible that this may affect levels of greater horseshoe bat activity on Site, although further surveys will be required to determine whether this is the case.

[2] Hundt., L. (2012). Bat Surveys: Good Practice Guidelines, 2nd Edition. Bat Conservation Trust, London.

Should development of the Site be considered in the future, Natural England will be consulted over the requirement for further bat/invertebrate survey work, to provide a robust basis for the provision of mitigation of potential effects on bats.

During a survey of potential roost sites, a maternity roost of Daubenton's bats was found within a branch of a dead tree on the Site. However, as the tree has already shed a number of branches it is likely that this roost site will be lost due to natural processes some time over the next few years as the tree continues to decay. Daubenton's bat is one of the most common and widespread bat species in the UK: as such, the loss of a single roost site would not be likely to have an adverse effect on the conservation status of the species. Nonetheless, should the roost need to be removed to make way for development, this would need to be carried out under licence from Natural England, with a compensatory roost site provided well in advance of development. This could be accommodated close to the existing roost on land owned by The Crown Estate).

4. Conclusions

Based on the survey findings, it is concluded that with the implementation of suitable mitigation/ compensation measures over appropriate timescales, it would be possible to develop both of the proposed Sites without a significant effect on the Bryanston SSSI.

A mitigation strategy will be tailored through further discussions with Natural England but could include landscape improvements across part of The Crown Estate's extensive Blandford Estate (shown on Figure 1). The summary note in **Appendix B** sets out a suite of measures, some of which could be implemented to protect local habitats. A combination of some of the measures listed, proportionate to the site size and the biodiversity value of the site, provides an opportunity to improve local bat habitats across a wider area of land than that proposed for allocation. This will outweigh the effects on bats from the loss of pasture land resulting from development and ensure compliance with NFFP (paragraph 109) which seeks to ensure that the planning system minimises impacts on biodiversity and, where possible, provides net gains in biodiversity. Mitigation will also pay regard to the habitat replacement calculator method.

The mitigation strategy will address the timing of mitigation measures. Some of the measures in Appendix B would provide rapid improvements in bat foraging resources, while other measures will produce beneficial changes over time. A combination of such measures will therefore be key in mitigating the impacts of development. This is, however, a matter of detail to be considered as part of a planning application rather than a matter to be considered in the Local Plan process.

Author	Reviewer
[redacted]	[redacted]
Lynn Whitfield	Charlotte Webbon

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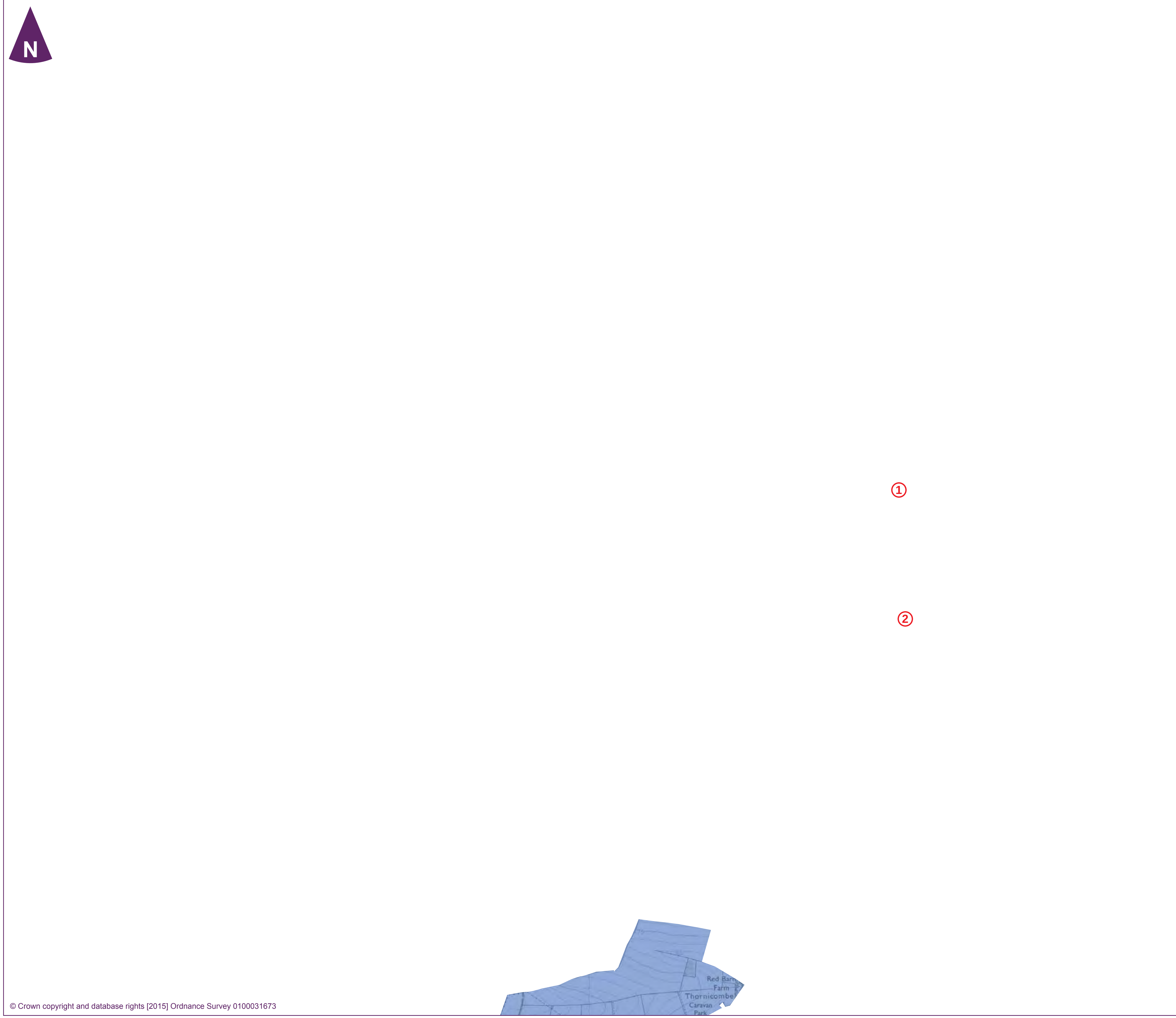

Potential development site location:

①

②

0 km
1.5 km
Scale 1:25,000 @ A3

Client

THE CROWN ESTATE

Summary of 2014 survey work related to Greater Horseshoe Bat

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Figure 1
Potential Crown Estate development sites near Blandford Forum

March 2015

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Appendix A
Summary of relevant protected species legislation

All British bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, inter alia, to:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb a bat (this applies anywhere, not just at its roost), in particular in such a way as to be likely to:
- Impair their ability to survive, breed or reproduce, or rear or nurture their young;
- Impair their ability to hibernate or migrate.
- Affect significantly the local distribution or abundance of that bat species;
- Damage or destroy a breeding site or resting place of any bat;
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not).

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (Rhinolophus ferrumequinum);
- Lesser horseshoe bat (Rhinolophus hipposideros);
- Bechstein's bat (Myotis bechsteinii);
- Barbastelle (Barbastella barbastellus); and
- Greater mouse-eared bat (Myotis myotis).

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Appendix B
Opportunities for enhancing the landscape for greater horse shoe bats

Technical note:
Opportunities for Enhancing The Landscape Around Blandford Forum for Greater Horseshoe Bats

1. Introduction

Amec Foster Wheeler Environment & Infrastructure (E&I) UK has been commissioned by The Crown Estate to provide advice relating to the effects on biodiversity that would be caused by the development of two sites that it owns at Blandford Forum, which have been identified as potential development sites through the preparation of the North Dorset District Council *'New Local Plan for North Dorset'*. The locations of the sites are shown on Figure 1. An important constraint that has been identified[1] in relation to these sites is the proximity of the Bryanston Site of Special Scientific Interest (SSSI), notified for its nationally important breeding roost of greater horseshoe bats (*Rhinolophus ferrumequinum*), which is a nationally rare species. The adjacent woodland also supports a number of other bat species, including Bechstein's bat (*Myotis bechsteinii*), which is also nationally rare.

Studies of greater horseshoe bats' ecology[2,3] have identified that suitable habitat within a radius of 1.8km of a breeding roost is particularly critical to the survival of juvenile bats, while land within a radius of at least 4.5km and up to 12km is important for lactating female bats. As the sites earmarked for development are within 1.8km of the Bryanston roost, there may be the potential for the loss of the grassland on these sites, as well as loss of other semi-natural habitats and indirect effects such as additional lighting (which could deter bats from foraging), to adversely affect the conservation status of the population of greater horseshoe bats, which would be in contravention of *The Conservation of Habitats and Species Regulations 2010 (SI 2010 No. 490)* and result in a significant adverse effect on the SSSI.

However, discussions with Natural England (NE)[4] and the Vincent Wildlife Trust (VWT)[5] (which manages the SSSI) suggest that adverse effects could be avoided or mitigated, and indeed a net benefit for bats achieved, via a package of habitat enhancement measures, provided that these can be maintained in the long term.

This document updates the report produced in 2010[6], setting out in more detail a range of measures that, particularly if implemented within a 1.8km radius around the Bryanston roost (see Figure 1), would enhance the value of the landscape for bats, especially greater horseshoes. Extension of these measures to land further afield (see Figure 2), and indeed measures to increase connectivity of bat habitat throughout the wider landscape, would also be desirable.

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[1] Amec Foster Wheeler E&I UK (formerly Entec UK) (2010). *North Dorset District Council's Core Strategy: Potential Development Sites. Biodiversity Report.* Entec, Leamington Spa.

[2] Eurobats (2010). *Report of the Intersessional Working Group on Conservation and Management of Critical Feeding Areas and Commuting Routes, 3-6 May 2010, Bonn, Germany.* http://www.eurobats.org/sites/default/files/documents/pdf/Advisory_Committee/StC4_AC15_Doc_28_Rev1_ReportIWGFeeding.pdf

[3] Dietz, C., von Helversen, O. and Nill, D. (2009). *Bats of Britain, Europe & Northwest Africa*. A&C Black, London.

[4] Meetings with John Stobart, Natural England, 18 August 2010; 26 October 2012.

[5] Colin Morris (CM), VWT, personal communications, and meeting with CM 26 October 2012.

[6] AMEC E&I UK (formerly Entec UK) (2010). *Enhancing the Landscape around Blandford Forum for Greater Horseshoe Bats.* AMEC, London.

This note is not intended to provide an exhaustive list of measures that will be employed on site. Instead it identifies a range of measures some of which could be adopted. A combination of such measures provides an opportunity to improve local bat habitats across a wider area of land than that proposed for allocation. The selection of the measures that The Crown Estate adopts will be influenced by the results of bat survey work that Amec Foster Wheeler has undertaken in 2014 and the preliminary assessment of the effects of the proposed development. In identifying enhancement measures, we recognise that any changes in land use and farming practices need to be not only proportionate to the potential effects of the proposed development on bats but also practicable and sustainable. This document does not, therefore, aim to be prescriptive as to the extent of the changes that should be implemented, although indicative locations of mitigation/compensation measures are provided. The measures that are taken forward for adoption will be defined through a process of consultation, especially with NE and VWT at the planning application stage.

2. Methodology

An extended phase 1 habitat survey[7] of land within approximately 1.8km of the Bryanston roost was carried out by AMEC ecologist and bat survey licence holder Lynn Whitfield (NE class licence levels 3 and 4; ref. CLS02565) on 30 April 2013. As well as mapping the broad habitat types and current land uses within the area, notes were made on areas of habitat curently providing poor foraging and commuting habitat for greater horseshoe bats, which could be enhanced.

3. General recommendations for habitat enhancement for greater horseshoe bats

Within this section are outlined general habitat creation and management measures which would benefit greater horseshoe bats. Further guidance on habitat management for this species can be found in the NE publication produced for this purpose[8].

3.1 Agricultural land

- Conversion of arable land to permanent pasture (especially cattle-grazed), to increase invertebrate diversity and availability, especially that of chafers which are a key food source for greater horseshoe bats - especially pregnant females - and rely upon undisturbed grassland to complete the larval and pupal stages of their life cycle (fields should be close[9] to woodland, which provides habitat for the adult chafers). Chain-harrowing, scarifying or rolling pasture should be avoided. Conversion of 'conventional' (i.e. non-organic) and intensive farming systems to organic and extensive systems;
- Avoidance of the use of worming compounds based on avermectins and other chemicals that are toxic to dung-feeding invertebrates such as dung beetles, which provide another important food source for bats including greater horseshoes;
- Where arable land is retained, use of traditional methods such as crop rotation and minimal use of pesticides;
- Leaving uncultivated and unsprayed strips around arable field margins;
- Creating field ponds, preferably close to hedgerows and woodland edges, to provide both drinking water and increased invertebrate prey;
- Especially in larger fields, planting of standard native trees and/or subdivision into smaller fields using hedgerows (with hedgerow trees) to provide cover, prey and hunting perches for greater horseshoe bats. Natural England has suggested referring to historic maps of the parkland to the west of Blandford for an indication of locations and numbers of standard trees that would be appropriate in this respect[10]; and

[7] Joint Nature Conservation Committee (2007). *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. JNCC, Peterborough.

[8] English Nature (2003). *Managing Landscapes for the Greater Horseshoe Bat* (Leaflet). English Nature, Peterborough.

[9] Ideally within 200-900m, up to 1500m.

[10] See for example The Godfrey Edition reprint of the 1901 Ordnance Survey map of Blandford Forum (Dorset Sheet 24.07). Available from Alan Godfrey Maps, Consett: www.alangodfreymaps.co.uk

- Creation of large dung heaps to provide concentrations of dung beetle and other invertebrate prey close to bat commuting habitat such as hedgerows.

3.2 Woodland

- Replanting of coniferous woodland with native broad-leaved species, especially oak (*Quercus robur*), where possible *en bloc* but otherwise along the edges of rides through retained areas of coniferous woodland. Any woodland clearance should, however, be carried out gradually, rather than clear-felling large areas, and trees checked for potential roost sites for hole- and crevice-using bat species before felling;
- Creation of wide, grassy rides maintained without the use of pesticides;
- Preservation of hanging branches along woodland edges as hunting perches for greater horseshoe bats;
- Retention of dead or damaged trees and limbs, leaving cavities and other features which will provide roost sites for other bat species; and
- Planting/avoiding clearance of understorey shrubs, with native species such as hazel and hawthorn being especially beneficial in terms of increasing invertebrate populations to support woodland bats including Bechstein's bat.

3.3 Increasing connectivity between habitats

Greater horseshoe bats are known to prefer following natural linear landscape features such as hedges, treelines, woodland tracks and riparian vegetation, flying close to these features and preferring to cross gaps such as roads where there is a closed tree canopy. Recommendations to link up roosts and feeding areas are as follows.

- Planting of field boundaries that connect areas of woodland and/or divide large areas of open land, to provide tall, bushy, continuous hedgerows with frequent standards, or close-set tree rows, with dead wood and hanging branches retained as described above and forming a closed canopy over minor roads wherever possible;
- Supplementing bankside planting along rivers (e.g. Target Note (TN) 7, Figure 1)and streams to ensure continuous tree/scrub lines, with trees managed as above;
- Planting adjacent to major roads with continuous bushy hedge/treelines managed as above; and
- Avoiding lighting along all known/likely bat commuting routes and foraging areas.

3.4 Measures relating to planned development

- Avoidance of light spill into the surrounding countryside[11];
- Replacement of any barns and other outbuildings demonstrated to be used by horseshoe bats as night roosts with purpose-designed structures suitable for this purpose, and avoidance of lighting around such structures; and
- Retention/provision of as many areas of permanent grassland and mature trees as possible.

[11] Guidance is provided by the Bat Conservation Trust/Institution of Lighting Engineers at http://www.bats.org.uk/pages/bats_and_lighting.html..

4. Specific site-related recommendations for habitat enhancement

Specific locations where some of the measures outlined above could be implemented are marked on Figure 1, with suggested measures described below. The decision about which if any of these measures should be adopted will be influenced by the findings of ongoing survey work (see section 1 above).

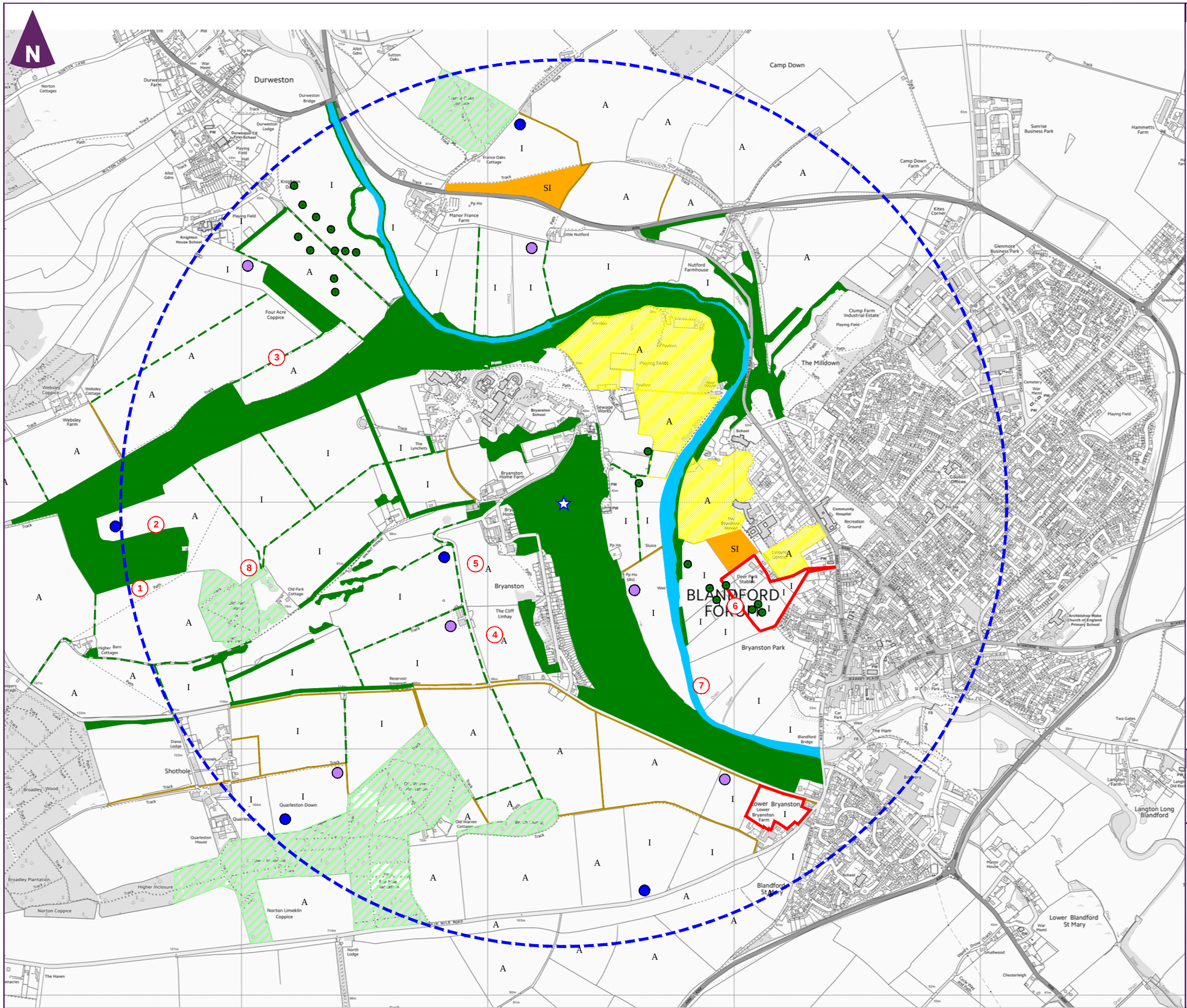
- *Conversion of arable land to permanent pasture*: the fields denoted by TNs 4 and 5 are currently arable but are bordered by broad-leaved woodland close to the Bryanston roost, that is likely to be used by bats and provides feeding habitat for adult chafers. Management of these fields, or even sections of them adjacent to the woodland, as pasture could therefore be especially beneficial for these bats;
- *Planting/enhancement of hedgerows*: Figure 1 shows that the majority of the fields in the area are bounded by unvegetated fencelines, or hedgerows that are sparse or very low and well managed (e.g. TN 3). Planting or gapping up of hedgerows, and reducing management so that they are allowed to grow tall and bushy (cutting only every 2-3 years in late winter, with only one side or section cut each time), would provide both increased amounts of foraging habitat for bats, and increased connectivity between the roost woodland and between blocks of woodland across the area that may be used for foraging. Appropriate native species such as hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), hazel (*Corylus avellana*) and field maple (*Acer campestre*) should be used, with trees allowed to grow into standards every 20m wherever possible;
- *Leaving uncultivated and unsprayed strips around field margins*: the majority of the agricultural fields in the area have no or very narrow unmanaged margins (TNs 1 and 2 denote two such margins, which are typical of the whole area). Leaving unmanaged strips, unsprayed with pesticides, at least 6m wide alongside hedgerows and woodland edges[12] would provide valuable additional foraging habitat;
- *Building of field ponds*. These should be large enough that they do not dry out in the summer, and in grazed areas, should be fenced off to prevent trampling of bankside vegetation and contamination of the water with slurry. Ponds should be situated within unmanaged vegetation adjacent to hedgerows, thus promoting connectivity for bats and invertebrates via the unmanaged grassland field borders, but ensuring that they are not permanently shaded in order to permit the growth of aquatic vegetation. Potential locations are shown on Figure 1;
- *Tree planting*: limited numbers of mature standard trees occur within the open areas studied: see for example TN 6. These trees, including dead or dying specimens, should be retained as far as possible and supplemented with new parkland planting, using native species of local provenance. The selection of species for planting will need to be considered carefully in the light of current concerns regarding possible susceptibility of species to pests and diseases recently introduced, or likely to be introduced, into the UK, and also potential susceptibility to climate change effects. (Natural England has indicated that many mature elm trees in the area were lost to Dutch elm disease, and that one option may to be to reintroduce disease-resistant strains of native elm); and
- *Creation of dung piles*: a large dung pile is present at TN8; however, it is not known whether the dung is exclusively from animals untreated with pesticides such as avermectins. Potential locations for the creation of additional dung piles are shown on Figure 1; these should be from stock not treated with compounds toxic to dung beetles.

[12] See: http://www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/scerealfieldmargins and http://www.ecifm.rdg.ac.uk/field_margins_and_conservation_strips.htmfor further details. Width should be measured from the outer edge of the hedge or tree canopy to minimise shading.

5. Timescales

Habitat creation/management change measures should be implemented at the earliest opportunity, in order that sufficient compensatory habitat resources can be made available by the time development is likely to commence. Although some measures will only reach their full potential after many years (e.g. newly planted trees, even if relatively large specimens, will take decades to reach maturity), others, such as the creation of ponds and dung piles, will reach their full potential more quickly.

Author	Reviewer
[redacted]	[redacted] .....
Lynn Whitfield	Richard Knightbridge



Key

- Locations for proposed development
- Bryanston SSSI
- 1.8km radius around SSSI (of special value to juvenile greater horseshoe bats)
- Broad-leaved semi-natural woodland
- Coniferous plantation woodland
- Broad-leaved scattered trees
- SI — Semi-improved neutral grassland
- I — Improved grassland
- A — Amenity grassland
- A — Arable
- Field boundary with low, clipped hedgerow
- Field boundary with fence or sparse hedgerow
- Bushy hedge or treeline
- 5 — Target note
- Potential pond location
- Potential dung pile location

0 m 750 m

Scale 1:15,000 @ A3

Client

THE CROWN ESTATE

The Crown Estate
Potential Development Land
Near Blandford Forum

amec foster wheeler

Figure 1
Habitat features relevant to potential enhancement measures for greater horseshoe bat

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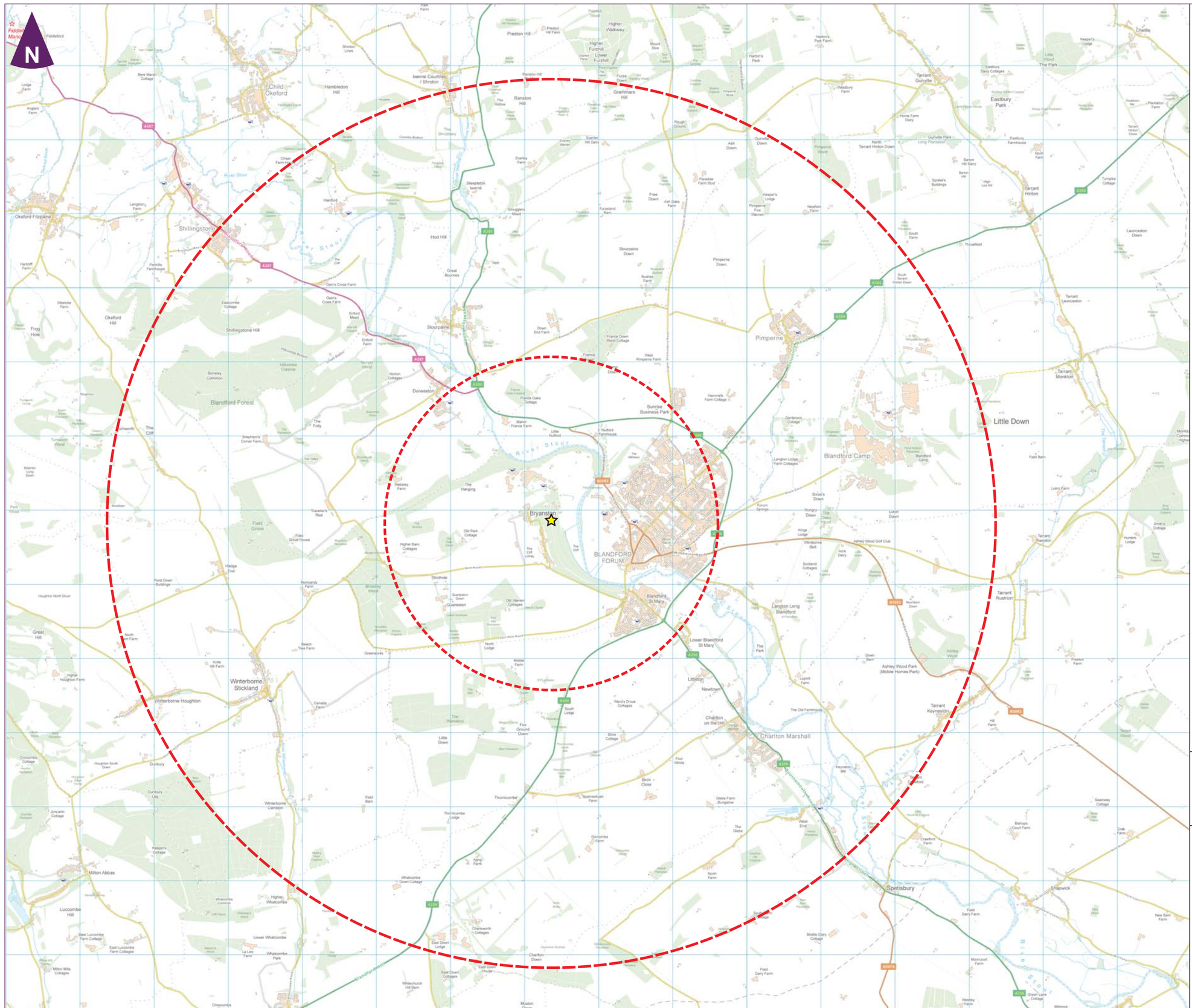

Contains Ordnance Survey data © Crown copyright and database right 2010

0 km 5 km

Scale 1:100,000 @ A3

Client

THE CROWN ESTATE

The Crown Estate
Potential Development
Land Near Blandford
Forum

amec foster wheeler

Figure 2
Wider areas around the Bryanston SSSI where enhancement would benefit bats from the roost

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