OUTLINE HABITAT RESTORATION AND MANAGEMENT PLAN
INTRODUCTION

1. Atmos Consulting Ltd (Atmos) was commissioned by RWE npower renewables Limited (NRL) in March 2012 to review the Habitat Management Plans prepared for the Carnedd Wen wind farm and habitat restoration project by White Young and Green Group in 2008. A number of plans had been drafted, and a further version (Outline Habitat Management Plan or OHMP) was produced by Boreas Ecology Ltd and provided as Appendix 7.1 of a submission of NRL’s Supplementary Environmental Information in 2011.

2. The primary aims of the OHMP in 2011 remained as set out in the 2008 Environmental Statement: to bring about a restoration of blanket bog and to manage habitats in such a manner as to encourage the recovery of the local black grouse population. The secondary aim was to provide nesting and foraging habitat for breeding hen harriers. Both black grouse and hen harriers had been recorded in the general area as part of the surveys carried out for the 2008 ES.

3. Having reviewed the 2011 OHMP, and in light of more recent ornithological surveys, carried out on behalf of NRL in 2011 and 2012, Atmos has concluded that the primary aim of any HMP should be re-focused on habitats in their own right, rather than as supporting structures for individual bird species. Nevertheless specific provisions relating to ornithological protection have been agreed with NRW and these appear at 61 below.

4. The present document explains the rationale for this change in emphasis, through an examination of the original condition of the site before conifer planting took place from the 1970s and 80s onwards; the results of botanical surveys carried out in 2010 and 2012; evidence for the existence of a viable seed bank at Carnedd Wen and, crucially, the results of the bird surveys carried out in 2011 and 2012.

5. The report then re-states the aims of the revised OHMP (hereafter referred to as the Habitat Restoration and Management Plan, HRMP), sets the process by which management prescriptions for the various parts of the application area were identified and outlines the techniques that would be used to bring about the restoration of habitats that reflect the conditions of the site before afforestation.

6. Finally the means by which the HRMP would be implemented will be described, and the ways in which progress of the HRMP would be monitored are set out.

7. It is important to note that the HRMP is not primarily intended as a means of mitigating any adverse effects of the associated wind farm development, but is a wider plan to restore habitats following the impacts of afforestation. Mitigation for any wind farm impacts is described in elsewhere in the previous environmental information and in the current SEI. An assessment of the environmental impacts of the HRMP is made in Chapter 7 (Non-avian Ecology) of this SEI.
2 **PRE-PLANTING CONDITION OF THE SITE**

8. The Carnedd Wen site forms the central part of an area often referred to in literature as Llanbrynmair Moor. Botanical surveys carried out in the 1970s found that the Moor was a complex mosaic of blanket bog and associated habitats, giving rise to high botanical diversity. The site was believed to have been one of the best examples of such upland habitats in Wales, and it is likely that, were it to have survived in its original condition, it would have qualified under the Guidelines for the Identification of SSSIs for designation at a national level, and potentially as a European Special Area for Conservation. In addition, the site is reported to have been, in 1977, a nationally important breeding ground for merlin, golden plover and greenshank (New Scientist 20 Nov 1980).

9. Evidence of the quality of the pre-planting condition of the area can be found within the three parts of the Corsydd Llanbrynmair/Llanbrynmair Moors SSSI that were intended to be protected from planting, and which remain good examples of western blanket bog vegetation, including abundant bog asphodel, occasional bog rosemary, cross-leaved heath and a variety of bog mosses including the peat-forming bryophyte species *Sphagnum cuspidatum* and *Sphagnum magellanicum*.

3 **SUMMARY OF RECENT BOTANICAL SURVEYS**

10. Extensive botanical studies of the site have been carried out as part of the EIA and habitat restoration planning process for the Carnedd Wen project. These are reported in Appendix A7.3 of the 2008 ES, Appendix 7.2 of the 2011 SEI and in Chapter 7 of the present SEI.

11. Blanket bog was reported, in the 2011 SEI, to cover approximately 401 hectares. More recent botanical surveys, carried out in 2012, and reported in Chapter 7 of this SEI, suggest that this figure was an underestimate, given the extent of heavily modified blanket bog vegetation that remains within the forest canopy. Moreover, the 2012 peat depth modelling and hydrological studies have shown a significantly greater area of former blanket bog beneath the tree canopy that would be capable of supporting the habitat in future, than was suggested in the original ES. It is presently estimated that the area of former blanket bog that is capable of restoration is at least 459ha.

12. Heathland cover, mainly in the form of wet modified heath or a mosaic of wet heath and acid grassland, was found to be far less extensive than blanket bog in the 2008 ES. Surveys in 2010, reported in the 2011 SEI, suggested that only some 42 hectares of open heathland was present on the site. This is perhaps unsurprising, as upland heathland forms on shallower, drier peats and humic soils that are more suited to conifer growth. Under these conditions it might be expected that any original heathland vegetation would have been more affected by dense tree growth and consequent light loss than many of the blanket bog areas. Nevertheless, the remaining heathland persists in a linear network of rides and along the
edges of forest tracks throughout the plantation and will serve as a source of widespread colonisation and expansion where conditions are suitable post-felling.

13. In summary, the results of the various studies taken together show that, in addition to the three parts of the Corsydd Llanbrynmair SSSI, there exists a network of residual blanket bog, heathland and flush habitats within the remaining open areas of the site, mainly in rides and breaks in the forestry cover (Appendix 7.2, 2011 SEI), as well as a series of smaller areas varying from a few metres square in gaps in the canopy to parcels several hundred square metres in extent, where tree growth has been checked by wet ground conditions and light levels consequently approach those of fully open areas (present SEI).

14. These areas retain remnants of the original vegetation which, although inevitably altered to varying degrees by forestry planting and operations, represent sources of vegetation communities which could spread under appropriate conditions into areas that would be clearfelled as part of the Carnedd Wen project.

15. In addition, there is strong evidence from recently clear-felled areas that a viable seed bank of key species exists across the site. Seed banks comprise inert but viable seed material buried in the upper soil layers which respond positively to the increases in light levels, soil moisture and temperature that result from forest felling.

16. Therefore, there is strong and sufficient evidence to support the notion that, with careful tree felling and the creation of favourable hydrological conditions, it will be possible to restore large areas of blanket bog and heathland habitats within the Carnedd Wen forest boundary. Where soil or slope conditions preclude the possibility of such habitats developing, there is scope to create areas of semi-natural deciduous woodland, marshy grassland and acid grassland, all of which would be expected to have existed on the site prior to afforestation.

4 DEFINING THE HABITAT RESTORATION AREAS

17. Habitat Restoration Areas (HRAs) have been defined based on the HRA decision tree shown in Figure 1, which uses threshold peat depths and ground slopes to determine the type of habitat restoration to be implemented. Habitat restoration will be focused in areas previously planted with conifers and which will be subject to felling during the implementation of the Carnedd Wen project.
Figure 1  Habitat Management Plan - Decision Tree

18.  Forested parts of the site with modelled peat depths >0.5m and slopes less than 3.5° have been modelled as having greatest potential for the restoration of blanket bog.
19. Other HRAs occur on parts of the site with steeper slopes or lower peat depths, or both. In these areas, restoration may ultimately result in blanket bog, but slope and/or peat depths may only enable wet or dry heath. In these areas, while the target habitat is blanket bog, the outcome may not be. Accordingly, the estimated area restored to blanket bog is based on the 'priority' HRAs only.

20. The choice of peat depth and slope thresholds for definition of HRAs reflect published guidance on the likelihood of successful blanket bog restoration. An extensive survey of the success of drain / ditch blocking by Forestry Commission Wales (FCW, 2012) indicated that slopes <3.5° (6%) have the most advantageous conditions for water table recovery with drain blocking. Peat depths > 0.5m are anticipated to have a sufficient depth of peat and functioning hydrological system to return to active blanket bog, given appropriate water table conditions.

21. It should be noted, however, that the use of the <6% slope criterion is precautionary. Evidence provided by CCW from blanket bogs across Wales suggests that blanket bog will, under the correct circumstances, readily develop on slopes of up to around 8%. Thus, estimates of the extent of likely blanket bog restoration at Carnedd Wen are likely to be conservative.

22. The process of deriving the HRAs in GIS was as follows:

- HRA extents were determined in ArcGIS 10 using the following data sources:
  - Slope maps derived from the 25m and 5m digital terrain models (DTMs);
  - Peat depth model (described in SEI Part One Appendix 12.1);
  - Forest coupes (mapped as part of the Forestry SEI).
- The slope maps were classified into three slope ranges (0–3.5°, 3.5–16.6°, >16.7°) and layered with the peat depth model (classified as less than or greater than 0.5m) and the forest coupe outlines.
- Approximate boundaries for blanket bog were identified where the DTMs showed slopes <3.5° and the peat model indicated peat depths >0.5m. This is a conservative approach, as evidence provided to the Restoration Team by CCW suggests that blanket bog can develop on steeper slopes in Wales. This HRMP therefore allows for a degree of adaptive management, to be decided upon by the Steering Group (see below): it is envisaged that blanket bog will be prioritised wherever it develops on the site. The HRA boundaries were then refined by aligning the approximate boundaries to existing forest coupe boundaries (e.g. rides, racks, natural openings or clearings). These minor alignment changes were undertaken to make identification of HRAs practicable on the ground while resulting in only minor infringement of the rule set used to define them (i.e. incorporation of some peat down to 0.3m depth and up to 5.5° slope). In all, 459ha of priority HRAs have been defined.
- In addition to the HRAs, the boundaries of areas of existing bog adjacent to or linking priority restoration areas were defined. These areas generally comprise some of the best quality habitat site within the afforested area of the site, and are considered as source areas for recovery of the peatland underlying forestry. Taken alone, these areas total 130ha, such that the total anticipated area of blanket bog restoration is estimated at 589ha.
• 'Secondary' HRAs were defined by mapping all the residual areas of forestry not marked for Long Term Retention, Delayed Felling or felling for 'priority' HRAs and total 568ha.
• Additional 'secondary' HRAs have been defined as all areas of delayed felling that will ultimately be felled when marketable, which are not required for long term retention (on landscape visual grounds) and which are on peats to deep to commercially restock under the current policy framework.
• Undesignated areas comprise the retained areas of forestry, lakes and areas of open ground outside the main forestry boundary. Open ground areas are currently of sufficient quality in habitat terms that intervention might cause more damage than benefit.

23. The breakdown of areas (by hectare) is shown below, with Boreas figures for comparison:

<table>
<thead>
<tr>
<th>Description</th>
<th>Area (ha) 2013 SEI</th>
<th>Area (ha) 2011 SEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority HRAs (felled for restoration to blanket bog)</td>
<td>459</td>
<td>401*</td>
</tr>
<tr>
<td>Secondary HRAs (felled for restoration to bog or wet / dry heath)</td>
<td>568</td>
<td>-</td>
</tr>
<tr>
<td>Secondary HRAs (delay felled for restoration to bog wet / dry heath)</td>
<td>169</td>
<td>-</td>
</tr>
<tr>
<td>Existing bog adjacent to or linking priority restoration areas</td>
<td>130</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total restoration area</strong></td>
<td><strong>1,327</strong></td>
<td></td>
</tr>
<tr>
<td>Undesignated areas (open ground, long term retention forestry)</td>
<td>1,278</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,605</strong></td>
<td></td>
</tr>
</tbody>
</table>

5 RESTORATION METHODOLOGIES

5.1 Background Research

24. The techniques for post-forestry restoration of upland habitats have evolved rapidly in recent years, in part through conservation initiatives that have aimed to reverse the ecological changes that were caused by large scale conifer planting in the 1970s and 1980s, in part
because of statutory requirements to bring nationally and internationally designated sites into favourable condition and to recognise the need to further biodiversity, and partly because of the growth of wind energy in upland Britain.

25. Where, only a matter of 10-15 years ago, restoration methodologies were largely experimental in nature, those experiments have resulted in the development of a range of tried and tested techniques that can be applied to the Carnedd Wen site, and which have been employed by conservation bodies nearby in Wales and further afield.

26. It is not the intention, in this SEI, to provide a detailed literature review of peatland restoration projects. The proposals set out in the present document have been informed by a range of publications, including the following:

- A framework to set conservation objectives and achieve favourable condition in Welsh Upland Sites (CCW, 2007)
- Active Blanket Bog in Wales - EU Life Project (Farmer, 2011)
- An Introduction to Welsh Peatlands - Presentation (P Jones CCW, 2011)
- Brash Management on Habitat Restoration Sites (Forest Research, 2003)
- Development on Peatland - Internal Guidance (SEPA, 2010)
- Developments on Peatlands - Site Surveys (SEPA, 2012)
- EIA of Forest Projects (Forestry Commission, 2009)
- Energy Assessment of TAN8 Wind Energy Strategic Search Areas (Houston et al, 2005)
- Upland Habitat Management Handbook, Chapter 6 (English Nature)
- Forests and Peatland Habitats (Forestry Commission, 2000)
- Forests and Water - UK Forestry Standard Guidelines (FCS, 2011)
- Guidance - Developments on Peatland - Site Surveys (SEPA, 2011)
- Guidance on the assessment of peat volumes, reuse of excavated peat and the minimisation of waste (SR and SEPA, 2012)
- IPIN 1706 Presentation of Brash on clearfelled sites - bailing
- Managing Brash on Conifer Clearfell Sites (Forest Research, 2006)
- Peatland Hydrology (Labadz et al, 2010)
- PUDP IDCG Biodiversity Conservation and Enhancement in Development Proposals (Powys, 2009)
- Restoring afforested peat bogs, results of current research (FCW, 2010)
- Review of Blanket Bog Management and Restoration (DEFRA, 2007)
- TAN 5 Nature Conservation and Planning (WAG, 2009)
- The afforested peat resource in Wales (FCW, 2012)
- The Peatlands of Ireland (Hammond, 1981)
27. In addition, members of the Habitat Restoration Project Team, including Dr Alan Edwards (hydrology), Dr Andrew Mills (peatland geomorphology) Chris Piper (forestry) and Stewart Lowther (ecology) have visited the Migneint in central Snowdonia, which is part of the EU LIFE-supported Active Blanket Bog in Wales project, a partnership venture between the RSPB, CCW, Forestry Commission Wales and Environment Agency Wales. The project has successfully removed some 230 hectares of forestry planting and restored blanket bog within the Migneint-Arenig-Dduallt SAC. A representative of the Migneint project accompanied members of the Carned Wen project team to several parts of the site and discussed the methodologies used for both the tree removal and the bog restoration works, as well as the ongoing management works that aim to maintain the priority habitats within the restored site.

28. A further visit was made by the Restoration Team to the Black Law wind farm Habitat Management Area, accompanied by an ecologist from Scottish Power. The Black Law wind farm in Lanarkshire enabled the restoration of an abandoned 150 hectare opencast mine and the clearance of around 400 hectares of non-native forestry. A range of bog restoration techniques have been trialled at Black Law, and the team was able to evaluate the effectiveness of these on-site. Accepting that central and west Wales experiences a generally wetter climate than Lanarkshire, which will mitigate the problem of ridge desiccation that is evident in parts of the Black Law site, the visit was of value in demonstrating the techniques that could be used to raise water tables and promote the development of peat forming plant and bryophyte species.

29. The visits and the reviewed literature, together with the previous experience of the team in peatland habitats, have led to a consensus amongst its members as to the appropriate measures to implement at Carned Wen.

30. A key principle that has underlain the planning of the restoration works is that they should facilitate natural regeneration of the pre-planting semi-natural habitats of the site in directions determined by the underlying topography, soils and hydrological conditions (see Section 4). In other words, the plan does not aim to be overly-prescriptive, at least in terms of the achievement of specific National Vegetation Classification communities. Once the initial conditions for restoration have been established, ongoing management, over the lifetime of the wind farm, will seek to track the natural recovery of the site, and to intervene only when necessary. For example, it will be necessary to monitor and manage the regeneration of conifers, or the spread of non-native invasive species such as rhododendron, but it is not intended that a given habitat area be discouraged from developing naturally towards a particular form of mire habitat in favour of another.

31. The Restoration Plan requires consideration of a number of elements: appropriate felling techniques of parts of the site of varying sensitivity; management of the water table; native tree planting and ongoing monitoring and management. These are discussed in the following sub-sections.

5.2 Felling
32. Previous felling plans for the site were predicated on the need to provide habitat for black grouse and hen harriers, and included the creation of refuge and breeding areas. In the light of the re-focused priorities of the current HMRP, the aims of the forestry strategy and felling plan have been amended in order to restructure the extent and timing of permanent removal of forest cover within the application area and thereby:

- continue to accommodate the technical requirements of the wind farm (as before);
- facilitate early commencement of restoration of as much blanket bog and wet and dry heath habitat as practicably possible.

33. Full details of the forest management plan are provided in the Forestry Management Plan, produced as part of the current SEI by C J Piper and Co, Chartered Foresters.

34. Key aspects of the felling plan are:

- 459ha (97%) identified as being suitable for blanket bog restoration will be felled within the first seven years following consent of the project;
- other areas felled either during the initial seven-year project period or subsequently during the lifetime of the wind farm will be progressively restored to wet and dry heathland;
- due to the variation in habitat restoration objectives, crop types, slopes, soil conditions, and local site sensitivities, there is a need for felling techniques to be specific to each part of the site;

35. A felling methodology matrix is provided in Table 5 of Chapter 6 (Forestry). This shows the outline felling methodology for each of the habitat restoration areas, as determined according to the sensitivities of each felling block. For example, for the three parts of the Corsydd Llanbrynmair SSSI, any marketable timber would be hand-felled and winched from the site whole, whilst non-marketable timber would be hand felled and brash would be left in situ or placed into drains. In less sensitive areas of less than 50cm peat depth, mechanical felling would take place using low ground pressure tracked harvester(s) and extraction using brash mats to facilitate machinery movement. Residues would either be compressed into old drainage channels, or mulched using low ground pressure wide tracked machinery.

36. All felling and harvesting operations will be carried out in compliance with the requirements of the UK Forestry Standard and associated Guidelines, particularly those concerning mitigation of potential soil and hydrology impacts.

37. The matrix approach to felling reflects the existing sensitivity of each forestry block and the identified potential of that area (see Section 4 above), though proportionate minimisation of any damage caused by the felling operation, and appropriate management of nutrient inputs into oligotrophic (naturally nutrient-poor) substrates.

5.3 Water Table Management

5.3.1 Drain Blocking
38. The successful development of blanket bog is dependent on hydrological conditions in which the water table normally lies within 10cm of the ground surface. Once those conditions are achieved on relatively flat ground, with nutrient-poor peat at depths usually greater than 0.5m, an available source of colonising vegetation and, ideally, a viable seed bank, blanket bog will become the dominant habitat over a period of five to ten years, and species diversity can be expected to increase within and beyond that period. Ongoing management beyond the initial ‘conditions setting’ is required, however, in order to prevent regeneration of conifers, the spread of invasive species, or the spread of dominating species such as purple moor grass.

39. The Carnedd Wen site is interlaced with an extensive network of forestry drains, installed to lower the water table to facilitate the growth of conifers. For those areas where the restoration of blanket bog is proposed, drains that surround or cross individual planting coups will be blocked, restoring water levels to the upper layer of peat.

40. A detailed account of the proposed drain blocking techniques that would be used is set out in section 9.2 of the Drainage Management Plan that forms part of the present SEI for the Carnedd Wen project. This includes a Drain Blocking Decision Tree that would be used to determine the most appropriate blocking technique to be employed in any given area, depending on slope, drain orientation, upslope catchment volumes of water carried by the drain and the potential for peat pipes.

42. Investigations of forest furrows have shown no significant evidence of peat cracking, which can inhibit the effectiveness of drain blocking. It is therefore expected that the proposed drain blocking will be effective in raising the water table to a level that supports the restoration of blanket bog.

5.3.2 Furrows

43. Within the majority of Carnedd Wen’s forestry blocks, a series of parallel furrows were ploughed prior to conifer planting. The ploughing operation followed typical practices in that peat material was raised from furrows and deposited in the intervals between them, forming ridges. Trees were subsequently planted on the ridges to separate root structures from the saturated peat layers beneath.

44. Experience at the Black Law wind farm has suggested that, following felling, the ridges can remain above even a water table raised by drain blocking and can be vulnerable to desiccation, particularly in more exposed parts of the site where winds promote evaporation from surface soils. This can cause irrepairable damage to the structure of peat, leading to its eventual erosion.

45. In order to address this, a series of valuable experiments have been conducted at Black Law, designed to investigate the most effective means of preventing ridge desiccation. One approach was to use a mechanical excavator to uproot tree stumps from the ridges and to deposit them, inverted, into the furrows. This had some success in preventing drying, and blanket bog species are successfully colonising the experimental plot. However, the results were aesthetically unappealing for application on a large scale, due to the presence of exposed root systems protruding from the ground surface.
46. A more naturally appearing outcome was achieved through the use of a technique termed ‘low intervention ground smoothing’, or ‘cross-tracking’ by Scottish Power’s ecologist during the Habitat Restoration Team’s visit in August 2012. This involved raising the water table to near surface level through drain blocking, and allowing cut tree stumps to begin to decay in the resulting wet conditions over a 3-4 year period. At the end of that period, a low ground pressure heavy excavator was driven over the plot, first along one orientation, and then along a perpendicular one (hence the term ‘cross tracking’). This process effectively flattened the ground surface, spreading the ridge material into the furrows, and creating a more or less even overall surface. Any vegetation that had established prior to the cross tracking operation recovered within one year, and peat forming *Sphagnum* species spread rapidly in the restored and now completely wetted blanket bog.

47. Given the success of cross tracking at Black Law, such a technique would be suitable for Carnedd Wen and would be used where appropriate.

48. Outside the areas identified for blanket bog creation, where peats are more shallow and/or slopes are greater than around six degrees, the expected outcomes following forestry felling are wet and dry modified heathland. In both cases, brash and waste non-marketable timber would be placed into drainage channels. In all HRAs, where species-rich wetland flushes occur within the site, these will be retained.

5.4 Deciduous tree planting

49. Provision in the HMP is also made for the restocking on soils where peat depth is <50cm of linear native riparian woodland adjacent to some streams, and the creation of native deciduous woodland where conditions are otherwise unsuitable for the development of blanket bog or heathland.

50. A preliminary species list for deciduous woodland planting has been developed, based on the main components of Welsh Upland Oak Woodland, and comprises:

- sessile oak;
- birch;
- hazel;
- rowan;
- holly.

51. Planting densities would be between 1,100 and 3,000 trees per hectare, planting at between 3.0m and 1.8m centres, with the aim of achieving an average overall density of about 1,600 trees per hectare.

52. Planting proportions will depend upon prevailing soil conditions but it is proposed that oak and birch would be the dominant species at 45% and 30% respectively, with minor species like the hazel, rowan and holly comprising 10%, 10% and 5% respectively.
Where planting takes place along linear, riparian corridors, the species list would be augmented with alder and willow.

5.5 Monitoring and Management

Monitoring of the Habitat Restoration Project is essential to ensure that the objectives of the scheme are being met and for identifying any management interventions that may be required during the lifetime of the project.

It is proposed that a programme based on the Common Standards Monitoring (CSM) framework, developed by the Joint Nature Conservation Council for monitoring the progress of designated sites towards favourable status, is used at Carnedd Wen.

The essence of CSM is that the status of each of the main habitats of the site (i.e. blanket bog, heathland, etc) are measured against predetermined objectives for those features, normally the attainment of ‘favourable’ condition.

Botanical and hydrological monitoring are the principal means by which such measurement would take place. It is proposed that the precise methodologies and schedules for monitoring would be developed by a Habitat Restoration Steering Group, to whom the results of monitoring would be reported and who would determine whether specific management measures were required in light of those results.

Certain management measures will definitely be required, however. These include the clearance of regenerating conifers, which will either be achieved through hand pulling or mechanical felling depending on the sensitivity of a given area, and low intensity grazing.

Experience gained by the joint venture partners in the EU LIFE Project at Migneint suggest that Welsh Mountain (Section A) semi-feral ponies are an ideal grazing animal for management of the habitats that would be restored to Carnedd Wen. Grazing densities of around one animal per ten hectares are used at Migneint with positive effects in terms of the promotion of plant diversity. The introduction of such ponies has an additional benefit insofar as the Welsh population is in decline in its traditional habitats, and the introduction of animals onto the Carnedd Wen site would assist in halting such a decline.

6. STEERING GROUP

It is proposed that the delivery, monitoring and management of the HMRP be controlled by a Habitat Management Steering Group, comprising representatives of the developer/operator, CCW, and Powys County Council. The Steering Group would appoint an Ecological Clerk of Works to oversee the implementation of the plan and to determine, through the use of the decision making tools set out here and elsewhere within the current SEI (the Construction Environmental Management Plan, the Peat Management Plan and the forestry and hydrology chapters and associated appendices), the particular requirements of each part of the site. The Group would be constituted in advance of any pre-construction felling, and would remain in place for the 25-year lifespan of the Habitat Management Plan. It is proposed that matters
such as the frequency with which the Group meets, the precise conservation objectives of the Plan, and the procurement of services required to meet those objectives, would be agreed by the Steering Group at its inaugural meeting.

7. ORNITHOLOGICAL PROTECTION

61. Black grouse surveys shall be undertaken each year for five years from the date of the Section 36 consent. The scope and methodology for the survey and the identity of the surveyor will be submitted to and approved in writing by the Council in consultation with NRW. The surveyor will be experienced in the survey of black grouse and the appointment of the surveyor shall be agreed with NRW. The survey shall be carried out as approved.

62. Prior to the commencement of development a scheme for checking and updating the ornithological surveys submitted as part of the Environmental Statement (including 2009 Supplementary Environmental Information (“SEI”), 2011 SEI, July 2013 SEI and December 2013 SEI in addition to surveys, methodology, schedule and timing shall be submitted to the Council in writing for approval by the Council in consultation with NRW. The surveys will be undertaken by a suitably qualified ornithologist. The Scheme shall include the following provisions:

- Surveys shall be undertaken for all Schedule 1 breeding raptors within all areas of forestry to be felled and within 1km of all infrastructure and felling areas and if required further surveys will be planned throughout the development period.
- If any Schedule 1 birds are found nesting, mitigation measures shall be submitted to the Council at least one month in advance of any construction or felling works for their approval in writing in consultation with NRW and the mitigation measures shall be implemented as approved.

63. All records collated within the Environmental Statement and SEI for the development shall be made available to the Powys Local Biodiversity Information Service within six months of the granting of the Section 36 Consent. All records collated pursuant to any further surveys shall be made available to the Powys Local Biodiversity Information Service within six months of the date of the surveys.