

7.6 EFFECT ON ECOLOGY AND NATURE CONSERVATION

Introduction

- 7.6.1** The Technical Appendix provides the essential baseline information on ecology and nature conservation of relevance to the proposed An Camas Mòr development. It also provides a full assessment of the predicted effects of the proposed An Camas Mòr development on sensitive ecological receptors (*i.e.* habitats, flora and fauna) to a level of detail well beyond that normally associated with an Outline Planning Application.
- 7.6.2** One of the key overarching aims of the design and assessment process for An Camas Mòr has been, and would continue to be, to avoid significant impacts on important ecological receptors. Impacts have been avoided through the iterative development design process. Where avoidance of impacts has not been possible they have been minimised and proposals to create and enhance habitats of nature conservation interest that would be affected by the development have been proposed.

Scope

- 7.6.3** The scope of the assessment for ecology and nature conservation has been influenced by the consultations undertaken with a wide variety of people and organisations including the CNPA, SNH and FCS. The proposed An Camas Mòr community would be based within the Local Plan boundary which extends to approximately 105 ha. It would also require links to the surrounding existing infrastructure including roads and cycle/walk ways. There would also be a requirement for playing fields. These surrounding links and facilities would be outside of the Local Plan area and can be seen in the ILUP drawings (Volume 2), which have been used to focus the assessment.

Possible Effects and Inter-relationships

- 7.6.4** The possible effects on ecological receptors resulting from the construction and operation of the proposed development, as identified during feasibility and scoping, further consultation and ecological surveys and assessment, can be summarised as follows:

Construction Phase

- 7.6.5** Habitats, plants and faunal receptors:
- Works associated with the construction of the development infrastructure (*e.g.* soil/peat stripping, excavated mineral spoil storage, temporary lay down areas for construction materials);
 - Potential for direct and indirect disturbance to hydrologically sensitive habitats and fauna;

- Potential for loss of/direct disturbance to other sensitive habitats through vehicle/plant trafficking, etc.
- Potential for loss/degradation of sensitive habitats from erosion and deposition, due to construction excavation, drainage/de-watering activities;
- Potential for pollution of watercourses by construction materials, hydrocarbons, silt, etc.;
- Potential disturbance (e.g. displacement) to protected mammals and birds taking shelter (e.g. holts, nests, roosts) in the proposed development area;
- Potential disturbance to protected mammals and birds, foraging or commuting through the proposed development area, arising from the construction works (e.g. through human presence, vibration, light, dust etc.);
- Potential habitat fragmentation and prevention of free movement of sensitive fauna; and
- The potential for adverse cumulative effects to arise from this with other proposals in the vicinity of the proposed development.

Operational Phase

7.6.6 Habitats, plants and faunal receptors:

- Potential loss/degradation (direct and indirect)/fragmentation of habitats of conservation importance (e.g. UKBAP, EU priority habitats etc.) or importance to species of conservation concern, related to the permanent development infrastructure (houses, roads, run-off storage / treatment, etc.);
- Potential disturbance impacts to sensitive habitats and species associated with on-going maintenance requirements of the development and access roads;
- Potential for disturbance to sensitive fauna from the residences of the development (e.g. traffic, noise, visual disturbance, pets);
- Potential loss/degradation (direct and indirect)/fragmentation of habitats of conservation importance (e.g. UKBAP, EU priority habitats etc.) or importance to species of conservation concern due to garden plant escapees, picking, nutrient enrichment, fly-tipping, direct damage to surrounding habitats etc.;
- Potential loss/degradation (direct and indirect)/fragmentation of habitats of conservation importance (e.g. UKBAP, EU priority habitats) or

importance to species of conservation concern due to change in use or commencement of use of local surrounding habitats by local residents;

- Potential for soil/peat from construction resulting in surrounding vegetation changes;
- The potential for future land-use/management changes to positively or negatively affect species and habitats; and
- The potential for adverse cumulative effects to arise from this with other proposals in the vicinity of the proposed development.

Possible Inter-relationships

7.6.7 Several possible inter-relationships have been identified as relevant to the assessment of the effect on Ecology and Nature Conservation. Table 7.11 lists the various inter-relationships with the Environmental Impact Assessment topics. Possible inter-relationships have been identified with Geology and Soils, the Landscape Resource, Visual Amenity, Air Quality and Hydrology and Water Quality.

Influence of Periods A-D on Assessment

7.6.8 The implementation of the development has been split into four periods and these are detailed in the ILUP drawings (Volume 2). Since construction impacts are all temporary, although varying widely in duration, they have all been assessed together for ecology and nature conservation. Operational impacts, while being of between temporary and permanent durations, have been split into the four development periods and then assessed as a total or cumulative impact and effect significance for the permanent operation of the development.

Consultations

7.6.9 A wide range of organisations were consulted for their views and/or relevant baseline data (including ecological views and information) for the study area. Records obtained relating to species at risk from disturbance/persecution (e.g. badger sett records) are included within a Confidential Annex (Volume 4). The detail of these confidential records will only be made available to SNH and CNPA, however, all necessary assessment has been undertaken and is reported within this report: it is only the precise location details that are omitted.

The Study Area

7.6.10 Boundaries at varying distances from the proposed development area (the defined Local Plan area) and route of proposed main site access roads were defined for the purposes of baseline data collation (site survey and desk study) and impact assessment. The following defines the extent of the specific survey areas and related terms referred to:

- 'core development area' is the local plan area where the main development would occur (e.g. high street, houses, internal roads);
- 'site access corridors' refer to the proposed main access routes to the housing development area from Inverdrue and Coylumbridge, including the proposed new road behind Coylumbridge (it should be noted that where necessary further surveying has been undertaken in localised areas south of the B970 and outside of the area shaded as the wider survey area to incorporate the possibility of road junctions impinging outside of this area); and
- 'playing fields' refers to the area towards the River Spey which is highlighted in the ILUP for leisure facilities but is within the wider survey area.

Baseline Conditions

7.6.11 The baseline conditions are described in detail in the Technical Appendix for Ecology and Nature Conservation. In summary, the core development area and the wider study area includes a variety of habitats of nature conservation value which support a range of species of plants, animals and birds.

7.6.12 The principle habitat types within the proposed core development area are planted conifer woodlands with scattered lone Scot's pines and young birch of varying age classes, and semi-natural pine and birch dominated woodland. The centre of the core development area was formerly dry dwarf shrub heath with scattered areas of acid grassland but this area is all now reverting to woodland through intentional planting and natural regeneration. The B970 road to Nethy Bridge bounds the site to the east. A large area of mainly semi-natural mixed forest extends from the south of the site towards the River Druie. Habitats in the wider surrounding area (outside of the core development area) include juniper heath, various age classes of conifer plantation, semi-natural woodland, riverine habitats, riparian woodland and scrub, marshy grassland and enclosed arable and pasture fields.

Designations

7.6.13 There are no designated nature conservation sites within the development area. The River Spey Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) is close to the western boundary of the core development area and the River Druie (part of the Spey SAC designation) would be crossed by the main access road bridge and the pedestrian/cycleway and combined utilities bridge. In addition, the boundary of the Cairngorms SAC, Special Protection Area (SPA) and North Rothiemurchus Site of Special Scientific Interest (SSSI) are immediately adjacent to part of the proposed new road to the east of Coylumbridge. In addition, areas of plantation and woodland within and immediately surrounding the proposed development are listed on the non-statutory Ancient Woodland Inventory. The development area and the surrounding wider area are within the Cairngorms National Park.

Key Considerations

- 7.6.14** The key considerations to this study and its influence on the iterative outline design were to minimise all impacts and use offsetting habitat mitigation, if necessary, to both mitigate and provide a degree of enhancement. All efforts were also made, even at this outline design stage, to include outline mitigation proposals which would provide enhancement within the core development area, where possible.

Assessment Methodology

- 7.6.15** The full details of the assessment methodology are included within the Technical Appendix. The methodology used is current best practice in ecological and nature conservation impact assessment.

Effects

- 7.6.16** There are potentially significant adverse impacts for a range of ecological receptors, during both construction and operation, including: habitats; aquatic and terrestrial fauna and avifauna. The potential adverse impacts and effects assessed for the temporary construction phase of the proposed development for ecology and nature conservation ranged from Negligible to Major. The potential adverse impacts and effects assessed for the permanent operational phase (split into development periods and a total), of the proposed development for ecology and nature conservation ranged from Neutral to Major. Full details of the potential impacts are given in the Ecology and Nature Conservation Technical Appendix (see Volume 2, Chapter 9, Section 4).

Significance of Impacts at Assessment Periods

- 7.6.17** There are potentially significant adverse impacts for a range of ecological receptors at all of the assessment periods for both the construction and operation phases of the development. Full details of the potential impacts related to construction and operational periods are given in Volume 2, Chapter 9, Section 4, Ecology & Nature Conservation Technical Appendix.

Mitigation

- 7.6.18** A wide range of outline mitigation for ecology and nature conservation has been agreed for the proposed development. Three areas of land outside of the development but within Rothiemurchus Estate have also been proposed for specific management for nature conservation to offset the proposed development and provide enhancement within the National Park. Full details of the outline mitigation proposed are given in the Ecology and Nature Conservation Appendix (Volume 2, Chapter 9, Section 4) and the Ecology and Nature Conservation Strategy (Supporting Documents).

Significance of Residual Effects

- 7.6.19** With mitigation taken into consideration the residual adverse effects for the temporary construction phase on ecological receptors were assessed as being between adverse Negligible and Slight. In other words, with all outline mitigation and construction good practice implemented, the construction of the proposed development should not cause significant adverse impacts and resulting effects on the ecology and nature conservation resources. With outline mitigation taken into consideration the residual adverse effects for the permanent operational phase on ecological receptors were assessed as being between Neutral and Slight. In other words, with all proposed outline mitigation (to be further designed during detailed design) implemented, the permanent operation of the proposed development should not cause significant adverse impacts and resulting effects on the ecology and nature conservation resources.
- 7.6.20** The total of the potential adverse and likely effects from the proposed An Camas Mòr development have been considered within the ecology impact assessment for key ecological and nature conservation resources. There are not judged to be any cumulative or in-combination effects on ecological resources, which we are currently aware of, which could occur with other known proposed or implemented developments in the surrounding area and thus cause co-joined significant impacts.

Summary

- 7.6.21** A wide range of ecological surveys and studies have been completed on the proposed An Camas Mòr development site and the wider surrounding study area. These studies began in 2004 and continued for 5 years, allowing a comprehensive picture to be built up of the ecology, biodiversity and nature conservation interests of the area. These studies and surveys have been detailed in Volume 2, Chapter 9, Section 4, Ecology & Nature Conservation Technical Appendix.
- 7.6.22** There are a range of statutory designated sites for nature conservation and areas included within the Ancient Woodland Inventory which have all been mapped and considered during the assessment. In addition all the key ecological interests of the site have been studied to a level of detail that has allowed a detailed impact assessment to be undertaken for ecology and nature conservation.
- 7.6.23** Nature conservation evaluation of the core and wider study area has shown that there are a wide range of habitats and species present with a range of values from Negligible to Exceptional. These correspond to common ecological receptors of very limited nature conservation and biodiversity importance up to Internationally designated sites bordering the wider study area and very sensitive species of very high conservation importance.
- 7.6.24** The total of the potential adverse and likely effects from the proposed An Camas Mòr development have been considered within the ecology impact assessment for key ecological and nature conservation resources. The residual assessment has not indicated any likely significantly adverse effects on ecology and nature

conservation. There are not judged to be any cumulative or in-combination effects on ecological resources which could occur with other known proposed or implemented developments in the surrounding area.

7.7 EFFECT ON CULTURAL HERITAGE

Introduction

7.7.1 This section considers the likely effects of the construction and operation of An Camas Mòr on cultural heritage assets. The key methods, baseline survey results and assessment findings are reported here.

Scope

7.7.2 Cultural heritage assets relevant to this assessment include Scheduled Monuments (SMs) and other archaeological features of interest, Listed Buildings and other buildings of historic or architectural importance, and Gardens and Designed Landscapes (GDLs). There are no Conservation Areas or World Heritage Sites with cultural heritage dimensions within the study area considered here. Effects on ancient woodland and veteran trees are considered in the Ecology and Nature Conservation section.

Possible Effects and Inter-relationships

7.7.3 The possible effects considered relate to changes to the character and/or setting of cultural heritage assets relating to the archaeological, architectural and landscape heritage. The cultural heritage assessment has Inter-relationships with assessment of effects on landscape resource, visual amenity, and ecology and nature conservation (Table 7.11).

Influence of Periods A-D on Assessment

7.7.4 For the purposes of this assessment, each period of development is considered, that is, Periods A (2011) to D (2027).

Consultations

7.7.5 Historic Scotland (HS) and THC were consulted by letter to obtain baseline information, to seek approval for the proposed scope and methodologies for baseline survey and impact assessment and to establish any specific issues that these consultees considered should be addressed in the Environmental Impact Assessment. Cairngorms National Park Authority (CNPA) was kept informed of the outcomes of those consultations.