



17 October 2013

Land off Station Road,
Hayling Island

Brent Goose Mitigation
Strategy - ADDENDUM

Report Number: 1435_2011_R04a_JA_RW

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1435/P03 October 2013 JSA/JTF

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Land off Station Road, Hayling Island
Brent Goose Mitigation Strategy

1435_2011_R04a 17 October 2013 JA_RW

Section 1: Introduction

- 1.1 This report has been prepared by Tyler Grange LLP on behalf of Hayling Island Builders Ltd in respect of Land off Station Road, Hayling Island, Havant ('the site'). It is an addendum to a mitigation strategy agreed with Natural England and Hampshire County Council to compensate for loss of Brent goose foraging habitat to ensure there is no impact to the integrity of the SPA and Ramsar as a result of proposed development of the site (Tyler Grange report ref. 1435_R03b; hereafter referred to as 'the strategy').
- 1.2 This addendum has been prepared to address concerns raised by the RSPB in its letter dated 7th October 2013 (**Appendix 1**) in respect of the strategy. The RSPB states the strategy is modified as follows (excerpt from letter in **Appendix 1**):
- *"A minimum area of 2.5ha replacement feeding habitat to be secured on open, flat land, as close as possible to the H34 network of Brent goose and wader feeding sites.*
 - *The replacement habitat to be planted with either winter cereal, oilseed rape or permanent improved grassland, to ensure that it provides a suitable replacement resource for Brent geese and waders on an annual basis.*
 - *The replacement habitat to be in place before construction of the proposed development, and managed as such in perpetuity.*
 - *Measures put in place to limit informal recreational access to the network of H34 Brent goose and wader feeding sites.*
 - *Monitoring carried out of the replacement habitat for a minimum period of 3 years, with a requirement in place for the applicant to undertake further reasonable mitigation measures should the replacement habitat prove unsuccessful."*
- 1.3 Each of the RSPB's points is considered below. This addendum should be read in conjunction with the strategy.

Area of Replacement Habitat

- 1.4 The area of H34E that would be removed from the foraging resource for Brent geese is 2.5ha (i.e. the area of the development footprint). The strategy states that 1.5ha of land at H34E would be made more suitable for Brent geese to compensate for these losses. This does not compensate like-for-like in terms of area.
- 1.5 However, in addition, existing recreational use of H34C to the west (also used by Brent geese) will be reduced by blocking off uncontrolled points of access to H34C along its eastern boundary with the Billy Trail. The informal footpath on the western boundary of H34C adjacent to Langstone Harbour is outside of the developer's control and hence would not be affected (anecdotal evidence from surveys suggests that this path is well used, and use results in birds in the northern part of H34C being flushed to the harbour). This will increase the area of habitat that is suitable for Brent geese to forage.
- 1.6 As a crude estimate of the area that is likely to be improved for Brent geese it is necessary to consider the likely area that would remain affected alongside the path next to the harbour.



- 1.7 The Solent Disturbance and Mitigation Project (Ref. 1) refers to data obtained by Liley *et al.* 2010 (Ref. 2) in respect of the behavioural responses of both waders and Brent Geese to disturbance from visitors. These responses were “*measured in intertidal habitats, and so do not measure the response of Brent Geese in the full range of habitats they exploit*” (pg. 57). The report goes on to state that “*Brent Geese may be more habituated to disturbance in terrestrial habitats and so have shorter disturbance distances than in intertidal habitats*”.
- 1.8 In the absence of better predictors, the data from intertidal studies has been used to approximate the area that might be improved by preventing access from the Billy Trail. The median distance of 51.5m where disturbance occurred to Brent goose as a result of visitor use (Ref. 1; table 6.1) was used to calculate the likely area that would be more attractive to Brent geese after modifications to prevent access; the greatest distance where disturbance occurred (178m) was used to estimate the ‘worst case’ (this was also considered, in accordance with the precautionary principle introduced by the Habitats Directive for protected sites). In reality, the area of H34C that would be more attractive to Brent geese is likely to be somewhere in between the two since the mid part of the field is relatively narrow and may be less used than more open parts. There may well be other factors that influence the pattern of use. Table 1 and **Plan 1435/P03** set out the areas.

	Distance where disturbance* occurred used to calculate area (m)	Area (ha)
Total area of H34C	-	11.8
Likely area made more attractive	51.5	9.4
Minimum area made more attractive	178	5.8

Table 1: Area of H34C likely to be made more attractive to Brent geese following access restrictions. *distances taken from Liley *et al* 2010

- 1.9 Of course, it is not possible to state quantitatively what the benefit of this approach will have in terms of compensation for habitat lost. But when considered together, it is concluded that the enhancement of 1.5ha of H34D together with access management in H34C to make at least 5.8ha of the field more attractive to Brent geese is likely to compensate for losses of 2.5ha of H34E. Natural England and Hampshire County Council’s ecologist agreed with this conclusion.

Treatment of Replacement Habitat

- 1.10 Table 2 below sets out the cropping regime since 1999 in H34C and E. Contrary to what was stated in the strategy, information from the tenant farmer has confirmed the fields are not on rotation of cereals and legumes on alternate years. Winter wheat (which is a known forage crop; Ref. 3) is grown biennially, with alternate years either rape (another forage crop), linseed, soya or peas. Since 1999 the fields have not supported crops known to be used by Brents in only four

winters (circa 25% of winters). The situation is therefore considerably (25%) better than previously thought.

- 1.11 The farmer chooses crops based on market forces. It is not reasonable to require him to grow only those crops suitable for Brent geese, indeed Natural England and Hampshire County Council's ecologist agreed that this was not necessary.

Year	Crop	Year	Crop
1999	Rape	2007	Peas
2000	Wheat	2008	Wheat
2001	Soya	2009	Linseed
2002	Wheat	2010	Wheat
2003	Rape	2011	Rape
2004	Wheat	2012	Wheat
2005	Rape	2013	Peas
2006	Wheat		

Table 2: Crop rotation at H34C and E since 1999 (data provided by Simon Walter). Crops in bold are of known value to foraging Brent geese (Ref. 3)

Timing of Provision

- 1.12 It was agreed with Natural England and Hampshire County Council's ecologist that provision of compensatory habitat and recreation management was not required until such time as impacts were likely, with the objective to ensure that there is no net loss in availability of winter foraging.
- 1.13 Based on what was known, the strategy stated that provision would be before winter 2015/16 when the next winter wheat crop was sewn. However, given the crop rotation in Table 2, the timing of the next suitable forage crop (and the fact the birds may use stubble in other years) may well be sooner, hence provision should instead be made before winter 2014/15.
- 1.14 The heads of terms of the management and monitoring plan in the strategy have been modified accordingly in Table 3 below.

Limit Informal Recreational Access

- 1.15 RSPB was concerned that recreational access might be possible from the new development on to the remaining part of H34E to the north of the development. However, the development plans show no access to H34E from the development site. H34E is not currently used for recreational use (unlike H34C, there is no obvious destination from accessible locations around the field), and it is therefore not likely that there would be use of this field – and hence disturbance to birds – once constructed.

Monitoring

- 1.16 It was agreed with Natural England and Hampshire County Council's ecologist that if monitoring in the first three years post construction confirmed that Brent geese were using H34E in equivalent numbers, and H34C in greater numbers (i.e. that the mitigation strategy is successful), then monitoring need not continue for three seasons. However, if this was not the case then three seasons of survey would be undertaken.
- 1.17 RSPB considered that there should be "*a requirement in place for the applicant to undertake further reasonable mitigation measures should the replacement habitat prove unsuccessful*". This point was discussed with Natural England and Hampshire County Council's ecologist at a meeting prior to production of the strategy. It was concluded that there were many variables that could not be controlled by the developer that could influence the use of the site (patterns of usage of fields on around the SPA; population fluctuations; etc) such that it was not reasonable to impose such a condition on the developer. Instead, it was agreed that since there was a high likelihood of success, and that – as with other similar schemes around the SPA – the monitoring data could be used to better understand what measures are successful, rather than to require the mitigation measures to be modified by the developer in some way.
- 1.18 As stated in the strategy, a full management and monitoring strategy (modified heads of terms in Table 3) would be controlled by planning condition, with its implementation secured in perpetuity by planning obligation.

Objective	Prescription	Timing	Responsibility
Ensure H34D is farmed in such a way that it supports suitable habitat for foraging geese and waders	Farm H34D on same rotation as H34E and H34C, with cereals in alternate years, and other crops that may be suited to foraging geese at other times.	In line with usual farming practice	Farmer
Maintain clear, open sight lines between H34D and H34E	Vegetation along the retained ditch cut/ploughed annually to ground level in autumn.	By September 2014*, then annually in September	Farmer
Control access from Hayling Billy trail into H34C	Install fencing to block existing desire lines.	By September 2014*	Developer
	Ensure paths are not recreated, which would increase disturbance to birds. The fence should therefore be checked annually in autumn, before geese arrive, and if necessary repaired.	Annually in September	Developer
Monitor efficacy of mitigation	Undertake up to three winters of monitoring surveys post completion of mitigation and only in years where winter wheat present; if numbers equivalent or greater in year 1 or 2 then stop monitoring.	October to March; 2 visits per month	Developer/ecologist

*Assuming development commences in 2014, otherwise in September following commencement of development

Table 3: Modified heads of terms of management and monitoring plan



Section 2: References

- 1 R. A. Stillman, A. D. West, R. T. Clarke & D. Liley (February 2012) Solent Disturbance and Mitigation Project Phase II - Predicting the impact of human disturbance on overwintering birds in the Solent
- 2 Liley, D., Stillman, R. A. & Fearnley, H. 2010. *The Solent Disturbance and Mitigation Project: results of disturbance fieldwork 2009/10*. Report to the Solent Forum
- 3 Rowell, H.E. & Robinson, J.A. 2005. *Identifying and characterising the feeding areas of Dark-bellied Brent Geese Branta bernicla bernicla in and around Special Protection Areas in the UK. Waterbirds around the world*. Eds. G.C. Boere, C.A. Galbraith & D.A. Stroud. The Stationery Office, Edinburgh, UK. pp. 517-518.



Appendix 1: RSPB letter dated 7 October 2013



Daphney Haywood
Havant Borough Council

By Email only: Daphney.Haywood@havant.gov.uk

7 October 2013

Dear Mrs Haywood

Proposal: Outline planning permission for mixed-use development comprising up to 60 dwellings and 1,250sqm of light-industrial accommodation (Use Class B1)

Location: Land north of Station Road/East of Furniss Way, West Town, Hayling Island

Ref: APP/13/00639

Many thanks for consulting the RSPB on the further information submitted in respect of the above application. We welcome the applicant's new Brent Goose and Wader Mitigation Strategy (herein referred to as 'the Strategy'), but we do have a number of concerns regarding its recommendations.

The Strategy acknowledges the importance of the application site to wintering brent geese and (to a lesser degree) waders, following evidence of local observations highlighted in our previous response. Accordingly, the Strategy makes a number of recommendations to mitigate the loss of an estimated 2.5ha of feeding resource by undertaking the following measures:

- Farm H34D (currently a 1.5ha grass paddock) on same rotation as H34E and H34C, with cereals in alternate years
- Maintain clear, open sight lines between H34D and H34E
- Control access from Hayling Billy Trail into H34C
- Monitor efficacy of mitigation for up to 3 (alternate) years
- Implement the management and monitoring plan in perpetuity

The stated objective of these measures is to ensure that there is no net loss in winter foraging resource. However, we are concerned that the above may not be successful in achieving that objective, for the reasons set out below.

The Strategy suggests that the farmland within H34E is currently managed on a rotation, meaning that it is only suitable for winter foraging in alternate winters (when a winter wheat crop is present). It is proposed that the replacement habitat (H34D) will be managed in the same way. However, this information is inconsistent with the reports we have received from a neighbouring landowner, whose observations suggest that this last winter (2012/13) was the first in the last 19 years that that brent geese have been absent from the site. If rotational farming of H34E is a relatively new introduction to this land, then this

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means that there will already be a 50% reduction in available foraging resource, based simply on the current management regime.

Further, while the area of foraging habitat lost as a result of the development is calculated as 2.5ha, no assessment appears to have been made of the impacts on adjacent land which may be subject to disturbance from the development, deterring wintering birds from using a further area of land. The ditch bisecting the remaining area of H34E may also mean that geese in particular avoid the remaining southern area of field, as it may be perceived as being too small/enclosed. Nevertheless, even on the basis of a conservative estimate of 2.5ha of lost foraging resource, it is clear that the replacement habitat will be smaller than that lost by the footprint of the development. No explanation is offered in the Strategy as to why this smaller area might be sufficient to support the same number of geese as the area lost.

The relatively narrow shape of the replacement habitat also creates uncertainties in its attractiveness to brent geese, which the Strategy acknowledges prefer large open sites. The improved connectivity between the remaining arable land within H34E and that of H34D may help counteract the narrow shape, but it will not be apparent how attractive this area is until the mitigation works have been undertaken. According to the Strategy, these measures will not be put in place until after the development has been constructed, leaving little opportunity to alter the measures and ensure continuity of feeding resource if they prove unsuccessful.

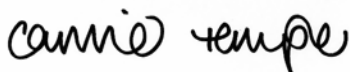
The proposed control of informal access to the adjacent field (H34C) is a welcome additional measure, however it is not clear how much this will reduce disturbance to brent geese and waders using that site, given that access will still be possible along the north and eastern boundaries of the site. It is also unclear whether this measure is seen as compensating for the smaller area of replacement habitat and if so to what extent.

Therefore, in order to provide greater confidence that there will be no net loss of wintering bird feeding resource as a result of the proposals, we consider that the following measures are required:

- A minimum area of 2.5ha replacement feeding habitat to be secured on open, flat land, as close as possible to the H34 network of brent goose and wader feeding sites.
- The replacement habitat to be planted with either winter cereal, oilseed rape or permanent improved grassland, to ensure that it provides a suitable replacement resource for brent geese and waders on an annual basis.
- The replacement habitat to be in place before construction of the proposed development, and managed as such in perpetuity.
- Measures put in place to limit informal recreational access to the network of H34 brent goose and wader feeding sites.
- Monitoring carried out of the replacement habitat for a minimum period of 3 years, with a requirement in place for the applicant to undertake further reasonable mitigation measures should the replacement habitat prove unsuccessful.

I hope these further comments are helpful. Please do not hesitate to get in touch should you wish to discuss any of the points we have raised in further detail.

Yours sincerely



Carrie Temple

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Plan

Area of Brent Goose Habitat likely to be Improved by Access Management
1435/P03 October 2013 JSA/JTF



Land off Station Road, Hayling Island
Brent Goose Mitigation Strategy

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Informal footpath - no changes proposed. When in use this is likely to disturb geese within circa 50m; worst case , up to 178m

LANGSTONE HARBOUR SSSI

Mud

Jetty

Jetty

Jetty

Jetties

Hayling Billy Trail

BMX Track

Newtown

Pumping Station

WOODLANDS L

SALT MARSH LANE

SI

SI F5

Drain

Drain

Drain

Drain

Drain

Drain

Drain

Drain

Drain

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Site Boundary

Fence Repairs (approximate locations)

Minimum Area likely to be enhanced (5.8 ha)

Maximum Area that may be enhanced (9.4 ha)

Area unlikely to be used when path in use owing to size and enclosed nature (0.7 ha)

Existing Informal Path

Uncontrolled access to F4 from Billy Trail prevented to reduce disturbance to birds

N

0 50 100 150 200m

Project Details	Land between Furniss Way and Dancers Way, Hayling Island
Title	Area of Brent Goose Habitat likely to be Improved by Access Management
Scale	As Shown
Drawing Ref	1435/P03
Date	October 2013
Checked	JSA/JTF