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Blessington Greenway

**An Bord Pleanála Response to Request
for Further Information on Ecology**

**Spatial Extent of Habitats Lost &
Woodland Restoration**

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Contents

1. Introduction	4
1.1 Project Background	4
2 Requests for Further Information on Ecology	4
2.1 Spatial Extent of Habitats	4
2.1.1 Built/Bare ground	6
2.1.2 Woodlands and Wet Woodlands	6
2.1.3 Grasslands	7
2.1.4 Wetlands	7
2.2 Habitat Restoration	7
2.2.1 Scrub Management	9
2.2.2 Invasive and Non-native Species	9
2.2.3 Retaining Deadwood and Habitat Piles	10
2.2.4 Standing Deadwood, Veteranisation and Managing Ash Dieback	11
2.2.5 Selective Felling	12
2.2.6 Understorey and Woodland Edge Planting	14
2.2.7 Conservation Grazing	15

1. Introduction

The following report presents the findings of a comprehensive review of habitats within the Blessington eGreenway scheme is hereafter referred to as the 'Proposed Development'. This report assesses the the spatial extent of habitats lost and concerns and opportunities around woodland restoration within and surrounding the Proposed Development. This report was produced in response to a Request for Further Information received by Wicklow County Council from An Bord Pleanála (ABP) on the 16th of March 2023.

The report brings together information gathered from follow-up desktop and fieldwork completed between June and December 2023. This document should be read in conjunction with the project Ecological Impact Assessment Report and Natura Impact Statement produced by the present authors in 2021 and updated accordingly as per the results of these surveys.

1.1 Project Background

The proposed Blessington eGreenway consists of 33km of walking and cycling paths that travel around the Poullapouca Reservoir/ Blessington Lake. This area is of ecological significance, acknowledged through its designation as a Special Protection Area (SPA) and its inclusion in the Potential Natural Heritage Area (pNHA). The Greenway lies partly within the Poulaphouca Reservoir SPA (site code: 002122) and within 500m of the Wicklow Mountains SAC (site code: 002122).

2 Requests for Further Information on Ecology

ABP raised a number of queries in relation to the potential impact of this project on the local environment as detailed below:

11,The applicant is referred to the detailed submission on the proposed development from the Development Applications Unit of the Department of Housing, Local Government and Heritage and in particular to matters relating to permanent habitat loss and significant disturbance. The applicant is requested to provide a comprehensive and detailed response to each of the issues raised in the submission received by the Department with regard to nature conservation. In particular, the applicant shall address the following:

2.1 Spatial Extent of Habitats

ABP RFI:

- i. Provide an estimation of the amount and spatial extent of individual habitats that will be lost to the proposed development to assess whether the proposed mitigation and compensatory measures are adequately detailed to be successful and are appropriate to

ensure that there is 'no net loss' of biodiversity (National Biodiversity Action Plan, 2017-2021).

RFI RESPONSE:

The total habitat area within the Proposed Development footprint including areas where earthworks are planned is 18.35ha. The breakdown of habitat areas is shown below in Tables 1 and 2.

Table 1: Habitat types and areas due for removal

Broad Habitat Category	Total Area Removed (ha)
Built/bare ground	3.37
Grassland	3.05
Wet Woodland	0.87
Wetland	0.04
Woodland	11.03
Grand Total	18.35

Table 2: Habitat Types and Areas due for removal per scheme section

Habitat Group	Blessington	Baltyboys	Lacken	Tulfarris	Ballyknockan	Valleymount	Total m ²
Built/bare ground	1.81	0.14	0.29	0.77	0.01	0.36	3.37
Grassland	0.57	0.86	1.47	0.01	0.03	0.11	3.05
Wet Woodland	0.24	0.13	0.04	0.00	0.03	0.43	0.87
Wetland	0.03	0.00	0.00	0.01	0.00	0.00	0.04
Woodland	2.22	2.39	1.39	0.84	1.90	2.30	11.03
Grand Total	4.86	3.51	3.20	1.63	1.96	3.19	18.35

As per the submitted landscaping plans compensation for lost habitat is as follows:

2.1.1 Built/Bare ground

This category is composed of existing built infrastructure including roadways and buildings. The category also includes stonewalls and areas of bare and recolonising bare ground. Habitats in this category are of low or negligible ecological value. No compensatory measures are needed to offset their removal/modification.

2.1.2 Woodlands and Wet Woodlands

A native woodland species mix is proposed to complement existing mature tree planting. The schedule contains a mix of feathered and clear stem trees (15%), whips (45%) and native shrub planting (40%). Depending on location each planting site will be further enhanced with wildflower and bulb planting to contribute to the increased biodiversity of each setting.

Compensatory woodland will be considered for the specific hydrological, shading and conditions of each establishment area. Site variability will allow for the establishment of varied woodland types. This will allow for the compensation of both wet woodland and dry woodland habitat types. Additionally, the replacement of non-native species including larch and Sitka spruce with native woodland species will be a net benefit for biodiversity overall. The retention of mature trees within the reservoir fringe habitat will protect the important ecosystem services already provided within the site boundary.

Each of the trees to be lost will be replaced by native broadleaved trees. These will be of much higher biodiversity value than the non-native trees that are to be lost. Native trees planted (depending on species) will flower and produce fruit within 2-5 years of planting. The biodiversity value of these trees will increase each subsequent year.

Wicklow County Council propose to replace each tree on a 'one for one' basis with native trees. An Arboricultural Survey and Assessment concluded that approximately 7,265 trees will be required to be removed to facilitate the greenway, the proposal replaces those trees in the following manner:

Wicklow County Council is committed to and will undertake the planting, on average, one native tree every 10 meters along the main route of the Greenway that is located on ESB lands, where the conditions allow. This would result in the planting of approximately 2300 native species trees.

Wicklow County Council has identified other parcels of land in their ownership that are directly adjacent to or close to the Blessington Greenway which are suitable for replanting purposes and has committed to replanting these areas with native species trees. This would result in the planting of approximately 4,965 trees. In addition to the areas above Wicklow County Council has identified other parcels of land within ESB ownership that have suffered from wind damage. Subject to agreement with ESB Wicklow County Council proposes replanting of these areas with

native species trees. This would result in the planting of an additional 3,300 trees.

It is concluded that the loss of 11ha of woodland will be adequately compensated to ensure that 'no net loss' of biodiversity (National Biodiversity Action Plan, 2017-2021) will occur within the lifetime of this Proposed Development.

2.1.3 Grasslands

A total of 3.5ha of grassland will be removed as part of this scheme. Of this area, approximately 27% of the area is grassland of low ecological value including amenity grassland areas. Grassland areas within the development footprint were typically small and discontinuous. Species-rich grasslands were generally found along the shoreline and around river flood plains which are outside of the works areas for the Greenway.

Wildflowers will be sown with a mix of species that will be visually attractive and promote wildlife and increased biodiversity in the setting. This will also offer a contrast to the typical verge amenity grass finish. Where possible, all wildflowers shall be collected from seed locally and hand cast sown to new locations along the Greenway route. Bulbs to provide seasonal interest and complement the native woodland planting, are proposed within the woodland settings where reduced light will limit the success of grass and wildflowers.

2.1.4 Wetlands

The total area of wetlands within the proposed works area is 0.05ha. In general, the Greenway has been designed to avoid areas of wetland habitat. Earthworks are required in a small area of marsh habitat along the existing Blessington section which will result in the removal of 0.04ha of marsh habitat. This is not considered a significant effect given the small area of the works. Through the avoidance of wetlands areas, the project will achieve no net loss of wetland habitat locally.

2.2 Habitat Restoration

ABP RFI:

The Board agrees with the Department that tree planting with equivalent numbers of trees to be lost may not provide adequate compensation for the loss of mature woodland habitat. The applicant should consider alternatives such as existing woodland restoration.

RESPONSE

A range of broad broad-scale and site specific management actions have been proposed to improve the quality and habitat diversity of retained habitats within and surrounding the Proposed Development as detailed below.

- The retention where possible of important mature trees of high conservation value or with habitat value for bats, birds and mammals including pine marten and red squirrel. See lists of trees in Appendix 1
- The protection and avoidance of areas of high-quality habitat are detailed in Appendix 2 and
- The establishment of new habitat areas as detailed in the Landscaping report (Blessington Lakes eGreenway Landscape Plan (AECOM 2023)) and as detailed in Section 2.1 of this report)

It can often be more beneficial to conserve and enhance existing habitat than to create new habitat areas¹ (Perez-Ramon, 2010). The majority of the woodland habitat around the site is mature, plantation woodland with areas of semi-natural habitat. Typically these woodlands were even-aged conifer plantations with minimal understory flora, minor amounts of shrub species and low amounts of deadwood.



Figure 1: A conifer plantation at Poulaphouca. Note the absence of understory and ground layer. Woodland management techniques to introduce or enhance these are made in this section.

¹ The conservation of existing biodiversity: A priority for Europe" by Perez-Ramon, M., Gonzalez-Lama, Y., Moreno, B., & Rey Benayas, J. M. (2010). *Science*, 328(5973), 1194-1197

A key aim of woodland habitat enhancement is to add diversity to the structure of the woodland. This may be achieved by creating diversity in age and size class of existing stands of woodland (e.g. some of the extensive Scots Pine plantations around the reservoir). This may involve the removal of some lines of existing trees or utilising the space allowed by the creation of the Greenway for interventions. Here, the additional light would allow for the planting of different (understorey) species to be successful and natural regeneration would also be enhanced.

The following actions are proposed to help enhance the biodiversity value of retained woodland:

2.2.1 Scrub Management

During surveys, it was found that in areas of tree monoculture, the shrub of the woodland was poorly developed. This is a result of a continuous canopy of uniform height. The scrub found was generally dominated by Bramble. However, large stands of Bracken were also encountered. These two species would often occur in differing proportions within the same woodland stands. In such areas, there would be poor or no understorey and a general paucity of other species.

Although of habitat value in its own right in other environments, scrub can be antagonistic to the development of understory plants as it will often outcompete many smaller and low-growing plants, mosses and bryophytes. Scrub encroachment and grazing has been cited as leading cause of the degradation of woodlands in Ireland (NBDC, 2005). Direct action would be required in the form of Bramble and/or Bracken removal. This may be carried out utilising hand tools with no requirement for mechanised plant to enter the sites. It is acknowledged that power tools (e.g. trimmers with steel blades) will be required for extensive areas. Works to remove or reduce Bramble or Bracken should be carried out outside the bird nesting season (March-August inclusive) in order to avoid impacts on native breeding birds. Cutting of scrub species should be carried out near the base of the plants. Cuttings should not be left in situ, however, there is no need to remove these from the sites. These may be stockpiled in order to form habitat piles as described in 2.2.3 (below).

2.2.2 Invasive and Non-native Species

While not identified as a major concern within the study area, the management of invasive species particularly Snowberry would improve woodland diversity by reducing competition with native plants. The location of stands of invasive species is provided in Appendix 3. Non-native species may be escaped garden or ornamental plants like Snowberry. In the absence of a well-developed shrub layer, these species may form monocultures to the detriment of native shrub and understorey species. To this end, it is recommended that an invasive species management plan be drawn up for the entire Greenway. Where non-native invasive species occur within woodland areas these should be removed as sensitively as possible to avoid impacts on native species. As per scrub removal (Section 2.2.1 above), hand tools should be used by preference. Works should be carried out outside the bird nesting season and carried out in rotation to avoid undue disturbance to native species. As with scrub that has been removed, the cuttings may sometimes

be used in habitat piles as detailed in the following section. It is important to note that species such as Knotweeds may never be used in such a way as this could encourage regrowth. No knotweed species were found to occur within wooded areas, however.

2.2.3 Retaining Deadwood and Habitat Piles

Deadwood, fallen branches, rotting stumps and dead trees are the lifeblood of any woodland. Decaying wood recycles nutrients back into the soil, provides food and shelter for birds, mammals, and invertebrates and hosts spectacular collections of fungi. Generally, the more deadwood within a woodland, the greater the biodiversity value (Woodland Trust, 2019)². The myriad combinations of decay type, extent and locations within any dead tree create vast amounts of microhabitat types that can be exploited. This is one of the reasons deadwood can support such a diversity of organisms. A portion of the woody vegetation removed as part of clearance can be used to create deadwood log piles (if cut into manageable lengths) and brash piles. Log piles can be mixed with soil, and sods to create hibernacula which are suitable for hedgehogs and amphibians like frogs. These can also – if suitably situated – be of great benefit to invertebrate species such as solitary bees.

Brash piles (smaller pieces of wood such as branches and twigs) may also be formed. These should be formed from gathered up brash (cuttings & trimmings) and formed into A-shaped piles. These should be made larger rather than smaller as these are of greater benefit to native species. If large enough, brash piles may also come to be used as hibernacula. As these decay, nutrients will be returned slowly to the woodland while allowing habitat for micro-organisms.



Figure 2: Trees in an Ash/Oak woodland that have been felled and allowed to lie ‘naturally’ atop other lengths of wood in long sections.

² Woodland Trust. (2019). Life in deadwood. Wood Wise, Autumn 2019

Trees that are felled for conservation reasons (see 2.25 below) may be left within the woodland for further conservation benefits. These should be felled in long lengths, rather than short sections, to mimic natural processes. They may be left distributed across the woodland floor, again to mimic natural conditions. If possible, some of the felled trees may be allowed to rest atop some large branches off the forest floor. This would be of benefit to some macroinvertebrates but also to some lichen species. If there is access to suitable machinery, some of the live trees to be felled may be pushed over (rather than sawn), in order to retain the root plate. This will further increase the tree's biodiversity value to decomposers.

2.2.4 Standing Deadwood, Veteranisation and Managing Ash Dieback

Standing deadwood is the deadwood of trees that die without falling over. Standing deadwood is an incredibly valuable habitat for wildlife that can often live nowhere else. Standing deadwood is important for several species as it provides a dry and safe refuge above the woodland floor. Birds like the Great Spotted Woodpecker, which has been growing in great numbers in Ireland over the last decade or so, rely on standing deadwood. The holes the Woodpeckers create can in turn be commandeered down the line by bats and other cavity-nesting birds. A large number of mature Ash found along and adjacent to the scheme will need to be removed due to Ash dieback. Where possible the trunks of larger trees should be retained as standing deadwood habitat. However, it is recommended that the felling of affected Ash is carried out very selectively and is to be carried out after rigorous selection by both forester and ecologist working in tandem.

Woodland is healthiest when it has a mixture of young, mature, veteran and dead trees. Veteranisation is the human-induced action that creates characteristics found in veteran trees which are common in ancient woodland. The idea with these techniques is to create dysfunctional wood, which will in turn be decayed by fungi. The creation of holes and nest boxes can potentially be used by birds and bats soon after they are created and by insects in the longer term once the decay process has begun. Veteranisation may also be carried out to purposely create habitat for bird and bat species. Slits may be cut into trunks or branches that mimic natural crevices that may be utilised as bat roosts.

Figure 3: A range of veteranisation activities that can be carried out on the retained trees



Deadwood may be retained on live trees. This allows for a greater diversity of habitat within a substantially live canopy. The proportion of dead branches on trees can even be enhanced by foresters who can deliberately damage living branches on trees to be maintained. This is a form of veteranisation of a living tree that will not substantially reduce the lifespan of the tree. This technique will also have the effect of opening up more canopy space within a closed canopy environment (e.g. an evergreen plantation) and thus allow for greater diversity in the understorey and shrub layers.

During clearance, the site Ecologist, in conjunction with the Forester, can mark suitable trees for the creation of dead standing trees and veteranisation actions such as those shown above. These actions should be conducted throughout the site and on a range of retained trees including both native and non-native species.

2.2.5 Selective Felling

Selective felling is the felling of selected trees in order to affect change to a woodland structure. This can be carried out in a variety of ways. Linear gaps – ‘rides’- through even-aged plantations or stands may be created. These may be up to 1.5 times the height of the adjacent trees. They have the effect of creating internal woodland edges where a greater variety of species may now occur. Some trees should be retained within the rides to act as ‘bridges’ for species to cross. These may also be used to limit wind-funnelling. The ride edges may be made uneven in order to increase the surface area of the edge. Woodland rides may be kept clear by mowing or strimming every 2-3 years. Coppicing of woody species on the ride edge may also be carried out on a longer rotation (e.g. 8-10 years). Rides will provide habitat for a range of invertebrates, including butterflies. They are also of benefit to several bird species.



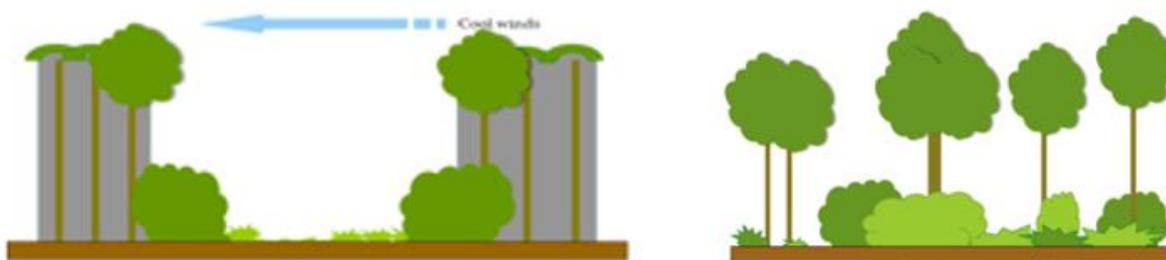
Figure 4: A woodland ride with a mown path. Note the diversity of plant sizes within the woodland edge

Gaps in the woodland where trees and woody plants are removed may also be considered. These are known as glades. These provide light, warmth and a diversity of habitats and niches for many species, including flowering plants and invertebrates. It also provides edge habitat (as above), bird feeding and nesting habitat as well as flower-rich sheltered areas. These are of value to pollinators and their predators.



Figure 5: Thinning of woodland to create a woodland glade.

Another form of selective felling is thinning. This is the removal of individual trees in order to favour native broadleaved trees and better habitat areas. It is useful where such native trees exist within a plantation. It can help move a plantation toward a native tree-dominated canopy. This works by opening the canopy sufficiently to facilitate crown development of native trees while maintaining low light levels to restrict unwanted understorey growth. Around 75% of the canopy should be retained. Standing deadwood should also be retained.



Woodland Ride Structure

Halo thinning around larger trees of value

Figure 6: Woodland restructuring techniques

'Halo thinning' is another technique which may be employed. This is where trees are selectively

cleared around a particular tree which has been identified as being of existing or potential biodiversity value. It can assist this tree to develop if it is crowded or out-shaded by other trees. A proportion of the closely surrounding trees are removed by selective felling or another technique such as ring-barking. An initial action might be the removal of 50% of the surrounding trees in Year 1. Then, following an interval of 1-5 years, an inspection can determine whether the removal of further trees would be beneficial.

It should be noted that in all instances, selective felling should only be carried out following surveys of the selected trees for the presence of bats and other protected mammals. Such felling should only be carried out outside the bird nesting season.

2.2.6 Understorey and Woodland Edge Planting

There are some areas within mature plantations or stands where the canopy is sufficiently high or gappy to allow for understorey planting. If decided upon, only native broadleaved species should be used. It is recommended that understorey species be predominantly (i.e. $\geq 70\%$) chosen for planting interventions. Suitable species would include Holly, Hazel, Spindle, Guelder Rose and Elder. To a lesser extent, taller tree species (e.g. Oak, Alder) may also be chosen where it is considered that there is an opportunity that these will form a part of the upper canopy in the future.

Where interventions such as scrub clearance and selective felling are carried out, there may also be opportunities created for planting within the plantation or stand. In these instances, a 'continuous cover' approach should be taken. Continuous cover is an approach to forest management that aims to achieve a varied structure and greater species diversity without clear-felling. This approach can maximise the biodiversity potential of a woodland as well as making it more resilient to threats from disease or climate change. It also reduces impacts on woodland soils and minimises the risk of runoff from works within the woodland. This approach would also have benefits for woodland bird species.

Woodland edges offer opportunities for habitat creation also. These include not just where the existing woodland edge meets the Greenway but also where the woodland adjoins agricultural land or other open habitats. What is being sought here is an increase in the diversity of habitats on the edge of the woodland to 'grade' the large mature woody vegetation here into the adjacent area with a variety of plant types. For example, a grassy margin, a scrub layer and a portion of wood with understorey planting could be created to adjoin the existing plantation. This might be achieved by thinning the outside rows of the woodland, clearing brash etc., understorey planting the thinned area, leaving a strip for woody vegetation to develop naturally outside this and finally by maintaining a grassy area outside this. The grassed area need only be mown once every 2-5 years and the scrub on the next layer need only be coppiced every 7-10 years.



Figure 7: Woodland edge habitat at Poulaphouca.

The benefits of woodland edge management include increased light penetration into the plantation, greater diversity of woody plants and therefore bird nesting habitat and allowing more flowering plants to develop in the grass and scrub areas and the interface between. Woody shrub species that flower may be planted (e.g. Hawthorn and Blackthorn) in order to increase the value to pollinators more quickly.

2.2.7 Conservation Grazing

Grazing is an essential management tool for most of our semi-natural habitats in Ireland. Grazing by herbivores is an integral part of grassland, wetland and woodland ecology. Where it occurs at appropriate levels, it facilitates structural diversity, encourages high levels of biodiversity in the ground and field layers, maintains open areas and stimulates natural regeneration. Cattle and ponies are good for controlling dense herbaceous vegetation, and their trampling can create sites for tree seedlings to establish.

Conservation grazing involves using native breeds of cattle, sheep, goats or horses to manage landscapes by creating tailored grazing plans to meet the needs of the site. This requires choosing the appropriate species, the number of animals and timings for livestock grazing to achieve the conservation goals of the site while ensuring animal welfare.

An excellent example of the effectiveness of this management strategy can be seen in the busy

publicly-accessed areas of Howth Head³

2.2.8 Actions for Creating a Conservation Grazing Strategy

- Identify areas for conservation grazing including woodland and grassland sites
- Consult with NPWS and their Agri-Ecology Team regarding the plan
- Find a local farmer with Irish Rare Breed cattle, sheep or pony's
- Provide information for the public and stakeholder groups.
- Manage grazing through no-fence collars⁴ or fencing

2.2.9 Grassland Restoration and Enhancement

While woodland make up the majority, other areas of grassland are found within and adjacent to the scheme that is suitable for habitat enhancement and restoration as shown in Figure 8 below. Semi-natural grassland areas including calcareous grasslands, flushes and wet grasslands. These are diverse habitat if managed correctly. A managed cutting or grazing regime would help enhance the biodiversity value of these areas and help to achieve a No net loss in biodiversity while also enhancing existing quality habitat areas.

³ <https://www.rte.ie/news/2021/0908/1245299-goats-deployed-in-unique-conservation-project-in-howth/>

⁴ No-fence Grazing Technology consists of a solar-powered GPS collar and a digital boundary. The collar communicates with an app via the mobile network. The farmer can draw a boundary on the map on their app to define the field boundary. When the stock gets close to the invisible fence line their collar chimes. If they continue, they get a small electric shock. Stock quickly learn to avoid the chiming areas

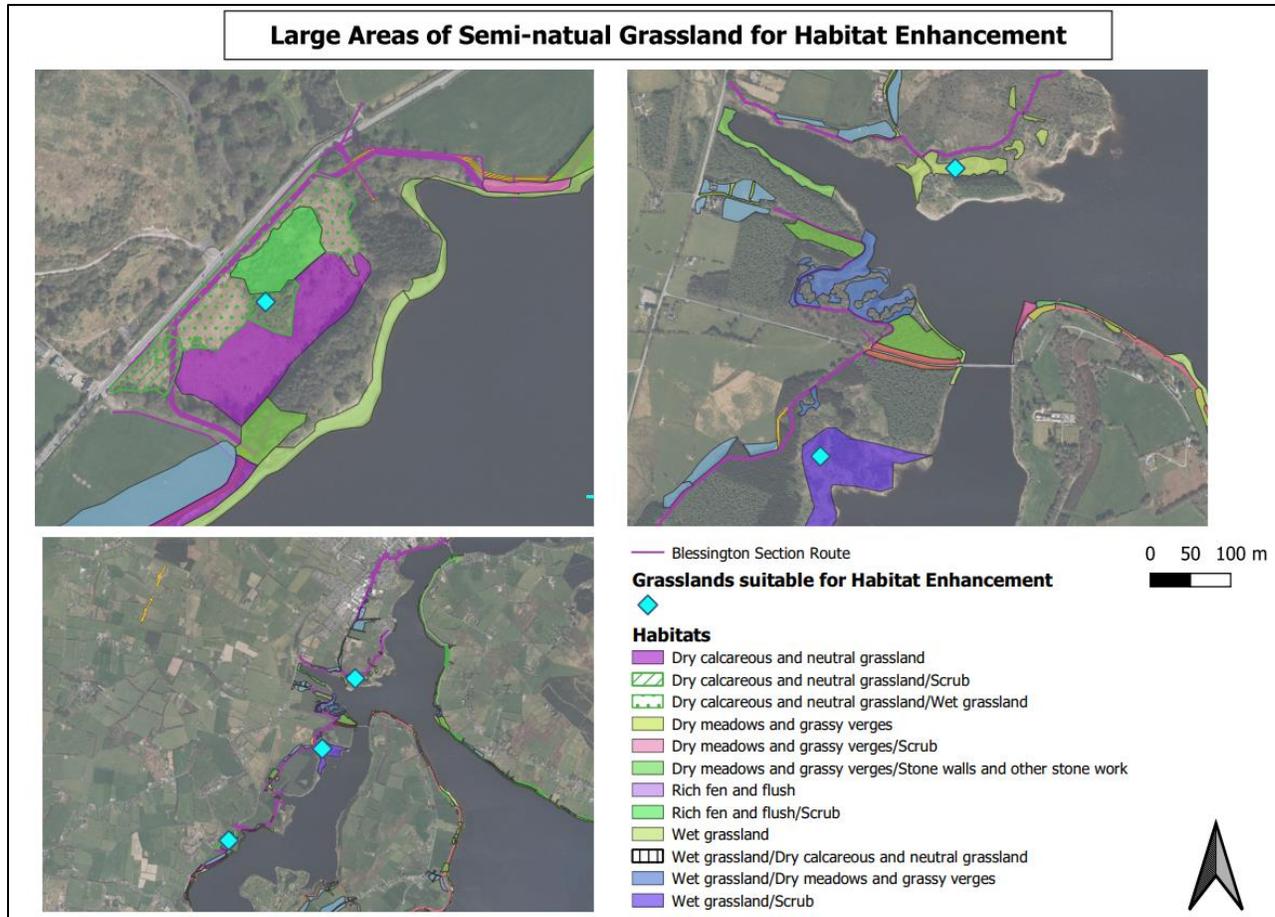


Figure 8: Areas of grassland for possible enhancement actions

Appendix 1: Mature Trees

- **TbRWP: To be Retained Where Possible**
- **TbP: To be Protected**

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Ash	2021	TbRWP	698390.2	711895	Earthworks
Mature Ash	2021	TbRWP	698918.8	712767.9	Earthworks
Mature Treeline	2021	TbRWP	700393.8	710865.4	Earthworks
Mature Willow	2021	TbRWP	698981.7	714249.7	Earthworks
Mature Treeline	2021	TbRWP	697992.7	713054.3	Earthworks
Mature Oak	2021	TbRWP	696286.2	710521.2	Earthworks
ivy covered tree	16/11/2023	TbRWP	698503.9	711664.1	Earthworks
Mature Ash	16/11/2023	TbRWP	698707.5	711268.5	Earthworks
Mature Pines with dense ivy	15/11/2023	TbRWP	700310	707565.3	Earthworks
Mature Ash with dense ivy	16/11/2023	TbRWP	700459.1	710821.8	Earthworks
Mature Beech	21/11/2023	TbRWP	696046.1	710482.1	Earthworks
Mature Beech x2	21/11/2023	TbRWP	696024.1	710484.5	Earthworks
Mature Beech	15/11/2023	TbRWP	697363	711989.7	Earthworks
Mature Ash	29/11/2023	TbRWP	698733.1	711183.2	Earthworks
Mature Beech	29/11/2023	TbP	698127.3	712052.6	Earthworks
Mature Oak	29/11/2023	TbRWP	698031.5	712090.9	Earthworks
Mature Beech	29/11/2023	TbRWP	698693.5	711283.2	Earthworks
Mature Ash	2021	TbRWP	698352.7	711925.6	Scheme
Mature Ash	2021	TbRWP	698334.9	711942.2	Scheme
Mature Hawthorn	2021	TbRWP	699294.9	711565.1	Scheme
Mature Oak	2021	TbRWP	697960.7	712103.5	Scheme
Mature Rowan	2021	TbRWP	698372.7	711910.9	Scheme
Mature Willow	2021	TbRWP	698286.9	711974.3	Scheme
Mature Beech	2021	TbRWP	700223.3	707099.3	Scheme
Mature Hazel	2021	TbRWP	700221.2	707064.8	Scheme
Mature Elder	2021	TbRWP	696337.3	710531.9	Scheme
Mature Elm	2021	TbRWP	696040.8	710487.5	Scheme
Mature Oak	2021	TbRWP	696064.5	710486.2	Scheme
Mature Scots Pine	2021	TbRWP	701848.2	709204.5	Scheme
p high, around 350 years old	21/11/2023	TbP	696581.5	711308.8	Scheme
Tree roosting potential moderate	15/11/2023	TbRWP	698586.2	714411.1	Scheme
Mature tree	15/11/2023	TbRWP	698615.5	713324	Scheme

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Ash	17/11/2023	TbRWP	700294.4	707549.3	Scheme
Mature Alder	17/11/2023	TbRWP	699556.4	706366	Scheme
Mature Lime	21/11/2023	TbRWP	696502.8	711193	Scheme
Mature Beech	21/11/2023	TbRWP	696572.9	711284.5	Scheme
Mature Beech	21/11/2023	TbRWP	696593.3	711321.9	Scheme
Mature Beech	21/11/2023	TbRWP	696594.5	711327.7	Scheme
Mature Beech	21/11/2023	TbRWP	697193.1	711867.3	Scheme
Mature Beech x3	21/11/2023	TbRWP	697018.6	712437.3	Scheme
Mature Beech	15/11/2023	TbRWP	698289.6	714331.7	Scheme
Mature Willow	29/11/2023	TbRWP	698653.8	711384.4	Scheme
Mature Ash	29/11/2023	TbRWP	698662.5	711358	Scheme
mature Holly	29/11/2023	TbRWP	698711.7	711269.1	Scheme
Mature Ash	29/11/2023	TbRWP	698734	711193.7	Scheme
Mature Hawthorn	29/11/2023	TbRWP	698720	707680.9	Scheme
Mature Beech	29/11/2023	TbRWP	698578.7	713713.4	Scheme
high potential	29/11/2023	TbRWP	697988	712102.1	Scheme
Mature Beech	29/11/2023	TbP	698055.6	712091.7	Scheme
Mature Ash	29/11/2023	TbP	698417.2	711879.9	Scheme
Mature Ash	29/11/2023	TbRWP	698677.2	711340.7	Scheme
Mature Beech	29/11/2023	TbRWP	698727.6	711222.7	Scheme
Mature Willow	29/11/2023	TbRWP	698638.6	711418.6	Scheme
mature Sycamore	29/11/2023	TbRWP	698753.4	709316.1	Scheme
Mature Oak	23/11/2023	TbP	696284.4	710523.8	Scheme
Mature Willow	29/11/2023	TbRWP	698614.4	711463.9	Scheme
Mature Willow	29/11/2023	TbRWP	698603.9	711479.3	Scheme
Mature Willow	29/11/2023	TbRWP	698568.3	711540.5	Scheme
Mature Pine	15/11/2023	TbRWP	700276.3	707524.5	Scheme
Mature Ash	2021	TbRWP	695316.4	709773.1	Outside
Tunnel with low bat potential	2021	TbRWP	695949.4	710498.2	Outside
Mature Alder	2021	TbRWP	699089.9	710447.7	Outside
Mature Alder	2021	TbRWP	699047.4	710742.5	Outside
Mature Alder	2021	TbRWP	699060.2	710751.4	Outside
Mature Ash	2021	TbRWP	699091.8	710468.3	Outside
Mature Ash	2021	TbRWP	698840.4	710980.8	Outside
Mature Ash	2021	TbRWP	698849.7	710978	Outside
Mature Ash	2021	TbRWP	698633.8	713334.7	Outside
Mature Crab Apple	2021	TbRWP	698995	710816.7	Outside

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Hawthorn	2021	TbRWP	698391.6	711881.9	Outside
Mature Oak	2021	TbRWP	698972.2	710865.7	Outside
Mature Oak	2021	TbRWP	698920.9	710914.8	Outside
Mature Oak	2021	TbRWP	697974.8	712107.8	Outside
Mature Stand of Trees	2021	TbRWP	698094.1	708881.9	Outside
Mature Treeline	2021	TbRWP	700356.8	710898	Outside
Mature Willows	2021	TbRWP	697950.3	708327.1	Outside
Mature Ash	2021	TbRWP	697402.1	712740.3	Outside
Mature Ash	2021	TbRWP	698975.3	706877	Outside
Mature Ash	2021	TbRWP	697378.3	712042.3	Outside
Mature Ash	2021	TbRWP	696844.7	709007.9	Outside
Mature Beech	2021	TbRWP	697426.6	712727.1	Outside
Mature Beech	2021	TbRWP	697013.9	712451.1	Outside
Mature Beech	2021	TbRWP	697007.2	712428.9	Outside
Mature Beech	2021	TbRWP	697392	712020.4	Outside
Mature Beech	2021	TbRWP	697366.1	712006.6	Outside
Mature Beech	2021	TbRWP	697349	711989.1	Outside
Mature Beech	2021	TbRWP	697301.7	711953.3	Outside
Mature Beech	2021	TbRWP	697237.2	711912.8	Outside
Mature Beech	2021	TbRWP	697208.1	711893.2	Outside
Mature Beech	2021	TbRWP	697266.3	712355.1	Outside
Mature Beech	2021	TbRWP	698748.6	714482	Outside
Mature Beech	2021	TbRWP	698714.9	714469	Outside
Mature Beech	2021	TbRWP	698514.8	714494.2	Outside
Mature Beech	2021	TbRWP	697587.7	709440.4	Outside
Mature Beech treeline	2021	TbRWP	697445.7	709423.9	Outside
Mature Beech treeline	2021	TbRWP	698578.2	714483	Outside
Mature Beech treeline	2021	TbRWP	696805.4	708987.2	Outside
Mature Birch	2021	TbRWP	700208.5	706964.2	Outside
Mature Birch	2021	TbRWP	700252.2	707104	Outside
Mature Chestnuts	2021	TbRWP	698502.5	714477.8	Outside
Mature Crab Apple	2021	TbRWP	698980.2	706964.9	Outside
Mature Elm	2021	TbRWP	697592.1	709453.7	Outside
Mature Hazel	2021	TbRWP	698490.9	714460.9	Outside
Mature Larch	2021	TbRWP	698002.7	713139.7	Outside
Mature Lime tree	2021	TbRWP	698497	714468.4	Outside
Mature Maritime Pine	2021	TbRWP	697643.7	711943.9	Outside

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Oak	2021	TbRWP	700207.5	707122.9	Outside
Mature Oak	2021	TbRWP	700207.8	707176.9	Outside
Mature Oak	2021	TbRWP	698802.4	714512	Outside
Mature Scots Pine Grove	2021	TbRWP	697273.8	712319.6	Outside
Mature stand of Beech	2021	TbRWP	698781.7	714497.1	Outside
Mature Sycamore	2021	TbRWP	697269.1	711936.1	Outside
Mature Sycamores	2021	TbRWP	697985.1	713148.2	Outside
Mature Treeline	2021	TbRWP	698073.4	713237.1	Outside
Mature treeline	2021	TbRWP	697274.8	709294.6	Outside
Mature Treeline	2021	TbRWP	696995.6	709118.2	Outside
Mature Treeline	2021	TbRWP	697009.7	709117.2	Outside
Mature Treeline	2021	TbRWP	696924.4	709063.7	Outside
Mature Treeline	2021	TbRWP	696865.3	709007.1	Outside
Mature Treeline	2021	TbRWP	696865.3	709007.1	Outside
Mature Willow	2021	TbRWP	697289.3	712258.6	Outside
Mature Willow	2021	TbRWP	697131.7	712206.3	Outside
Mature Willow Stand	2021	TbRWP	697112.5	712157.4	Outside
Mature Willow Stand	2021	TbRWP	697383.2	712078.5	Outside
Mature Willow Stand	2021	TbRWP	697218	712107.7	Outside
Seasonally wet drain	2021	TbRWP	698599.2	707939.8	Outside
Semi-mature Alder	2021	TbRWP	698811.2	714517.8	Outside
Semi-mature Ash	2021	TbRWP	697826.8	709174.8	Outside
Semi-mature Ash	2021	TbRWP	697558	709462	Outside
Stone wall	2021	TbRWP	697379.4	709370.4	Outside
Decidious Trees	2021	TbRWP	701632	710334	Outside
Mature Beech	2021	TbRWP	696288.9	710917.4	Outside
Mature Beech	2021	TbRWP	696293.9	710869.4	Outside
Mature Beech	2021	TbRWP	696320.6	710825	Outside
Mature Beech	2021	TbRWP	696369.3	710774.9	Outside
Mature Beech Treeline	2021	TbRWP	695715.9	710175.1	Outside
Mature Beech	2021	TbRWP	696020.5	710477.2	Outside
Mature Birch	2021	TbRWP	700990.6	708088.5	Outside
Mature Birch	2021	TbRWP	700505	707790	Outside
Mature Chestnut	2021	TbRWP	695969.4	710469.8	Outside
Mature Conifer	2021	TbRWP	695971.1	710501.5	Outside
Mature Conifer Woodland	2021	TbRWP	696389.3	710518.9	Outside
Mature Hawthorn	2021	TbRWP	701894.2	709493	Outside

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Hazel	2021	TbRWP	696017.1	710496.5	Outside
Mature Oak	2021	TbRWP	696257.5	710492.8	Outside
Mature Oak	2021	TbRWP	695951	710478.5	Outside
Mature Sycamore	2021	TbRWP	696355.6	710538.2	Outside
Mature Sycamore Treeline	2021	TbRWP	696376.6	710543.6	Outside
Mature Sycamore Treeline	2021	TbRWP	696392.3	710547.6	Outside
Mature Sycamores	2021	TbRWP	695508.2	709949	Outside
Mature Treeline	2021	TbRWP	696334.6	711023.3	Outside
Mature Treeline	2021	TbRWP	695351.5	709784.4	Outside
Scots Pine Grove	2021	TbRWP	695462.1	709923.5	Outside
Specimen Trees	2021	TbRWP	701618.2	710245.3	Outside
Mature Beech	2021	TbRWP	697377.6	709728.2	Outside
Mature Scots Pine	2021	TbRWP	697276	709680.2	Outside
Mature Treeline	2021	TbRWP	700750.8	710657.9	Outside
Mature tree	15/11/2023	TbRWP	698611.9	713351.5	Outside
Mature tree	15/11/2023	TbRWP	698921.6	712765.1	Outside
Mature tree	15/11/2023	TbRWP	698876.5	712697.5	Outside
Mature deciduous	15/11/2023	TbRWP	700862.6	707776.5	Outside
Mature Trees	16/11/2023	TbRWP	701697.7	710181.4	Outside
Mature Willow	16/11/2023	TbRWP	701673.9	710188.2	Outside
Mature Willow	16/11/2023	TbRWP	701652.7	710253.6	Outside
Mature Pines with dense ivy	16/11/2023	TbRWP	701592.6	710359.6	Outside
Mature Pines with dense ivy	16/11/2023	TbRWP	701312.8	710497.6	Outside
Mature Ash	16/11/2023	TbRWP	700495	710805.7	Outside
Mature Tree	17/11/2023	TbRWP	700218.9	707291.6	Outside
Mature Oak	17/11/2023	TbRWP	700217	707186.5	Outside
Mature Oak	17/11/2023	TbRWP	700209.5	707125.2	Outside
Mature Willow	17/11/2023	TbRWP	700057.8	706801.9	Outside
Mature Willow	17/11/2023	TbRWP	700036.4	706811.7	Outside
Mature Willow	17/11/2023	TbRWP	699496.3	706349.5	Outside
Dead mature Ash with dense ivy	21/11/2023	TbRWP	696877.6	709390.5	Outside
Dead mature Ash with dense ivy	21/11/2023	TbRWP	696888	709397.8	Outside
Dead mature Ash	21/11/2023	TbRWP	696899.5	709411.8	Outside
Dead mature Ash	21/11/2023	TbRWP	696949.8	709473.3	Outside
Mature Oak x3	21/11/2023	TbRWP	696926.4	709518.4	Outside
Mature Beech x2	21/11/2023	TbRWP	696909.5	709532.2	Outside
Mature Beech	21/11/2023	TbRWP	696894.5	709542.6	Outside

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Pines with dense ivy	21/11/2023	TbRWP	697022	709560	Outside
Mature Ash	21/11/2023	TbRWP	697391	709713.9	Outside
Mature Beech	21/11/2023	TbRWP	697392.4	709719.1	Outside
Mature Tree	21/11/2023	TbRWP	697392.3	709711.9	Outside
Mature Beech Treeline	21/11/2023	TbRWP	697456.5	709637.3	Outside
Mature Beech	21/11/2023	TbRWP	697496.1	709494.3	Outside
Mature Ash with dense ivy	21/11/2023	TbRWP	697570.1	709468.9	Outside
Mature Ash with dense ivy	21/11/2023	TbRWP	697587.1	709453.9	Outside
Mature Beech	21/11/2023	TbRWP	697587.4	709445.9	Outside
Mature Beech	21/11/2023	TbRWP	697660.8	709362.7	Outside
Mature Ash	21/11/2023	TbRWP	697824.2	709172.2	Outside
Mature Larch	21/11/2023	TbRWP	697857.6	709169.2	Outside
Mature Ash	21/11/2023	TbRWP	697859.7	709155.3	Outside
Mature Ash	21/11/2023	TbRWP	697936.6	708970.3	Outside
Mature Ash	21/11/2023	TbRWP	697951.6	708961.6	Outside
Mature Ash	21/11/2023	TbRWP	697953.2	708872.1	Outside
Mature Sycamore	21/11/2023	TbRWP	696436	710555.1	Outside
Mature Sycamore	21/11/2023	TbRWP	696396.7	710550.2	Outside
Mature Beech	21/11/2023	TbRWP	696068.3	710479.6	Outside
Mature Beech	21/11/2023	TbRWP	696022.3	710478.7	Outside
Dead mature Ash	21/11/2023	TbRWP	695960.6	710458.2	Outside
Mature Beech	21/11/2023	TbRWP	695980.6	710423.5	Outside
Mature Horse chestnut, and Ash	21/11/2023	TbRWP	695926.9	710470.7	Outside
3 x bat boxes	21/11/2023	TbRWP	695732.6	710173	Outside
Mature Beech	21/11/2023	TbRWP	696560.9	711273.6	Outside
Mature Beech	21/11/2023	TbRWP	697114.5	711822.7	Outside
Mature Lime	21/11/2023	TbRWP	697155.8	711844.3	Outside
Mature Beech	21/11/2023	TbRWP	697219.1	711893.9	Outside
Mature Beech	21/11/2023	TbRWP	697241.2	711909.4	Outside
Mature Sycamore	21/11/2023	TbRWP	697305.5	711956.6	Outside
Mature Beech Treeline	21/11/2023	TbRWP	697362.4	711999.2	Outside
Mature Beech	21/11/2023	TbRWP	697261.3	712351.8	Outside
Old ruined building	15/11/2023	TbRWP	698810.4	714251.4	Outside
Dead mature Ash	15/11/2023	TbRWP	698720.5	713984.1	Outside
Mature Beech x3	16/11/2023	TbRWP	698548.9	711519.7	Outside
Mature Beech	15/11/2023	TbRWP	697463.5	709434.6	Outside
Mature Beech	15/11/2023	TbRWP	697414.5	709400.1	Outside

Notes	Date	Actions	X(ITM)	Y(ITM)	Works Area
Mature Beech	15/11/2023	TbRWP	697049.4	709148.7	Outside
Mature Beech	15/11/2023	TbRWP	697035.6	709138.9	Outside
Mature Beech	15/11/2023	TbRWP	695923.9	710469.1	Outside
Mature Beech	15/11/2023	TbRWP	697367.8	709366.9	Outside
Mature Beech	15/11/2023	TbRWP	697440.7	709418.8	Outside
Mature Willow	15/11/2023	TbRWP	701573.1	710341.1	Outside
Mature Beech	21/11/2023	TbRWP	697392.1	712014.9	Outside
Mature Birch	29/11/2023	TbRWP	698944.8	714229.1	Outside
Mature Birch	29/11/2023	TbRWP	698944.8	714229.1	Outside
Mature Ash	29/11/2023	TbRWP	698686.2	711295.1	Outside
Mature Alder	29/11/2023	TbRWP	699091.1	710719.3	Outside
Mature Sweet chestnut	29/11/2023	TbRWP	698907	709873.4	Outside
Mature Willow	29/11/2023	TbRWP	698394.1	709293.9	Outside
Mature Ash	29/11/2023	TbRWP	698592.8	707941.9	Outside
Mature Oak	29/11/2023	TbP	698913.5	709876.3	Outside
mature Birch	29/11/2023	TbRWP	698708.9	707741.9	Outside
Mature Ash	29/11/2023	TbRWP	698948.4	706913.9	Outside
Mature Oak	23/11/2023	TbP	696272.4	710497.5	Outside
Mature Willow	29/11/2023	TbRWP	698625.3	711448.8	Outside
Mature Willow	29/11/2023	TbRWP	698578.2	711526.7	Outside

Appendix 2: High Nature Value Habitat

Areas to be protected and retained where possible

ITM Grid reference point refers to the centre point of each habitat polygon. Please see accompanying habitat maps and mapping data for further information.

- **TbRWP: To be Retained Where Possible**
- **TbP: To be Protected**

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
(Mixed) broadleaved woodland	696011.7	710467	TbP
(Mixed) broadleaved woodland	700833.9	707781	TbP
(Mixed) broadleaved woodland	701492.6	708625	TbP
(Mixed) broadleaved woodland	701859.4	709524	TbP
(Mixed) broadleaved woodland	698978.5	710138	TbP
(Mixed) broadleaved woodland	700494.9	707802	TbP
(Mixed) broadleaved woodland/Scrub	700494.1	707771	TbP
(Mixed) broadleaved woodland/Scrub	701772.2	709848	TbP
(Mixed) broadleaved woodland/Scrub	698400.2	711884	TbP
(Mixed) broadleaved woodland/Wet grassland	697528.5	712673	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	699024.7	706124	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	701699.1	710176	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	699074	710737	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	698924	713015	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	698826	714468	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	698618.5	707882	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	699511.6	706357	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	701767.9	708946	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	697131.3	712205	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	697219.8	712154	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	697321.8	712132	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	697406.5	712092	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	700759.5	707811	TbP
(Mixed) broadleaved woodland/Wet willow-alder-ash woodland	699043.7	706010	TbP
Dry calcareous and neutral grassland	695666.8	709994	TbP
Dry calcareous and neutral grassland	695400.4	709873	TbP
Dry calcareous and neutral grassland	695262	709575	TbP
Dry calcareous and neutral grassland	698970.1	713037	TbP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
Dry calcareous and neutral grassland	695762.8	710208	TbP
Dry calcareous and neutral grassland/Wet grassland	695846	710353	TbP
Dry calcareous and neutral grassland/Wet grassland	698954.8	710861	TbP
Dry calcareous and neutral grassland/Wet grassland	698985.9	714252	TbP
Dry calcareous and neutral grassland/Wet grassland	698918.4	712978	TbP
Dry calcareous and neutral grassland/Wet grassland	698903.5	712844	TbP
Dry calcareous and neutral grassland/Wet grassland	701038.5	708071	TbP
Wet willow-alder-ash woodland	700061.1	706819	TbP
Wet willow-alder-ash woodland	697841.5	712810	TbP
Wet willow-alder-ash woodland	697427.8	712610	TbP
Wet willow-alder-ash woodland	697053.8	712723	TbP
Wet willow-alder-ash woodland	698387.7	709239	TbP
Wet willow-alder-ash woodland	698956.3	714515	TbP
Wet willow-alder-ash woodland/Reed and large sedge swamps	696924.6	712779	TbP
Wet willow-alder-ash woodland/Reed and large sedge swamps	697209.1	712676	TbP
Wet willow-alder-ash woodland/Scrub	697839.3	712707	TbP
Wet willow-alder-ash woodland/Wet grassland	697877.6	712683	TbP
Wet willow-alder-ash woodland/Wet grassland	697907.5	708435	TbP
(Mixed) broadleaved woodland	698476.2	708111	TbRWP
(Mixed) broadleaved woodland	698627	707738	TbRWP
(Mixed) broadleaved woodland	698974.8	706929	TbRWP
(Mixed) broadleaved woodland	700241.9	707430	TbRWP
(Mixed) broadleaved woodland	697901.2	712883	TbRWP
(Mixed) broadleaved woodland	697695.8	712625	TbRWP
(Mixed) broadleaved woodland	697384.8	712649	TbRWP
(Mixed) broadleaved woodland	697469.5	712702	TbRWP
(Mixed) broadleaved woodland	696802.5	712442	TbRWP
(Mixed) broadleaved woodland	697156.9	712429	TbRWP
(Mixed) broadleaved woodland	697207.7	712045	TbRWP
(Mixed) broadleaved woodland	696551.2	711138	TbRWP
(Mixed) broadleaved woodland	696350.4	711067	TbRWP
(Mixed) broadleaved woodland	696415.6	711021	TbRWP
(Mixed) broadleaved woodland	696559.8	710728	TbRWP
(Mixed) broadleaved woodland	695739.8	710229	TbRWP
(Mixed) broadleaved woodland	697952.5	708345	TbRWP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
(Mixed) broadleaved woodland	697911.9	708602	TbRWP
(Mixed) broadleaved woodland	697889.4	708333	TbRWP
(Mixed) broadleaved woodland	698190.2	709034	TbRWP
(Mixed) broadleaved woodland	698504.9	709322	TbRWP
(Mixed) broadleaved woodland	698767.5	709244	TbRWP
(Mixed) broadleaved woodland	698822.8	709838	TbRWP
(Mixed) broadleaved woodland	699095.8	710614	TbRWP
(Mixed) broadleaved woodland	698947.9	710901	TbRWP
(Mixed) broadleaved woodland	698839.8	711002	TbRWP
(Mixed) broadleaved woodland	698621.9	711448	TbRWP
(Mixed) broadleaved woodland	698205.4	711993	TbRWP
(Mixed) broadleaved woodland	698066.8	712069	TbRWP
(Mixed) broadleaved woodland	697846.3	711965	TbRWP
(Mixed) broadleaved woodland	698974.1	711845	TbRWP
(Mixed) broadleaved woodland	698593.5	714430	TbRWP
(Mixed) broadleaved woodland	698836	714552	TbRWP
(Mixed) broadleaved woodland	697818.2	713710	TbRWP
(Mixed) broadleaved woodland	698741.1	712276	TbRWP
(Mixed) broadleaved woodland	698747.6	713098	TbRWP
(Mixed) broadleaved woodland	698675	713157	TbRWP
(Mixed) broadleaved woodland	698614.3	713247	TbRWP
(Mixed) broadleaved woodland	698531.9	713556	TbRWP
(Mixed) broadleaved woodland	699022.9	707269	TbRWP
(Mixed) broadleaved woodland	696706.4	709181	TbRWP
(Mixed) broadleaved woodland	696953.7	709550	TbRWP
(Mixed) broadleaved woodland	698963.1	706027	TbRWP
(Mixed) broadleaved woodland	698756.1	706709	TbRWP
(Mixed) broadleaved woodland	698327.1	714322	TbRWP
(Mixed) broadleaved woodland/Dry meadows and grassy verges	698070.5	713178	TbRWP
(Mixed) broadleaved woodland/Reed and large sedge swamps	697132.2	712723	TbRWP
(Mixed) broadleaved woodland/Scrub	698759.5	707580	TbRWP
(Mixed) broadleaved woodland/Scrub	699015.9	707411	TbRWP
(Mixed) broadleaved woodland/Scrub	697796.9	712744	TbRWP
(Mixed) broadleaved woodland/Scrub	697651.6	712661	TbRWP
(Mixed) broadleaved woodland/Scrub	700367.1	710887	TbRWP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
(Mixed) broadleaved woodland/Scrub	700753.9	710669	TbRWP
(Mixed) broadleaved woodland/Scrub	701105.7	710541	TbRWP
(Mixed) broadleaved woodland/Scrub	698906	709784	TbRWP
(Mixed) broadleaved woodland/Scrub	701081.2	707355	TbRWP
(Mixed) broadleaved woodland/Treelines	697983.7	713138	TbRWP
(Mixed) broadleaved woodland/Treelines	698027.5	713200	TbRWP
(Mixed) broadleaved woodland/Treelines	696358.7	710806	TbRWP
Dry calcareous and neutral grassland/Improved agricultural grassland	699223.2	711636	TbRWP
Dry calcareous and neutral grassland/Improved agricultural grassland	699573.1	711362	TbRWP
Dry calcareous and neutral grassland/Improved agricultural grassland	700618.7	710729	TbRWP
Dry calcareous and neutral grassland/Scrub	698886.9	710957	TbRWP
Dry calcareous and neutral grassland/Scrub	698927.7	712891	TbRWP
Dry calcareous and neutral grassland/Scrub	698919.7	712799	TbRWP
Dry calcareous and neutral grassland/Scrub	699062.1	711756	TbRWP
Dry calcareous and neutral grassland/Scrub	699918.6	711119	TbRWP
Dry calcareous and neutral grassland/Scrub	700136.4	711035	TbRWP
Dry calcareous and neutral grassland/Scrub	700923.5	710597	TbRWP
Dry calcareous and neutral grassland/Scrub	695705.2	710216	TbRWP
Exposed sand, gravel or till	698754.3	707629	TbRWP
Exposed sand, gravel or till	698995.4	706453	TbRWP
Exposed sand, gravel or till	699535.6	706385	TbRWP
Exposed sand, gravel or till	699605	706525	TbRWP
Exposed sand, gravel or till	700120.1	706871	TbRWP
Exposed sand, gravel or till	700204	707164	TbRWP
Exposed sand, gravel or till	701558.8	708839	TbRWP
Exposed sand, gravel or till	701367.4	710337	TbRWP
Exposed sand, gravel or till	700357.3	710865	TbRWP
Exposed sand, gravel or till	699985.8	711086	TbRWP
Exposed sand, gravel or till	699707.7	711238	TbRWP
Exposed sand, gravel or till	699295.1	711586	TbRWP
Exposed sand, gravel or till	698833.5	712642	TbRWP
Exposed sand, gravel or till	698638.2	713265	TbRWP
Exposed sand, gravel or till	698542.7	713706	TbRWP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
Exposed sand, gravel or till	698626.4	713864	TbRWP
Exposed sand, gravel or till	698986.8	714282	TbRWP
Exposed sand, gravel or till	699063.6	714304	TbRWP
Exposed sand, gravel or till	698185.2	713296	TbRWP
Exposed sand, gravel or till	696565.8	710892	TbRWP
Exposed sand, gravel or till	696252.2	710443	TbRWP
Exposed sand, gravel or till	695615.7	709926	TbRWP
Exposed sand, gravel or till	695281.1	709591	TbRWP
Exposed sand, gravel or till	700605.8	707812	TbRWP
Exposed sand, gravel or till	700751.6	707833	TbRWP
Exposed sand, gravel or till	697975.3	708371	TbRWP
Exposed sand, gravel or till	698260.1	709001	TbRWP
Exposed sand, gravel or till	698870.4	710768	TbRWP
Exposed sand, gravel or till	697629.6	711869	TbRWP
Exposed sand, gravel or till	697577	712016	TbRWP
Exposed sand, gravel or till	699478.7	711420	TbRWP
Exposed sand, gravel or till	699517.4	711398	TbRWP
Exposed sand, gravel or till	699568	711362	TbRWP
Hedgerows	697816.3	713409	TbRWP
Hedgerows	697348.1	712685	TbRWP
Hedgerows	696847.7	712481	TbRWP
Hedgerows	696932.7	712503	TbRWP
Hedgerows	696461.9	710604	TbRWP
Hedgerows	697910.1	708388	TbRWP
Hedgerows	698954	712810	TbRWP
Hedgerows	699141.9	711717	TbRWP
Hedgerows	699771.6	711249	TbRWP
Hedgerows	700458.1	710851	TbRWP
Hedgerows	700371.5	710904	TbRWP
Hedgerows	701074.4	710584	TbRWP
Hedgerows	697542.6	713225	TbRWP
Hedgerows	697667.9	713253	TbRWP
Hedgerows	697614.5	713348	TbRWP
Hedgerows	697612.6	713141	TbRWP
Hedgerows	697410.1	712837	TbRWP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
Hedgerows	697424.2	712957	TbRWP
Hedgerows	697457.1	713040	TbRWP
Hedgerows	697486.9	713141	TbRWP
Hedgerows	697428.1	712698	TbRWP
Hedgerows	697683.9	713487	TbRWP
Hedgerows	696862.2	712509	TbRWP
Hedgerows	697939.1	708944	TbRWP
Hedgerows	697947.1	708966	TbRWP
Hedgerows	697860.9	709150	TbRWP
Hedgerows	697969.6	708938	TbRWP
Hedgerows	697962.9	708973	TbRWP
Hedgerows	697933.1	709163	TbRWP
Hedgerows	697847.1	709160	TbRWP
Hedgerows	697488.8	709432	TbRWP
Hedgerows	697530.7	709482	TbRWP
Hedgerows	697569	709466	TbRWP
Hedgerows	697627.5	709484	TbRWP
Hedgerows	697097.3	709173	TbRWP
Hedgerows	697138.5	709192	TbRWP
Hedgerows	696847.1	708999	TbRWP
Hedgerows	696740	708861	TbRWP
Hedgerows	696626.9	709044	TbRWP
Hedgerows	696776.4	709057	TbRWP
Hedgerows	697147.8	709213	TbRWP
Hedgerows	701288.6	708012	TbRWP
Hedgerows	701100.6	710730	TbRWP
Hedgerows	701157.9	710587	TbRWP
Hedgerows	698749.6	706273	TbRWP
Hedgerows	698790.2	706330	TbRWP
Hedgerows	698779.6	706656	TbRWP
Hedgerows	698833.5	706763	TbRWP
Hedgerows	698816.9	706868	TbRWP
Hedgerows	698759.1	707064	TbRWP
Hedgerows	698958.6	706070	TbRWP
Hedgerows	698742.3	709775	TbRWP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
Hedgerows	698748.8	709832	TbRWP
Hedgerows	698740.8	709865	TbRWP
Hedgerows	700349.3	707528	TbRWP
Hedgerows	700585.9	707245	TbRWP
Hedgerows	700563.9	707250	TbRWP
Hedgerows	700898	707321	TbRWP
Hedgerows	700979.1	707353	TbRWP
Hedgerows	700837.9	707278	TbRWP
Hedgerows	701460.3	707963	TbRWP
Hedgerows	701163	707944	TbRWP
Hedgerows	701063.9	708045	TbRWP
Mixed broadleaved/conifer woodland	700303	707570	TbRWP
Stone walls and other stone work	695821.7	710374	TbRWP
Stone walls and other stone work	697675.6	709250	TbRWP
Stone walls and other stone work	697655.7	709342	TbRWP
Stone walls and other stone work	697646.4	709369	TbRWP
Stone walls and other stone work	697593.9	709439	TbRWP
Stone walls and other stone work	697645.7	709301	TbRWP
Stone walls and other stone work	697694.2	709225	TbRWP
Stone walls and other stone work	698781.4	706285	TbRWP
Stone walls and other stone work	698768.3	706836	TbRWP
Stone walls and other stone work	700379.3	707423	TbRWP
Stone walls and other stone work	700374.8	707421	TbRWP
Stone walls and other stone work	700370.5	707380	TbRWP
Stone walls and other stone work	700711.8	707315	TbRWP
Stone walls and other stone work	700675.3	707298	TbRWP
Stone walls and other stone work	700622	707250	TbRWP
Stone walls and other stone work	701336.3	708006	TbRWP
Stone walls and other stone work	701312.2	708016	TbRWP
Stone walls and other stone work	701137.6	708060	TbRWP
Wet grassland	697824.4	712819	TbRWP
Wet grassland	697891.3	712749	TbRWP
Wet grassland	697838.9	712647	TbRWP
Wet grassland	697925.9	712688	TbRWP
Wet grassland	697665.8	712588	TbRWP

Habitat	X(ITM)	Y(ITM)	High Nature Value Habitats
Wet grassland	697496.5	712558	TbRWP
Wet grassland	696441.1	711175	TbRWP
Wet grassland	696533.4	711173	TbRWP
Wet grassland	696434.3	711059	TbRWP
Wet grassland	701928.3	709455	TbRWP
Wet grassland	697920.8	708472	TbRWP
Wet grassland	697971.2	708569	TbRWP
Wet grassland	697940.1	708599	TbRWP
Wet grassland	698163.4	708945	TbRWP
Wet grassland	698667.2	709289	TbRWP
Wet grassland	699059.2	710712	TbRWP
Wet grassland	698816.1	714137	TbRWP
Wet grassland	698763.7	712428	TbRWP
Wet grassland	698818.8	712142	TbRWP
Wet grassland	698841.4	712053	TbRWP
Wet grassland	698929.7	714551	TbRWP
Wet grassland	697286.9	709579	TbRWP
Wet grassland	698624.4	709340	TbRWP
Wet grassland/Dry calcareous and neutral grassland	700798.2	707839	TbRWP
Wet grassland/Dry calcareous and neutral grassland	701161.5	708063	TbRWP
Wet grassland/Dry meadows and grassy verges	697230.6	712220	TbRWP
Wet grassland/Dry meadows and grassy verges	697131	711776	TbRWP
Wet grassland/Dry meadows and grassy verges	699040.1	710287	TbRWP
Wet grassland/Dry meadows and grassy verges	698524	711606	TbRWP
Wet grassland/Dry meadows and grassy verges	697136.3	712240	TbRWP
Wet grassland/Dry meadows and grassy verges	697357.6	712136	TbRWP
Wet grassland/Dry meadows and grassy verges	697213.8	712132	TbRWP
Wet grassland/Dry meadows and grassy verges	697075.4	712140	TbRWP
Wet grassland/Scrub	698268.6	709055	TbRWP
Wet grassland/Scrub	698805.4	712109	TbRWP

Appendix 3: Invasive Species

Point	Invasive Species Note	Date	X(ITM)	Y(ITM)	Works Area
P102	Dense Snowberry stand	2021	698192.2	712011.8	Outside
P384	Himalayan honeysuckle	15/11/2023	700557.6	707751.7	Scheme
P386	winter heliotrope along drain, 5x6 metres	17/11/2023	699211	706244.5	Scheme
P105	Himalayan Knotweed	2021	698841.9	714532.3	Outside
P106	Giant Knotweed	2021	696547.2	710883.1	Outside
P107	Japanese Knotweed	2021	696530	710895.4	Outside
P383	Himalayan honeysuckle	15/11/2023	700388.2	707747.4	Outside
P385	winter heliotrope (about 5 plants)	15/11/2023	700901.2	708031.4	Outside
P387	rhododendron 5x3	21/11/2023	695980.3	710428.7	Outside
P422	pheasant berry	20/11/2023	698777.2	714457.8	Outside