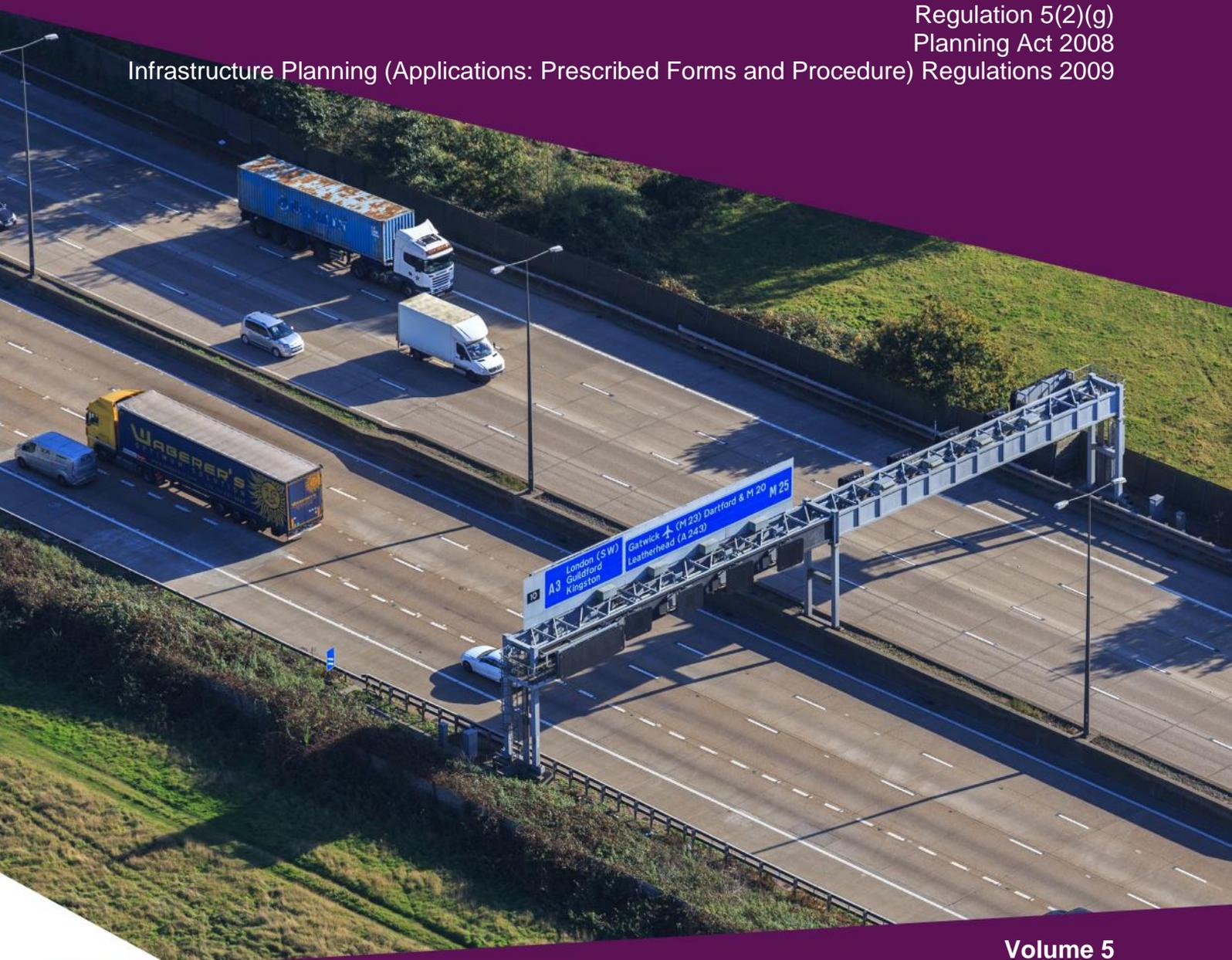


M25 junction 10/A3 Wisley interchange TR010030

5.3 Habitats Regulations Assessment Annex C: Selection of the suite of compensatory measures

Regulation 5(2)(g)
Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M25 junction 10/A3 Wisley interchange improvement Development Consent Order 202[x]

5.3 HABITATS REGULATIONS ASSESSMENT ANNEX C: SELECTION OF THE SUITE OF COMPENSATORY MEASURES

Regulation Number:	Regulation 5(2)(g)
Planning Inspectorate Scheme Reference	TR010030
Application Document Reference	TR010030/APP/5.3
Author:	M25 junction 10/A3 Wisley interchange improvement project team, Highways England and Atkins

Penance

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1. Introduction

- 1.1.1. Consultation with key stakeholders (Natural England, the Forestry Commission, Royal Society for the Protection of Birds (RSPB), Surrey County Council (SCC), Guildford Borough Council and Surrey Wildlife Trust (SWT)) on the Habitats Regulations Assessment (HRA) has taken place throughout the Scheme selection and design process.
- 1.1.2. The HRA consultation has been recorded in the Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3). As part of the HRA process, the Statement to inform an Appropriate Assessment identified an adverse effect on the integrity of the Thames Basin Heaths Special Protection Area (SPA) due to the loss of habitat. The permanent loss of 5.9 ha of the SPA, and temporary loss of 8.6 ha, will be confined to the woodland edge of the SPA and therefore will not directly affect the heathland habitats nor the qualifying species that they support. Nor will the land take affect any functionally linked habitats for the qualifying species. However, the habitat losses occur within the boundary of the SPA and, in view of the conservation objectives to maintain the extent and distribution of supporting habitats, the losses represent an adverse effect to the integrity of the SPA.
- 1.1.3. Furthermore, this woodland habitat may also contribute to the invertebrate resource of the qualifying SPA species. This in turn could lead to an adverse effect in view of the structure and function of the habitats of the qualifying features.
- 1.1.4. During a consultation meeting on the 16 March 2018, Natural England noted that it might be possible to provide compensation for the impacts resulting from the loss of SPA land by enhancing the habitat value of land within the currently designated boundary (i.e. by clearing woodland to allow areas of heathland to regenerate). However, it was noted that there would be an expectation to avoid physical loss of the SPA total land area, thus requiring additional land to form part of the compensation package.
- 1.1.5. It was agreed that the compensation package should consist of a mixture of SPA compensation land to replace the SPA land take, and SPA enhancement areas to improve the suitability of the SPA for its qualifying features (by providing more nesting and foraging habitat and increased food resources).

2. Agreement of suite of compensatory measures and ratios

- 2.1.1. During a stakeholder meeting on the 28 June 2018, the compensation package (now referred to as the suite of compensatory measures) was discussed and agreed with stakeholders (refer to Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3) for details).
- 2.1.2. The ratios vary between the SPA compensation land and the SPA enhancement areas, following consultation.
- 2.1.3. The broad principle Highways England are pursuing for compensation land for the SPA is a 1:1 ratio for the areas of permanent loss, in order to avoid a reduction in the area of the SPA (see Section 3 below on Selection of SPA compensation land).
- 2.1.4. In contrast a precautionary approach was taken to the enhancement of land within the SPA (see Section 4 below on Selection of enhancement areas). Research undertaken by Atkins and the stakeholders (Natural England, SWT and RSPB) has identified that the appropriate enhancement ratio can vary greatly between schemes. Based on the present nature of the habitat being lost within the SPA (i.e. woodland habitat that does not directly support any qualifying species, but may contribute to the invertebrate food resource within the SPA) it has been proposed that a 3:1 enhancement ratio would be appropriate (i.e. for every hectare of permanent and temporary land take within the SPA, three hectares of enhancement area will be created within the SPA).

3. Selection of SPA compensation land

3.1. The consideration of Pond Farm as SPA Compensation Land

- 3.1.1. The potential SPA compensation land was first discussed with Natural England during a meeting on the 18 December 2017. During this meeting, Natural England suggested that compensation land for the land take should ideally be in one location and not fragmented. It was also suggested that Pond Farm, the Surrey Wildlife Trust (SWT) Site within the Ockham and Wisley Commons Site of Special Scientific Interest (SSSI) component of the SPA, would be a good location for the SPA compensation land.
- 3.1.2. The location of Pond Farm can be seen on Figure 15 of 5.3 Habitats Regulations Assessment Figures (application document TR010030/APP/5.3). This land was proposed due to its setting within the SPA. This meant it was well placed to complement the existing SPA whilst also not affecting the existing 400 m residential development exclusion zone around the SPA¹.
- 3.1.3. The initial proposal was to consider whether this area could be reverted back to heathland. However, this was considered unlikely due to the long-term use of the land as cattle fields having led to high nutrient inputs. However, there was still the possibility to plant the fields as woodland to provide the woodland habitat and associated invertebrate resource being lost as a result of the Scheme.
- 3.1.4. On the 31 January 2018 (refer to meeting minutes for the 20 December 2017) SWT objected to the use of Pond Farm as SPA compensation land.
- 3.1.5. During a meeting on the 16 March 2018, SWT's concerns about the use of Pond Farm as SPA compensation land were discussed.
- 3.1.6. SWT gave a view that this parcel was unsuitable as SPA compensation land because it provides vital winter grazing for the cattle that SWT use on all of their sites throughout Surrey, including other components of the Thames Basin Heaths SPA. Therefore, the ability to maintain the stock levels and herd management at Pond Farm is vital to the management of the entire SPA, not just the Ockham and Wisley Commons SSSI part of it. The change to open public access would be incompatible with SWT's need to use the land as winter grazing for their herd and a location for cattle with calves and stock needing to be quarantined. Therefore, by taking this land from SWT, the Scheme would be having a detrimental impact on SWT's operations and hence their ability to manage the rest of the Thames Basin Heaths SPA
- 3.1.7. For this reason, the use of Pond Farm as SPA compensation land was rejected and alternative options were sought, that (i) provided suitable potential to compensate for the land take, (ii) were directly connected to the SPA, and (iii) avoided any changes to the local planning authority buffer zones.

¹ There is a 400 m protection buffer around the Thames Basin Heaths SPA to prevent developments that result in a net increase in residential units, which could potentially lead to increased pressure on the SPA as a result of cat predation and recreational disturbance.

3.2. The consideration of Old Lane, Elm Lane and Wisley SPA compensation land parcels

- 3.2.1. During the stakeholder meeting on the 28 June 2018, Atkins proposed SPA compensation land parcels on Old Lane, Elm Lane and near Buxton Wood bridge in replacement of the original proposal of Pond Farm. These areas have since been named:
1. C1²: Old Lane SPA compensation land;
 2. C2: Wisley SPA compensation land;
 3. C3: Elm Corner SPA compensation land.
- 3.2.2. These SPA compensation land parcels can be seen on Figure 15 of 5.3 Habitats Regulations Assessment Figures (application document TR010030/APP/5.3).
- 3.2.3. The rationale for choosing these parcels was the provision of suitable food sources for the SPA qualifying species (particularly nightjar, which are known to regularly use grazed fields as foraging habitat) whilst not being within the 400 m buffer zone of the Wisley Airfield development or affecting the Elmbridge buffer zone north of the M25. It was noted that the SPA compensation land parcels would provide habitat of similar, or possibly greater SPA value, than those to be permanently lost to the Scheme.
- 3.2.4. The proposals for the management of these SPA compensation land parcels was discussed under consultation with stakeholders (Natural England, SWT, Royal Society for the Protection of Birds (RSPB) and the Forestry Commission) between 26 July 2018 and 5 December 2018 (refer to Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3) for details).
- 3.2.5. An on-site meeting with Natural England, SWT, RSPB and the Forestry Commission on the 30 January 2019 led to all parties agreeing on management proposals for the SPA compensation land parcels:
- C1 - Old Lane SPA compensation land**
- 3.2.6. This land area consists of two fields.
- 3.2.7. Field 1: This is the larger of the two fields. This field would continue to be grazed, but trees would be planted in order to increase the invertebrate abundance of this field. This conversion to wood pasture would ensure that the florally diverse grass understory would be retained (providing a nectar resource), but would also enhance the invertebrate assemblage that the field supports by providing 20% canopy cover (based on the coverage of the canopy once the trees have reached maturity). Benefits over the existing field:
1. The increase of trees within the field would increase the invertebrate resource that the field contributes to the wider SPA;
 2. The open nature of the wood pasture would ensure that nightjars (and possibly woodlarks) will be able to forage, or continue foraging, within the

² These codes have been provided for convenience when interpreting Figure 15 of 5.3 Habitats Regulations Assessment Figures (application document TR010030/APP/5.3).

field (should they currently do so), but also that the likelihood that they would use the field for foraging may increase as there will be a greater invertebrate resource within the field.

- 3.2.8. Field 2: This field would be planted with a scrub edge, with flower-rich species such as hawthorn and blackthorn. This would provide a woodland edge for the surrounding mature woodland and would provide an important invertebrate resource for the SPA. This scrub would be managed by SWT. The majority of the field would be retained as grazed grass. The combination of a grazed field with a scrubby woodland edge would enhance the invertebrate resource of the field and therefore its invertebrate resource contribution to the SPA, and would also enhance the foraging opportunities for nightjars (known to forage within grazed fields, and also woodland edges) and possibly woodlarks (known to forage in grass areas).

C2 - Wisley SPA compensation land

- 3.2.9. This grass field would continue to be grazed, but additional trees would be planted in order to increase the invertebrate abundance of this field. This conversion to wood pasture would ensure that the grass understory would be retained (providing a nectar resource) but would also enhance the invertebrate assemblage that the field supports by providing 20% canopy cover (based on the coverage of the canopy once the trees have reached maturity). Benefits over the existing field:
1. The increase of trees within the field would increase the invertebrate resource that the field contributes to the wider SPA;
 2. The open nature of the wood pasture would ensure that nightjars (and possibly woodlarks) would be able to forage, or continue foraging, within the field (should they currently do so), but also that the likelihood that they would use the field for foraging may increase as there would be a greater invertebrate resource within the field and an enhanced linkage to the existing open habitats of the SPA due to the opening up of a glade within the Pond Farm west SPA enhancement area (see Section 4 below on Selection of enhancement areas).
- 3.2.10. The proposal was to only take part of the existing field (i.e. 1.3 ha of a 5.5 ha field) in order to meet the 1:1 permanent land take ratio. It was discussed and agreed by all parties that, should the amount of SPA compensation land need to be increased, it would be appropriate to increase the size of the Wisley SPA compensation land to include the whole of this field.
- 3.2.11. These SPA compensation land proposals, including the use of the whole field at Wisley SPA compensation land were discussed and agreed with Surrey County Council (SCC) during a meeting on the 1 February 2019 (refer to Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3) for meeting minutes).

C3 - Elm Corner SPA compensation land

- 3.2.12. This area of woodland would be managed in a similar way to the adjacent Elm Lane SPA enhancement area and thus enhance the invertebrate abundance of this woodland (see Section 4 below on Selection of enhancement areas).

3.3. The final selection of Old Lane and Wisley SPA compensation land parcels

- 3.3.1. Consultation with Guildford Borough Council and Wisley Properties Investment Limited during a meeting on the 7 February 2019 identified that the proposals for Elm Corner SPA compensation land, and partially for Old Lane SPA compensation land, changes the 400 m buffer for Guildford Borough Council, by expanding the 400 m buffer and potentially affecting applications for residential developments at Wisley Airfield.
- 3.3.2. Guildford Borough Council requested that the 400 m buffer should not be altered as a result of the Scheme. Based on this request, and the prior intention to increase the compensation land area at Wisley SPA compensation land to include the whole field, it was agreed that Elm Corner SPA Compensation Land would be removed from the suite of compensatory measures, and Old Lane SPA Compensation Land will be adjusted to remove the small field and slightly reduce the size of the SPA compensation land area within the larger field (refer to Figure 15 of 5.3 Habitats Regulations Assessment Figures (application document TR010030/APP/5.3)).
- 3.3.3. It is considered that the proposed SPA compensation land areas at Wisley SPA compensation land (C3 on the map) and Old Lane SPA compensation land (C1 field 1) will provide the greatest value to the SPA as they are immediately adjacent to open heathland areas, and will benefit from wood pasture planting to enhance their invertebrate resource for the SPA, whilst maintaining open grazed grass for foraging nightjars and woodlarks.
- 3.3.4. These proposals were raised and agreed with Natural England, SWT, RSPB and the Forestry Commission as part of the finalisation of the meeting minutes for the 30 January 2019 (refer to Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3) for meeting minutes).

4. Selection of enhancement areas

- 4.1.1. The enhancement areas will consist of a combination of:
1. Areas of total clearance totalling approximately 22.5 ha (where only trees with veteran features or potential bat features will be retained) to encourage heathland regeneration and provide open habitats for SPA qualifying species.
 2. Areas of thinning totalling approximately 24.9 ha, where the woodlands will be thinned (focusing on young silver birch trees and Scots pines), to encourage increased woodland diversity and provide more open habitats. This thinning will include widening existing rides and increasing the size of existing open patches within woodlands.
- 4.1.2. These enhancement works will increase the diversity of the retained woodland within the SPA, increasing the invertebrate resource that it supports, as well as increasing the areas of open heathland habitat, enabling the populations of SPA qualifying species within the SPA to increase.
- 4.1.3. Due to the temporary and permanent loss within the SPA totalling 14.5 ha, a plan was produced with 47.4 ha of enhancements within the SPA (refer to Figure 13 of 5.3 Habitats Regulations Assessment Figures (application document TR010030/APP/5.3)). The enhancement areas consist of a mixture of total clearance for heathland regeneration and woodland thinning to enhance the diversity and associated invertebrate abundance of the retained woodland within the SPA.
- 4.1.4. During a meeting with the Forestry Commission and SWT on the 26 July 2018, a discussion was held with regards to the enhancement areas, and the fact that the enhancement areas would consist of a mixture of some areas of total clearance for heathland regeneration and some areas of woodland thinning. It was confirmed that thinning should retain a 20% canopy of existing trees to still be considered woodland.
- 4.1.5. The proposed enhancement areas were discussed and agreed with Natural England on 9 October 2018, SWT on 16 October 2018, Forestry Commission on the 29 October 2018 (plus follow up call on the 13 December 2018), RSPB on the 5 December 2018 and SCC on 1 February 2019 (refer to Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3) for meeting minutes).
- 4.1.6. An on-site meeting with Natural England, SWT, RSPB and the Forestry Commission on the 30 January 2019 led to all parties agreeing on management proposals for the enhancement areas. These are summarised below.

4.2. General principles for the enhancement areas

Clearance for heathland restoration

- 4.2.1. Woodland will be cleared in order to allow heathland restoration. However, trees with important features will be retained as it would be detrimental to the site to

lose these features, and a diverse heathland should include some standing trees (both alive and dead) at a density of less than 10% cover³. These will consist of:

1. Veteran trees and trees with veteran features; and
2. Trees with potential bat roost features (including dead trees).

Thinning of woodland areas

4.2.2. The thinning of woodland areas is divided into two types:

4.2.3. **Regeneration thinning:** this is the selective thinning of a woodland area (retaining all veteran trees or trees with veteran features, trees with bat roost potential and granny trees). This allows regeneration growth in cleared areas, providing a range of age classes and adding resilience to the woodland. This will include measures such as:

1. 'Punching holes' into the woodland (some of which will be managed to remain open and some will be allowed to regrow with more diverse woodland, both in age and species diversity);
2. Increasing the size of existing open areas;
3. Creating and widening existing glades (some of which may be planted at the edges to provide a shrubby woodland edge habitat, some will be managed as heathland habitat); and
4. Selective felling of some trees and groups of trees, to allow retained trees to flourish, and encourage a more diverse species assemblage to regrow.

4.2.4. **Standard thinning:** This is a more typical selective thinning, where the number of trees within a woodland is, opening the canopy and allowing the remaining trees to fill it (retaining all veteran trees or trees with veteran features, trees with bat roost potential and granny trees), allowing the retained trees to flourish and encouraging a more diverse species assemblage to return. This may include some selective planting, where necessary, to increase the species diversity.

4.3. Description of enhancement areas

4.3.1. The following section is a description of each of the SPA enhancement areas. The locations of these can be found in Figure 13 of 5.3 Habitats Regulations Assessment Figures (application document TR010030/APP/5.3).

E1 - Cockcrow Hill SPA enhancement area

4.3.2. This area of woodland will be completely cleared to allow heathland regeneration. This will link the existing heathland by Pond Farm with Cockcrow bridge.

E2 - Ockham Common/Sand Hill SPA enhancement area

4.3.3. This consists of an area of woodland to be completely cleared to allow heathland regeneration (which will increase the continuous area of heathland on Ockham

³ As minuted in Habitats Regulations Assessment consultation report, application document TR010030/APP/5.3 in Annex B of Habitat Regulations Assessment Stage 2: Statement to Inform Appropriate Assessment (application document TR010030/APP/5.3), SWT confirmed in a meeting on the 26th July 2018 that the Countryside Stewardship programme defines heathland as having a maximum cover of 10% trees.

Common, whilst also providing a link with Cockcrow bridge) and an area of woodland thinning. The following key points were agreed with all stakeholders during the site meeting on the 30 January 2019:

1. The edge between the cleared area and the thinned woodland should be a 'wavy edge' rather than a 'straight edge'. This is because nightjars regularly utilise woodland edges for foraging, and the wavy edge will not only increase the length of available foraging habitat, but will also provide sheltered pockets in differing wind directions;
2. The area for clearance will include Sand Hill. The sides of this mound will be felled for heathland regeneration, but the top of the mound will be selectively thinned to leave a number of Scots pine trees;
3. The area of woodland thinning will be regeneration thinning, with the widening of rides, opening of areas of the woodland, and selective felling of the outer edge of the woodland to provide a diverse woodland edge effect for foraging nightjars (as mentioned previously, this edge will also be wavy).

E3 - Ockham Common/Old Lane SPA enhancement area

4.3.4. This consists of an area of woodland to be completely cleared to allow heathland regeneration, which will increase the continuous area of heathland on Ockham Common and also an area of woodland thinning adjacent to the car park on Old Lane. The following key points were agreed with all stakeholders during the site meeting on the 30 January 2019:

1. The edge between the cleared area and the thinned woodland should be a 'wavy edge' rather than a 'straight edge'. This was recommended by the RSPB heathland specialist because nightjars regularly utilise woodland edges for foraging, and the wavy edge would not only increase the length of available foraging habitat, but will also provide sheltered pockets in differing wind directions;
2. The area of woodland thinning will be regeneration thinning, with the widening of rides, opening of areas of the woodland, and selective felling of the outer edge of the woodland to provide a diverse woodland edge effect for foraging nightjars (as mentioned previously, this edge will also be wavy).

E4 - Elm Lane SPA enhancement area

4.3.5. This will mainly consist of woodland thinning, with a belt of woodland to be cleared along the southern edge of Bolder Mere.

4.3.6. The area of clearance adjacent to Bolder Mere will reduce the shading of the lake edge, and will enhance the invertebrate resource that the lake provides to the wider SPA.

4.3.7. The remainder of the woodland will undergo regeneration thinning. The primary objective of this thinning will be to increase the diversity of the woodland, and therefore its invertebrate abundance. This will also include some planting, potentially with evergreen species such as holly, to provide a visual screen between the A3 and the housing properties along Elm Lane. The management will also include the removal areas of rhododendron.

E5 - Wisley Common SPA enhancement area

- 4.3.8. A portion of this area has been recently thinned as part of the ongoing management of the woodland. It is proposed that this area will be completely cleared to allow heathland regeneration, to increase the area of continuous heathland habitat on Wisley Common.

E6 – Hut Hill south SPA enhancement area

- 4.3.9. This area consists of a small area of birch regrowth that will be clear felled to increase the area of open heathland habitat in this location.

E7 - Pond Farm south SPA enhancement area

- 4.3.10. This consists of two pockets of woodland either side of a path, that separate two open areas of heathland. One section (to the north) consists of mature trees such as oaks. Selective thinning of some of the younger tree specimens will enhance the diversity of this woodland area. The other section (to the south) contains dense birch growth. This area will undergo selective tree removal, including widening the existing path to provide an open linkage between the two areas of heathland.

E8 - Pond Farm west SPA enhancement area

- 4.3.11. This will include some selective thinning, with the creation of an open ride linking two existing areas of heathland to Wisley SPA compensation land.

5. Summary

- 5.1.1. The section above summarises the consultation process undertaken in order to identify and agree an appropriate suite of compensatory measures with the stakeholders (Natural England, the Forestry Commission, SWT, RSPB, GBC and SCC) that will compensate for the adverse effects of the Scheme on the SPA by:
1. Providing 8.1 ha of compensatory SPA habitat for the permanent loss of SPA land. This habitat will be managed to enhance its invertebrate resource contribution to the SPA and all three qualifying features;
 2. Creating 22.5 ha of diverse heathland habitat within the SPA to provide nesting and foraging habitat for all three qualifying features;
 3. Enhancing 24.9 ha of woodland to increase foraging opportunities for nightjar and woodlark (by creating wide glades, open areas, and 'wavy' woodland edges), and to increase the invertebrate resource contribution to the SPA and all three qualifying features.

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