

Appendix 8A

PEA Survey Report (CSA 2024a)

Preliminary Ecological Appraisal

August 2024

Upper Ogmore Wind Farm

Prepared by
CSA Environmental

On behalf of
Fisher German

Report No: CSA/6891/01

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

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EXECUTIVE SUMMARY

Overhead and underground power lines for a new 66kv electricity line are proposed at the Site, for which planning permission for a Development of National Significance will be sought.

CSA Environmental was instructed by Fisher German to undertake a Preliminary Ecological Appraisal (PEA) of the Site to identify any ecological constraints to development, inform scheme design, highlight opportunities for ecological enhancement and determine the need for any additional investigation/survey. As part of this PEA, a desk study and field survey of the Site were undertaken between April and May 2024, including a UK Habitat Classification survey.

Underground sections will be restricted to the highways boundary along existing road networks and are not considered to have any ecological significance. Ecological interest is associated with the mosaic of grassland, heathland and woodland habitats along the proposed overhead route. The proposed corridor passes through the Caerau West SINC as well as areas of Priority Habitats, therefore further discussions will be required on the scope of works and mitigation measures required in these areas.

Protected species which were confirmed to be present include reptiles and water vole, with additional species considered likely to be present including roosting bats, nesting birds and harvest mouse. Further survey work to determining presence/absence of species and the nature of their use of the habitats are recommended for roosting bats, water vole and great crested newts in order to inform an evidence based Ecological Impact Assessment to be prepared in support of planning. Due to the scale of the proposed work and associated short term impacts, precautionary working methods are considered appropriate for reptiles, nesting birds and harvest mouse.

No overriding constraints to development of the Site have been identified. Recommendations have been provided for ecological enhancement measures that could be delivered as part of the proposed development.

1.0 INTRODUCTION

- 1.1 This report has been prepared by CSA Environmental on behalf of Fisher German. It sets out the findings of a Preliminary Ecological Appraisal (PEA) of Upper Ogmores Wind Farm, Maesteg. Overhead and underground power lines for a new 66kv electricity line are proposed at the Site, for which planning permission for a Development of National Significance will be sought.
- 1.2 The scope of this appraisal has been determined with due consideration for best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and to the *Biodiversity: Code of practice for planning and development* (BS 42020:2013) published by the British Standards Institution (2013).
- 1.3 The proposed route occupies a length of c. 8.84km and is located around central grid reference SS 8940 9479, to the north-east of Maesteg and south-east of Glyncoed. The underground section of this route is restricted to the existing highways network, whilst the remaining overhead route crosses a mosaic of predominantly upland rush pasture, upland acidic grassland, modified grassland and purple moor grass and rush pasture habitats, with additional patches of scrub and woodland (see Habitats Plan in Appendix A). The proposed route and a 25m corridor either side were surveyed (with additional sections included where relevant and subject to route amendments) and is hereafter identified as 'the survey area'.
- 1.4 This PEA aims to:
 - Characterise baseline ecological conditions of the survey area and its wider context
 - Identify any ecological constraints to development of the survey area
 - Inform scheme design
 - Identify further ecological surveys and investigation necessary to inform a full Ecological Impact Assessment (EclA) of the Site
 - Highlight opportunities for ecological enhancement
- 1.5 To achieve these aims, an ecological desk study and field survey were undertaken of the survey area, the findings of which are presented herein.
- 1.6 As set out in best practice guidelines (CIEEM, 2017) a PEA is typically only suitable for planning submission where there are no ecological constraints relating to the project. Where ecological constraints are identified, such as the presence of important ecological features, the effects of development on these features should be assessed within a separate EclA report, which would supersede the PEA.

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this PEA includes:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- The Wildlife and Countryside Act 1981 (as amended)
- The Natural Environment and Rural Communities (NERC) Act 2006
- The Protection of Badgers Act 1992
- The Environment (Wales) Act 2016

2.2 This above legislation has been addressed, as appropriate, in the production of this report. Further information on the above legislation is provided in Appendix B.

Planning Policy Wales

2.3 The Planning Policy Wales (Welsh Government 2024) sets out the government planning policies for England and how they should be applied. Chapter 6: Distinctive and Natural Places is of particular relevance to this report as it relates to ecology and biodiversity. Further details are provided in Appendix B.

2.4 Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, 2009), which is referred to by the PPW, provides further guidance in respect of statutory obligations for protecting and enhancing biodiversity and geological conservation and their effects within the planning system.

Local Planning Policy

2.5 A number of local planning policies relate to ecology, biodiversity and/or nature conservation. These are summarised in Table 1 of Appendix B. These policies have been addressed, as appropriate, in the production of this report.

Standing Advice

2.6 Natural Resources Wales Standing Advice (Natural Resources Wales, 2021) regarding bats and planning, aims to support local authorities and forms a material consideration in determining applications. Standing Advice has therefore been given due consideration, alongside other detailed guidance documents, in the production of this report.

3.0 METHODS

Desk Study

- 3.1 An ecological desk study was undertaken in May 2024 comprising a review of online resources and biological records centre data as detailed below.
- 3.2 The Multi-Agency Geographic Information for the Countryside (MAGIC) online database was reviewed to identify nature conservation designations within the following search radii:
 - Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites within 10km of the Site (including possible/proposed sites)
 - Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Local Nature Reserves (LNR) within 3km of the Site
 - Other relevant data e.g. Ancient Woodland Inventory within 1km of the Site
- 3.3 A review was undertaken of the location of any such designations, their distance from and connectivity with the Site, and the reasons for their designation. This information was used to determine whether they may be within the proposed development's Zone of Influence (Zol).
- 3.4 The South East Wales Biodiversity Records Centre (SEWBReC) was contacted for details of any non-statutory nature conservation designations and records of protected/notable habitats and species. This information was requested for an area encompassing the survey area and adjacent land within c. 2km of the proposed route. This search area was selected to include the likely zone of influence upon non-statutory designations and protected or notable habitats and species.
- 3.5 Further online resources were reviewed for information which may aid the identification of important ecological features. The Woodland Trust's online Ancient Tree Inventory and Natural Resources Wales Ancient Tree Inventory reviewed for known ancient or veteran trees within the Site and adjacent land. Interactive online mapping provided by the charity 'Buglife' was used to determine whether the survey area falls within an Important Invertebrate Area. Data Map Wales also provided interactive online mapping which was used to help determine priority habitats within the area.
- 3.6 Relevant survey work associated with nearby planning applications was reviewed in order to further understand the local populations of protected species within the area. This included the Afan Valley Adventure Park outline planning application (P2018/0493) and the Y Bryn Wind Farm application (P2024/0029).

- 3.7 As Natural Resources Wales does not have specific published guidelines for assessing great crested newts in Wales, Natural England's Great Crested Newt Mitigation Guidelines (2001) was followed, a desktop search was undertaken to identify ponds within 500m of the Site which may have potential to support breeding great crested newts *Triturus cristatus*, using Ordnance Survey (OS) mapping, the MAGIC database and aerial photography.
- 3.8 Where possible under the terms of the data provider, relevant desk study data are presented in Appendix C.

Field Survey

- 3.9 A UK Habitat Classification ('UKHab') survey was carried out in fine and dry weather conditions on 29/30 April 2024 by Lucy Moorhouse (FISC Level 4) and Becca King (FISC Level 3) and Katie Critchley Cecol (Fisc Level 4) and Charlie Morgan (FISC Level 3) on 08 May 2024 encompassing the survey area and immediately adjacent habitats that could be viewed.
- 3.10 UKHab is a unified and comprehensive system for mapping and classifying habitats, designed to provide a simple and robust approach to surveying and monitoring, and replaces Phase 1 Habitat survey methods. The method allows for identification of important habitat types, including habitats of Principal Importance under Section 42 of the NERC Act (2006) and Habitats Directive Annex I habitats.
- 3.11 The following parameters were adopted for the UKHab survey undertaken for this PEA:
- UKHab Professional edition (Butcher *et al.*, 2023, commercial End User Licence Agreement (EULA))
 - Minimum Mappable Unit (MMU):
 - 10m²/0.001ha (polygons)
 - 5m (linear)
 - Primary Habitats recorded to a minimum of Level 2 (see below) with UKHab codes provided
 - Mandatory secondary codes used
 - Base-mapping comprising a combination of aerial imagery and topographic information
- 3.12 Primary Habitats are recorded to a minimum of Level 2. Where the survey is conducted at an appropriate time of year (e.g. May to July for grassland) habitats may be recorded to Level 3, 4 or 5, only if conditions and the experience of the surveyor allow.
- 3.13 Alongside the UKHab survey, additional field survey information was collected, comprising:

- Detailed floral species lists recorded for each identified habitat/parcel
 - Evidence of, or potential for, European Protected Species (EPS) (including bats, great crested newt, dormouse and otter)
 - Evidence of, or potential for, other protected species (including birds, reptiles, water vole, badger and certain invertebrates)
 - Evidence of, or potential for, other notable species (including S41 Species of Principal Importance as well as notable, rare, protected or controlled plants and invertebrates)
 - Any other survey information relevant to ecological matters
- 3.14 Results of the UKHab survey are presented on the Habitats Plan in Appendix A. Appendix D provides photographs of the habitats at the Site and Appendix E provides a list of floral species recorded in each habitat parcel. Nomenclature for higher plants within this report is consistent with the fourth edition of *The New Flora of the British Isles* (Stace, 2019).

Limitations

- 3.15 The original botanical survey was undertaken outside of the optimal period for most flowering plants and therefore it is likely that some species were missed. This has been taken into consideration for the habitat classifications, with additional species information collected during subsequent survey visits to inform these.
- 3.16 The original proposed route has been amended in a number of sections to account for constraints identified during the early design stages and so the survey area width varies along the proposed route and multiple visits were made at different times of the year to pick up changes.

Evaluation and Assessment

- 3.17 The evaluation and assessment of ecological features is beyond the scope of a PEA and has therefore not been undertaken here. Formal evaluation and assessment of any identified important ecological features should be undertaken as part of either a full EclA, or receptor-specific survey and assessment in accordance with the published CIEEM method (CIEEM, 2018).

4.0 BASELINE ECOLOGICAL CONDITIONS

Nature Conservation Designations

Statutory

- 4.1 There are no statutory designations covering any part of the survey area.
- 4.2 Two international statutory designations were identified within 10km of the survey area, the Blackmill Woodlands SAC (c. 8.7km south of the survey area) and the Cefn Cribwr Grasslands SAC (c. 10km south of the survey area).
- 4.3 One national statutory designation was identified within 3km of the survey area, the Mynydd-Ty-isaf SSSI (c. 0.5km north-east of the survey area).
- 4.4 One local statutory designation was identified within 3km of the survey area, the Bryn Tip LNR (c. 2.4km south-west of the survey area).
- 4.5 These statutory designations are described in Table 1 below. Based on the distance between the survey area and the designated areas, as well as the scale and nature of the proposed works with temporary short-term impacts along a narrow-defined corridor, significant effects on these designations are not anticipated and they are not considered to be a constraint to development.

Non-Statutory

- 4.6 A total of 20 non-statutory designations were identified within 2km of the Site, comprising Sites of Importance for Nature Conservation (SINCs) and Special Landscape Areas (SLAs). Of these, one lies within the survey area boundary, the Caerau West SINC, and a further six are within 1km of the Site. Due to the nature and scale of the work proposed, only non-statutory designations within 1km of the Site have been described in Table 1 below. This are considered further within Section 5 discussion.

Table 1. Statutory and Non-Statutory Designations within search radii

Site Name & Designation	Distance & Direction from Survey Area	Special Interests or Qualifying Features
International Designations 10km		
Cefn Cribwr Grasslands SAC	c. 8.7km south	The site is one of four sites selected to represent purple moor grass <i>Molinia</i> meadows in south central Wales. Extensive <i>Molini</i> - <i>Cirsium dissectum</i> fen-meadow including the heathy sub-type exists. The site is also important for the marsh fritillary butterfly.
Blackmill Woodlands SAC	c. 10km south	Old sessile oak <i>Quercus petraea</i> woodlands with an acidic ground flora as

		well as moderate coverage of fern and bryophyte cover.
National Designations within 3km		
Mynydd-Ty-isaf SSSI	c. 0.5km north-east	This site is characterised by the cliffs and crags of glacial corries which support a mosaic of vegetation types including <i>Calluna</i> dominated heath, <i>Vaccinium myrtillus</i> heath, a range of species poor grasslands, bracken-dominated slopes and fern-rich screes and rock outcrops. Parsley fern <i>Crypogramma crispa</i> , beech fern <i>Phegopteris connectilis</i> , and mountain fern <i>Oreopteris limbosperma</i> are examples of some of the fern species found here. The geology of the site supports a number of arctic-alpine and other plant species of local distribution in Wales. The high crags also provide nesting sites for a Schedule 1 raptor.
Local Designations within 3km		
Bryn Tip LNR	c. 2.4km south-west	A former coal tip containing dry, species rich grassland with a large stand of Gorse <i>Ulex europeus</i> . The site supports a variety of wildlife including the millipede <i>Turdulisoma cf turdulorum</i> , a new species discovered in 2017. Other species found here are dark green fritillary <i>Argynnis aglaja</i> and bee orchid <i>Ophrys apifera</i> . On-site habitats support breeding birds like stonechat <i>Saxicola orquate</i> , and linnet <i>Carduelis cannabina</i> . Brown hare <i>Lepus europaeus</i> , hedgehog <i>Erinaceus europaeus</i> , badger <i>Meles meles</i> , and otters <i>Lutra lutra</i> are among the mammal species also found here.
Non-Statutory Designations within 1km		
Caerau West SINC	On-site	Comprised of a range of different habitats including flush spring and acid/neutral flush, sphagnum blanket bog, and semi-improved acid grassland. A variety of heathland habitats are also present, namely: dry heath acid mosaic, dry dwarf shrub heath, and wet dwarf shrub heath. Marshy grassland and scattered bracken also exist throughout the site.
Caerau North SINC	c. 0.08km west	A large site with a mosaic of habitats including sphagnum blanket bog, marshy grassland, fen, and semi-improved acid grassland. Wet dwarf shrub heath, acid dry dwarf shrub heath, and broad-leaved semi-natural woodland habitats are also present.
Scotch Street SINC	c. 0.09km north-west	A mosaic of upland fringe habitats on previously disturbed land with important areas of boggy ground and mature heather.

Tudor West SINC	c. 0.09km west	A variety of grassland habitats are present; namely, neutral unimproved, marshy, and semi-improved acid grassland. Acid/neutral flush habitats are also found here, and the site supports a large area of ancient semi-natural woodland alongside broad-leaved semi-natural woodland.
Parc Croeserw SINC	c. 0.2km north	A mosaic of purple moor grass and rush pasture, lowland acidic grassland and lowland heathland supporting a range of flora and fauna with a high suitability for reptiles.
Nant-y-Wern SINC	c. 0.3km north	Area of ancient woodland and marshy grassland, including priority habitat 'purple moor grass and rush pasture'. The habitats support a diversity array of vascular plants, bryophytes and support a number of important bird species.

Habitats and Flora

- 4.7 Habitats recorded on-site are illustrated in Appendix A with detailed species lists provided in Appendix E. Relevant UKHab codes are provided within parentheses for each habitat type recorded [e.g. Other Neutral Grassland (g3c)].

Irreplaceable Habitats

- 4.8 There is no ancient woodland covering any part of the survey area or immediately adjacent land, as shown on the Natural Resources Wales Ancient Tree Inventory.
- 4.9 SEWBRc identified an area of Plantation on Ancient Woodland Sites (PAWS) c. 0.09km west of the A4063 within the southern stretch of the survey area.
- 4.10 No trees on or adjacent to the survey area are listed on the Ancient Tree Inventory.

Notable Flora Records

- 4.11 The SEWBRc provided 557 records of 119 notable plant species from within the search area. Those of potential relevance to the survey area include several non-native invasive species listed under Schedule 9 of the Countryside and Wildlife Act 1981 identified on-site within the broadleaved woodland south of Croeserw. These records date from 2012 to 2014 and include hollyberry cotoneaster *Cotoneaster bullatus*, Himalayan balsam *Epilobium brunnescens* and montbretia *Crocsmia pottsii x aure*. Additional non-native invasive species recorded in close proximity to the proposed route include New Zealand willowherb *Epilobium brunnescens*, located c. 0.5km south.

- 4.12 Notable species that could also be supported by the habitats present and therefore potentially relevant include heath spotted orchid *Dactylorhiza maculata*, located c. 0.15km north of the Site dating from 2002, and fir clubmoss *Huperzia selago*, located c. 0.5km south of the Site dating from 2013.

Habitats

- 4.13 The northern east to west stretch of the survey area comprises open upland landscape (crossing in part through the existing Upper Ogmores Wind Farm), with no distinct field boundaries. The habitats comprise a mosaic of several habitat types including upland rush pasture, upland acidic grassland and purple moor grass and rush pasture (described below). With many similarities in species composition, the boundaries between these habitats can be indistinct and the transition between them is often gradual. For the purpose of this report the habitats have been defined and mapped, however it should be recognised that these are not distinct boundaries (see Habitats Plan CSA/6891_100; Appendix A).
- 4.14 The survey area south of Brynheulog Road supports a higher component of purple moor grass and rush pasture priority habitat on lower lying land, before the proposed route joins the A4063 and heads south. Where the route deviates off the A4063 at the south-western end, similar habitat types were identified, with a higher component of 'modified' sheep grazed grassland and were segregated into fenced field compartments (F1-F7, see Habitats Plan CSA/6891/101; Appendix A).

Upland Rush Pasture (g1b, 14, 102)

- 4.15 Upland rush pasture was only present along the northern east to west section and comprised a grass-dominated habitat characterised by the presence of scattered soft rush *Juncus effusus* (secondary code 14; scattered rushes) and generally species poor vegetation influenced by the grazing pressure of sheep (secondary code 102; sheep grazed)
- 4.16 Dominant grasses included perennial rye grass *Lolium perenne*, tufted hair grass *Deschampsia cespitosa*, red fescue *Festuca rubra* and sweet vernal grass *Anthoxanthum odoratum*. The rushes appear in varying amounts, from occasional separate tussocks to dominating thick swards. Areas of the upland rush pasture appear to be of an improved nature, with frequent herb species including red clover *Trifolium pratense*, hawkbit *Leontodon sp* and creeping buttercup *Ranunculus repens*.

Upland Acid Grassland (g1b)

- 4.17 The upland acidic grassland varied between spongy vegetation with frequent mosses to tussocky vegetation of soft rush, purple moor grass *Molinia caerulea* and matt grass *Nardus stricta*. The underlying vegetation included grass species such as sheep's fescue *Festuca ovina*, meadow grass *Poa sp.*, perennial rye grass and bent grasses

Agrostis sp., as well as a number of frequent herb species including marsh thistle *Cirsium palustre*, willowherb *Epilobium* sp. and sheep's sorrel *Rumex acetosella*.

- 4.18 The upland acidic grassland habitat across the survey area showed variation in sward diversity and vegetation, with some areas dominated by mat grass whilst others were dominated by purple moor grass. The upland areas surrounding Target Note 1 (TN1) (see Habitats Plan; see Appendix A) were characterised by scattered heathland indicator species (<25% cover) including heather *Calluna vulgaris*, bilberry *Vaccinium myrtillus* and bracken *Pteridium aquilinum*.
- 4.19 On the steep slope on the western aspect (TN2) where sheep grazing is not present, the grassland exhibited a lush sward with a greater species diversity and higher frequency of herb species. Frequent grasses included purple moor grass, Yorkshire fog and tufted hair grass, with herb species including as heath bedstraw *Galium saxatile*, angelica *Angelica sylvestris* and tormentil *Potentilla erecta*, as well as scattered soft rush and at least one other species of rush *Juncus* sp. Heathland indicator species were also present in low abundances, as well as patches of bramble *Rubus fruticosus* agg. and willow *Salix* sp. scrub.
- 4.20 Where the route deviates off the A4063 at the south-western end, it passes through three fields of upland acid grassland, with F2 and F3 similar and managed as short sheep grazed pasture, with typical species such as sheep sorrel, tormentil, field woodrush and sweet vernal grass recorded. Field F1 differs to F2/F3 as a result of steep topography and absence of grazing or management, although species composition was similar, with addition of purple moor grass creating a more tussocky structure. Other smaller fields of upland acid grassland were identified at F8 and F9, similar in nature to F2/F3, sheep grazed and supporting ant hills, although F9 was more fine leaved grass dominated with herbs, while F8 was more varied with damp mossy areas and tussocky areas supporting soft rush, purple moor grass and matt grass with herb species.

Purple moor grass and rush pasture (f2b)

- 4.21 The priority habitat 'purple moor grass and rush pasture' comprises a broadly similar composition to the upland acidic grassland and upland rush pasture habitats identified on-site. However, this priority habitat is often associated with a rich sward of species including devils-bit scabious *Succisa pratensis* and ragged robin *Lychnis flos-cuculi* with a number of sedges and rushes, with spark-flowered rush *Juncus acutiflorus* usually abundant. Due to the botanical survey being undertaken early in the season for many plant species it is possible that a greater number of these were present within the sward than could be identified at the time of survey.

- 4.22 The area south of Brynheulog Road has been classified as purple moor grass and rush pasture based on the dominance of purple moor grass and presence of a greater number of herb species compared to other similar habitats across the survey area, these included tormentil *Potentilla erecta*, foxglove *Digitalis purpurea* and heath bedstraw *Galium saxatile*. Data Map Wales priority habitat maps also identified this area as purple moor grass and rush pasture of high sensitivity.
- 4.23 At the south-western section of the route, a large area of purple moor grass and rush dominated habitat is present along a network of small streams, creating boggy areas with no sign of recent management. A further area of dominant purple moor grass and rush pasture is present with F12 with wet ditches present, with rush more dominant, including spike rush *Eleocharis palustris*, soft rush, club rush *Schoenoplectus lacustris* and hare's tail cotton grass *Eriophorum vaginatum*.

Modified Grassland (g4)

- 4.24 Short sheep grazed grassland is present within field F4, with evidence of previous draining. The species composition and diversity was significantly lower than adjacent acid grassland fields, with occasional patches of soft rush. Grass species were dominated by perennial rye grass with few other grass or herb species recorded rarely.
- 4.25 Fields F5, F6 and F7 were also modified in nature and heavily grazed by sheep and horses. Some discrete areas where grazing was less intense retained characteristics of upland acid grassland with occasional moss-covered ant hills. Sweet vernal grass dominated but occasional sheep's fescue, field wood-rush, yarrow and sheep's sorrel.

Heathland (h1)

- 4.26 Two areas of heathland were identified within the survey area, see target note TN3 and TN4 on the Habitats Plan; Appendix A. Along the northern stretch of the route an area c.10m in length and c. 3m in width existed at TN3 along the boundary of upland acidic grassland to the west and plantation conifer woodland to the east. Dominant species included heather and gorse *Ulex europaeus*, with frequent bilberry and foxglove at a lower abundance. To the south of Croeserw an area of burnt heathland (TN4) existed amongst purple moor grass and rush pasture (secondary code 105).

Woodland and trees

- 4.27 The proposed route passes through an area of other broadleaved woodland (w1g) to the south of Croeserw. Species present included willow *Salix sp.*, beech *Fagus sylvatica*, hazel *Corylus avellana* and holly *Ilex aquifolium*. The survey area also included two areas of plantation coniferous woodland (w2, secondary code 29) to the south-east of Croeserw and at the southern end of the route.

- 4.28 A band of mature oak trees *Quercus sp.* exist along the central spine of the field F2 and along the northern boundary between Field F2 and F3.

Scrub: Bramble (h3d), Mixed (h3h), Willow (h3j) and Gorse (h3e)

- 4.29 Several patches of scrub habitats were identified within the survey area. Areas within the western part of the northern horizontal section included bramble scrub, willow scrub and mixed scrub comprising oak *Quercus robur*, willow and blackthorn *Prunus spinosa*. One area of gorse scrub was recorded within field section F4a where the field dropped away to a steep bank and was not grazed.

Fauna

Bats

- 4.30 A total of 63 bat records were identified within the search area, dating from 1989 to 2023. These include the following species: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, Nathusius' pipistrelle *Pipistrellus nathusii*, noctule *Nyctalus noctula*, Leisler's bat *Nyctalus leisleri*, brown long-eared bat *Plecotus auritus*, Natterer's bat *Myotis nattereri* and serotine *Eptesicus serotinus*.
- 4.31 The majority of records are associated with the residential area of Maesteg. The closest records are of common pipistrelle and unidentified bats c. 0.02km east and west of the proposed route.
- 4.32 Seven confirmed bat roosts and two possible bat roosts were returned within the search area, these comprised common pipistrelle and unidentified bat roosts dating from 2002 to 2020. These records appear to be associated with the residential area of Maesteg, with the closest roost located c. 0.03km east of the proposed route along the A4063.
- 4.33 The majority of the survey area is not considered to be of high suitability for bats, with limited linear features for commuting and foraging, particularly within the uplands in the east to west section of the route. There is potential for roosting bats associated with the woodland to the south of Croeserw and the trees identified within F2.

Badger

- 4.34 The SEWBRc have provided two records of badger *Meles meles* from within the search area, dating from 2007 and 2023. The records are c. 1.8km south and c.1.7km north from the proposed route.
- 4.35 The majority of habitats within the survey area are considered to be sub-optimal for badgers with limited sett building opportunities given the limited areas of woodland and absence of hedge banks, and open and exposed foraging habitat for this species. Although some limited areas of scrub and woodland superficially provide some suitable habitat, no evidence of badgers was recorded during the Site walkover and this species is considered likely absent.

Dormouse

- 4.36 No records of dormouse *Muscardinus avellanarius* were identified within the search area. There is limited suitable habitat for dormice on-site with the proposed route passing through one small, isolated block of woodland. This species prefers well-connected areas of ancient and mature woodland and mature hedgerows which are not present within the survey area. Dormice are not considered to be a constraint to proposed works.

Riparian Mammals

- 4.37 A total of seven records of otter *Lutra lutra* were identified within the search area, dating from 2002 to 2020. The closest records are located c. 1.2km north of the survey area, associated with spraints along the River Afan, and 1.3km west of a characteristic spraint next to a path.
- 4.38 Whilst small streams are present at the south-western end of the proposed route, these are less well connected to other large watercourses, with the River Afan laying over 3km west. It's possible occasional dispersal of otters through the network of tributaries occurs on-site, but unlikely to support regular foraging or sheltering. Considering the proposals will not directly impact riparian habitats and will be short term, otters are not considered a constraint.
- 4.39 No records of water vole *Arvicola amphibius* were identified within the search area, although a search of online databases suggests presence within the 10km grid square that includes the survey area
- 4.40 Several small, connected streams and surrounding boggy purple moor grass and rush habitats in the south-western end of the survey area are suitable to support water vole, with evidence of water vole incidentally identified within the grassland during the walkover (latrine site). Proposals will impact upon suitable terrestrial habitat where evidence has been noted and further consideration is required.

Other Mammals

- 4.41 Nine records of brown hare *Lepus europaeus* were identified within the search area, dating from 1997 to 2012. The closest record point is located c. 0.01km north of the upland section of the route, associated with five records from between 1997 to 2018 of live adults.
- 4.42 Open grassland habitats and adjacent woodlands associated with the eastern section and western end of the survey area may support brown hare, with records suggesting they are present locally. However, given the vast areas of open habitat in the surrounding upland area, a significant population is not anticipated within the survey area. Given the scale and short-term nature of the proposed works, this species is not considered to be a constraint.

- 4.43 A total of 22 records of hedgehog *Erinaceus europaeus* were identified within the search area, dating from 2002 to 2022. The records are mostly associated within the residential areas of Maesteg and the closest record is c. 0.05km east of the proposed route along the A4063.
- 4.44 The majority of habitats are at higher altitudes in upland locations with open and exposed patchwork of grassland, rushes, gorse and bracken, with lower altitude habitats south of Croeserw dominated by damp tussocky purple moor grass habitat, of low suitability for hedgehogs. If hedgehog is present within the survey area having dispersed from the nearby residential areas, these are unlikely to be present in notable number.
- 4.45 No records of harvest mouse *Micromys minutus* were identified within the search area. Given upland habitats are dominated by a patchwork of short sheep grazed pasture and scattered rush, these areas are less suitable for harvest mice. Dense continuous tussocky habitats associated with purple moor grass and rush pasture provide greater suitability for this species. Harvest mouse is a Section 42 Species of Principal Importance and is quite restricted in Wales, with records scattered across lowland areas in north, west and south Wales, including a cluster in Bridgend, with coverage from online resources covering the valley surrounding Maesteg. It is possible this species is present in discrete locations.

Birds

- 4.46 A total of 2873 records of 123 bird species were identified within the search area, dating from 1974 to 2023. Those of potential relevance to habitats on-site include upland and ground/scrub nesting species on the Red and Amber lists of conservation concern, such as: kestrel *Falco tinnunculus*, linnet *Linaria cannabina*, skylark *Alauda arvensis*, ring ouzel *Turdus torquatus*, snipe *Gallinago gallinago*, wheatear *Oenanthe Oenanthe* and whimbrel *Numenius phaeopus*.
- 4.47 There is widespread ground nesting bird habitat within tussocky purple moor grass, acid grassland and heath, as well as some tree/shrub habitat suitable for nesting birds. A number of generalist and specialist bird species are expected to utilise habitats within the survey area and direct impacts to nesting birds within impact areas will need to be considered further in proposals.

Reptiles

- 4.48 A total of 73 records of four reptile species were identified within the search area including common lizard *Zootoca vivipara*, adder *Vipera berus*, grass snake *Natrix helvetica* and slow worm *Anguis fragilis*. The closest record is of a common lizard adjacent to the proposed route within the Upper Ogmere Wind Farm section recorded in 2022, and a cluster of three records within 100m of the south-west section for grass

snake, adder and common lizard, dated 2000. The majority of the remaining records are from incidental sightings within and around Measteg within gardens and nearby open spaces.

- 4.49 Work associated with a nearby planning application for the Afan Valley Adventure Resort (reference: P2018/0493) confirmed a population of common lizard in 2017, as well as the presence of slow-worms and adders within their survey area in 2017.
- 4.50 Short-grazed sheep pasture is unsuitable for foraging and sheltering reptiles, however the open mosaic of grassland, heathland and scrub habitats across the survey area is highly suitable for reptiles and these species are expected to utilise these habitats along the proposed route. An incidental sighting of common lizard was made at the south-western end of the route within the purple moor grass and rush pasture. Impacts to reptiles will require further consideration.

Amphibians

- 4.51 A total of 73 records of four amphibian species were identified within the search area, including smooth newt *Lissotriton vulgaris*, palmate newt *Lissotriton helveticus*, common toad *Bufo bufo* and common frog *Rana temporaria*. The closest record was recorded of a common frog c. 0.05km west of the proposed route along the A4063. A further three records of common toads were identified within ponds c. 0.4km south and c. 0.6km west of the southern end of the proposed route.
- 4.52 A more detailed appraisal of the Site in respect of great crested newt is provided below.

Great Crested Newt

- 4.53 No records of great crested newts were returned within the data search. A search of online databases shows the closest records to be over 7km south of the survey area.
- 4.54 Survey work associated with the adjacent application for the development of Y Bryn Wind Farm (reference: P2024/0029) involved bottle trapping and eDNA sampling of 11 ponds during 2022. No evidence of great crested newts or positive tests were found in any of the surveyed ponds.
- 4.55 Despite spending much of their annual lifecycle within the terrestrial environment, great crested newts are dependent upon the presence of suitable aquatic breeding habitat in order for a population to persist. Three potential breeding ponds appear to be present within a dispersible range of the proposed route, based on OS mapping.
- 4.56 The open mosaic of habitats would provide suitable habitat for dispersing great crested newts, with no major barriers to dispersal identified between the ponds and the proposed route. Further

assessments would be required to determine the likely presence of this species within the local area and across the proposed route.

Invertebrates

- 4.57 A total of 935 records of 132 invertebrate species were identified within the search area. Those of potential relevance include nationally scarce species, such as the red-necked footman *Atolmis rubricollis*, and locally important species such as green hairstreak *Callophrys rubi*. The proposed route does not fall within an Important Invertebrate Area (IIA).
- 4.58 The mosaic of grassland, scrub, and woodland habitats across the proposed route are likely to support many generalist species, as well as more specialist species. Given the impacts are fairly restricted to a narrow working corridor over the short term, with habitats left to re-establish upon completion, the invertebrate assemblage is not considered to be significantly affected and further surveys were not considered necessary.

5.0 DISCUSSION AND RECOMMENDATIONS

Nature Conservation Designations

Non-statutory Sites

- 5.1 The south-western end of the proposed route passes through the Caerau West SINCC which is designated for its mosaic of valuable habitats. This section of the route involves installation of overhead electrical lines, with all underground work being restricted to the highway areas along existing roads. The work associated with overhead electrical lines will be restricted to small areas along the proposed working corridor to accommodate vehicle tracking and installation of poles. Although habitats will be disturbed during the installation of the pole mounted cables, this will be a short-term impact with ground conditions to be reinstated following the works to allow habitats to re-establish. Full scope of the work and mitigation will need to be discussed and agreed with the local authority.
- 5.2 Given the nature of the proposals with a discrete working corridor and impact area over a short-term period, no other non-statutory sites outside of the survey area are considered likely to be impacted by proposals.

Habitats and Flora

Habitat

- 5.3 The central underground part of the proposed route passes through the highway and is associated with existing road networks and is not anticipated to impact any sensitive habitats. The open mosaic of habitats along the remaining sections of the route comprising purple moor grass and rush pasture, upland acid grassland, heathland, scrub and pockets of woodland are considered to be ecologically valuable with the highest value associated with areas of priority habitat 'purple moor grass and rush pasture'.
- 5.4 As previously discussed, the impacts associated with the overhead electrical lines are expected to be short-term, with installation of between 4-6 poles per day, including clearance of c.15m radius around each pole, dig the required hole and fill, and with a vehicle movement corridor to string up the cables between pole locations (typically 100-130m apart). Habitats would be made good and reinstated following the installation, with a small area to remain clear of scrub/trees around each pole for maintenance and maintain clearance. Some habitat areas will be more sensitive to vehicle access, such as wet purple moor grass and rush pasture which will be more susceptible to damage of the soil and vegetation structure from tracking of heavy machinery. Full

scope of the work and mitigation will need to be discussed and agreed with the local authority for sensitive priority habitats.

Fauna

Bats

- 5.5 All bat species and their roosts are classified as European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017 (as amended).
- 5.6 Where the proposed route is likely to result in the loss of/impacts to trees, Ground Level Tree Assessments (GLTAs) are required to identify any features with the potential to support roosting bats. Trees with suitable features that are to be impacted will require further aerial inspection or presence/absence surveys to determine their use by bats.

Water vole

- 5.7 Opportunities for water vole were identified within the south-western end of the proposed route, with evidence of presence found within the purple moor grass during the initial survey. Water voles are protected under Schedule 5 of the the Wildlife and Countryside Act 1981 and are listed as a rare and threatened species under Section 42 of the NERC Act (2006). Otters are protected under Schedule 5 of the Wildlife and Countryside Act 1981 and are classified as a European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017 (as amended).
- 5.8 A dedicated water vole survey comprising two visits in the spring and summer is recommended within suitable habitat in the south-western section of the proposed route in order to determine confirm presence, coverage, and the potential scale of impacts to these species. The first survey was completed in June and a second survey will be completed in September.

Harvest Mouse

- 5.9 Harvest mouse is a Section 42 Species of Principal Importance and is quite restricted in Wales. It is possible harvest mouse are present in discrete locations across the surveyed area, particularly in tussocky purple moor grass habitats. The scale of work is not anticipated to have long-term impacts for this species, however precautionary working methods should be set out within a Construction Ecological Management Plan alongside avoidance measures for birds and reptiles, and followed during the construction period.

Birds

- 5.10 All wild birds are protected from killing and injury, and their nests and eggs are protected from damage and destruction, under the Wildlife and Countryside Act 1981 (as amended). Therefore, any temporary

disturbance or clearance of nesting habitat or features should ideally avoid the period between March and August (inclusive) when nesting birds are most likely to be present.

- 5.11 Due to the nature of the works which requires drier ground conditions to avoid significant damage to soil structures and third party land, the core period for conducting the proposed work is between March and October. It is therefore likely that not all work will be able to exclude the nesting bird season. During this period, all works will be subject to measures detailed within a Construction Ecological Management Plan (CEcMP) to limit the potential impacts, which includes checks of suitable habitat for nesting birds by a suitably qualified ecologist immediately prior to clearance, with a protective buffer or postponement of works if no alternative while birds are actively nesting until the young have fledged.

Reptiles

- 5.12 Opportunities for reptiles were confirmed across much of the mosaic of habitats along the proposed route, particularly purple moor grass, rush, heath and scrub habitats. All British reptile species are listed within Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded protection against killing and injury under parts of sub-section 9(1) of the Act. In addition, all British reptile species are species of principal importance under S42 of the NERC Act (2006) in England.
- 5.13 Given the length of the proposed route, the narrow working corridor and short-term nature of impacts, a full reptile survey is not considered proportionate to the scale of impact, with all habitats to be reinstated after completion. However, to avoid contravention of the Wildlife and Countryside Act, precautionary working methods should be employed throughout the construction period, as set out within a CEcMP, to avoid an offence through killing or injury. This may include, but not limited to, sensitive timing of works, two stage cutting of suitable habitat to allow reptiles to disperse from impact areas, and fingertip searches. A detailed mitigation strategy should be discussed and agreed with the LPA.

Great Crested Newt

- 5.14 Terrestrial habitats are suitable to support dispersal, refuge and foraging by great crested newts. A pond search identified three ponds within a potential dispersal range, sharing habitat connectivity across the proposed route (see Appendix C). It is recommended that a Habitat Suitability Index (HSI) assessment of each pond be undertaken to determine their suitability to support great crested newt breeding, followed by environmental DNA (eDNA) sampling where possible to determine presence or likely absence. It should be noted these surveys were conducted in June 2024, which found one pond to be dry and two where access was denied.

5.15 The two ponds where access was refused lie c.130m from the underground section of the route which will be restricted to the highway and no suitable terrestrial habitat will be impacted. These ponds lie c. 165m from the closest section of overhead line, across Cymer Road. Given the small impact areas associated with works, the distance and context of the ponds within suitable habitat, and the lack of records and other suitable breeding ponds in the local area, the risk of great crested newts being present is considered very low. Full methods and outcomes will be reported within a Great Crested Newt Survey Report and appended to any subsequent impact assessment.

Summary of Recommendations

5.16 Based on the ecological constraints identified above, Table 2 summarises recommendations for further work necessary to determine the need for, and scope of, any avoidance, mitigation and/or compensation measures to address potential adverse effects of development. The outcome of this further work will inform an EclA of the final scheme.

Table 2. Recommendations for further investigation/survey

Ecological Feature	Further Work	Applicable Timescales
Bats	Ground level tree assessments of any trees to be impacted	Anytime
Water vole	Dedicated water vole surveys of watercourses and suitable terrestrial habitat	April - October
Harvest Mouse	Precautionary working methods	-
Birds	Precautionary working methods	-
Reptile	Precautionary working methods (to be agreed with LPA ecologist)	-
Great crested newts	Habitat suitability Index (HSI) and eDNA sampling of ponds	Mid-April – end of June

Opportunities for Ecological Enhancement

5.17 Given the nature of proposals and the predominantly short-term impacts of the works there is considered to be a reduced requirement and opportunities for ecological enhancement. However, to promote adherence to the NPPF, Bridgend Local Development Plan and Neath Port Talbot Local Development Plan, opportunities for ecological enhancement include:

- Several bird and bat boxes on trees along the proposed route
- Additional tree planting

6.0 CONCLUSIONS

6.1 Confirmed and potential ecological constraints associated with the proposed route have been identified as the presence of:

- **Caerau West SINC** – within the proposed route
- **Roosting bats** – potential for bat roosting potential within trees to be impacted
- **Water vole** – evidence of presence and suitable habitat on-site
- **Harvest mice** – suitable nesting habitat
- **Nesting birds** – suitable ground and scrub nesting habitat
- **Reptiles** – incidental sighting and suitable habitat on-site
- **Great crested newt** – HSI/eDNA surveys of ponds within dispersal range

6.2 The following additional investigation/survey work is recommended to inform an evidence-based EclA of the proposed development, such that suitable ecological impact avoidance, mitigation and/or compensation measures may be adopted:

- Consultation with LPA with regard to potential effects on SINC, reptiles, water voles
- Ground Level Tree Assessments (GLTAs) for trees likely to be impacted
- Water vole survey of suitable habitats
- Great crested newt HSI/eDNA survey work
- Harvest mice precautionary working methods
- Nesting bird precautionary working methods
- Reptile precautionary working methods

6.3 Recommendations for ecological enhancement measures that could be delivered as part of development at the Site have been provided here-in, which will aid accordance with Bridgend County Borough Council and Neath Port Talbot County Borough Council.

6.4 No overriding constraints to development have been identified subject to the implementation of appropriate mitigation measures in respect of confirmed ecological constraints, and further recommended survey work.

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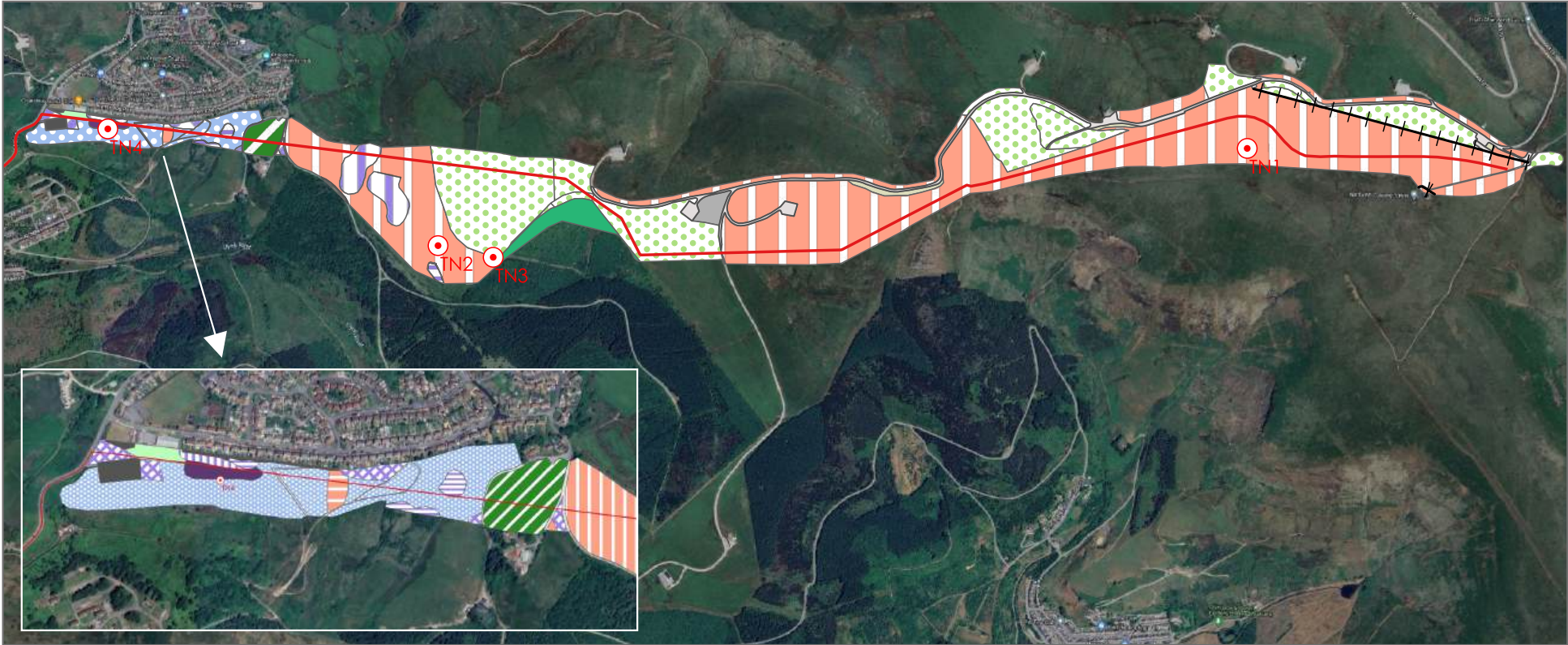
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Appendix A

Habitats Plan




 Proposed route

 Purple moor-grass and rush pastures (f2b)

 Upland acid grassland (g1b)

 Bracken (g1c)


 Upland rush pasture (g1b, 14, 102)

 Heathland and shrub (h)

 Bramble scrub (h3d)

 Mixed scrub (h3h)

 Willow scrub (h3j)

 Sparsely vegetated land (s)


 Developed land; sealed surface (u1b)

 Buildings (u1b5)

 Artificial unvegetated, unsealed surface

 Other broadleaved woodland (w1g)

 Coniferous woodland (w2)

 Fence

 Field reference

 Target note

TN1: Upland acidic grassland with heathland indicator species

TN2: Upland acidic grassland with a lush sward of herb species

TN3: Strip of heathland

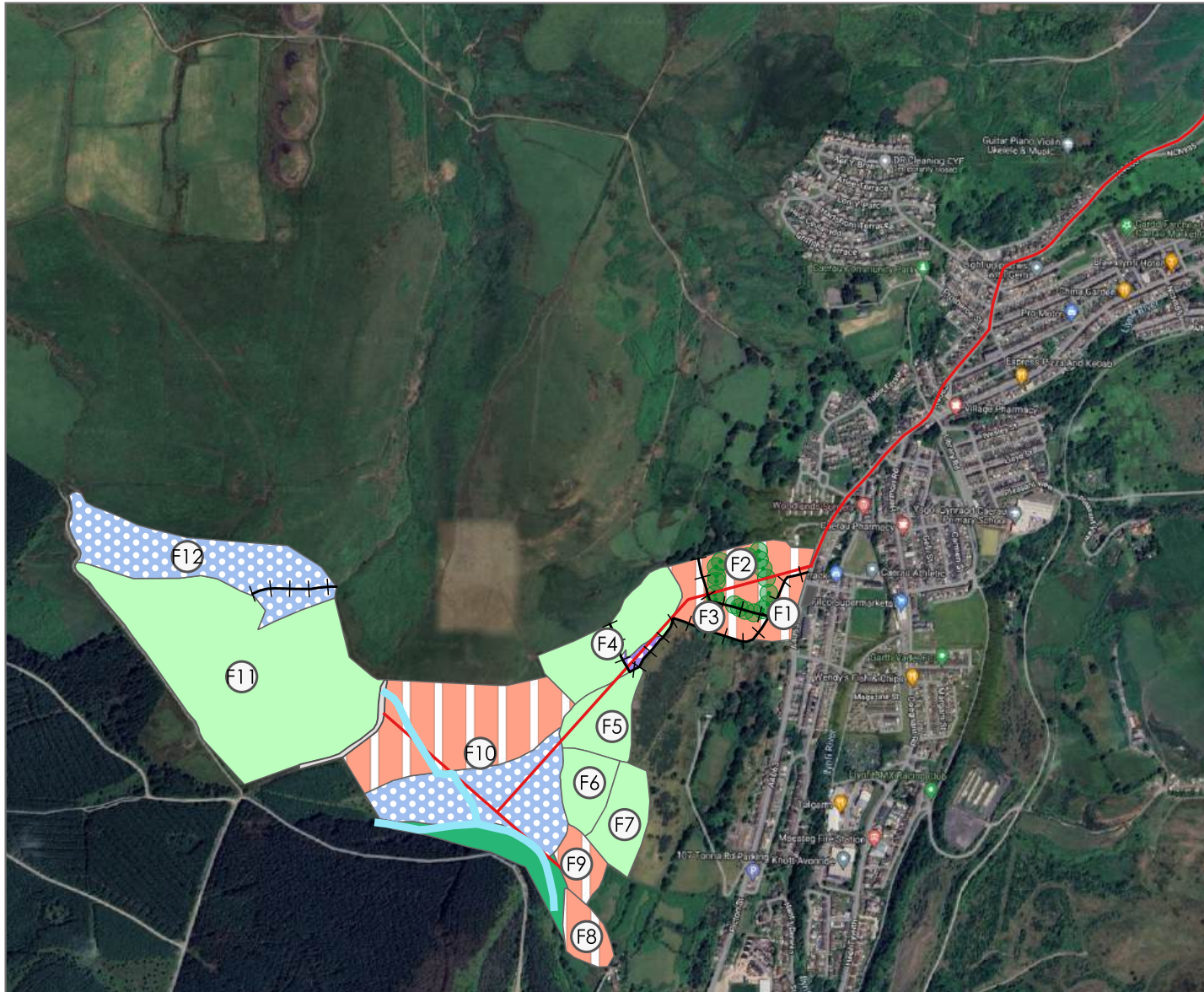
TN4: Area of burnt heathland



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Project	Upper Ogmore Wind Farm	Date	July 2024	Drawing No.	CSA/6981/100
Drawing Title	Habitats Plan	Scale	Refer to scale	Rev	-
Client	Fisher German	Drawn	BK	Checked	CT



- Proposed route
- Purple moor-grass and rush pastures (f2b)
- Upland acid grassland (g1b)
- Modified grassland (g4)
- Gorse scrub (h3e)
- Coniferous woodland (w2)
- Rivers and streams (r2)
- Fence
- Field reference
- Individual trees



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Drawing Title	Habitats Plan	Scale	Refer to scale	Rev	-
Client	Fisher German	Drawn	BK	Checked	CT

Appendix B

Legislation and Planning Policy

- 1.1. The **Conservation of Habitats and Species Regulations 2017** (as amended) make prescriptions for the designation and protection of Sites of Community Importance ('European sites', i.e. Special Areas of Conservation and Special Protection Areas) and European Protected Species (EPS). The latter include all native bats, great crested newts, dormice, otters and certain reptiles, listed under Annex II of the Regulations. Following the UK's departure from the European Union, the provisions of the Regulations have been retained through enactment of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which came into force on 31 December 2020.
- 1.2. The **Wildlife and Countryside Act 1981** (as amended, principally by the Countryside and Rights of Way Act 2000) forms the basis for protection of statutory designated sites of national importance (e.g. Sites of Special Scientific Interest; SSSIs) and native species that are rare and vulnerable in a national context. Additionally, badgers are protected under the **Protection of Badgers Act 1992**.
- 1.3. The **Environment (Wales) Act 2016** sets out the required for the 'sustainable management of natural resources' together with new ways of working to achieve this. Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (the S6 duty) for public authorities in the exercise of functions in relation to Wales. The S6 duty requires that public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and promote the resilience of ecosystems. Section 7 of Part 1 replaces the duty in section 42 of the NERC Act 2006, to publish and revise lists of living organisms and types of habitat in Wales of key significance, to sustain and improve biodiversity.
- 1.4. Section 40(1) of the **Natural Environment and Rural Communities (NERC) Act 2006** (as amended) states that each public authority, "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving and enhancing biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 42 (S42) lists of 55 habitats and 558 species of principal importance.
- 1.5. The Planning Policy Wales (Welsh Government, 2024) sets out the government planning policies for Wales and how they should be applied. With regards to ecology and biodiversity, Chapter 6: Distinctive and Natural Places, states that development plan strategies, policies and development proposals should be formulated to look at the long term protection and enhancement of special characteristics and intrinsic qualities of places, be these of natural, historic and built environments, ensuring their longevity in the face of change. This means both protecting and enhancing landscapes, habitats, biodiversity,

geodiversity and the historic environment in their own right, as well as other components of the natural world, such as water resources or air quality. Biodiversity loss should be reversed, pollution reduced, environmental risks addressed and overall resilience of ecosystems improved.

1.6. The PPW recognises the planning system has a key role to play in helping to reverse the decline in biodiversity and increase the resilience of ecosystems. Paragraph 6.4.3 sets out the principles that local planning authorities should apply when determining planning applications:

- Support the maintenance and enhancement of biodiversity and the resilience of ecosystems.
- Ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats, including the most recent targets set out in the 2022 UN Global Biodiversity Framework;
- Ensure statutorily and non-statutorily designated sites and habitats are properly protected and managed and their role at the heart of resilient ecological networks is safeguarded;
- Safeguard protected species and species of principal importance and existing biodiversity assets from direct, indirect or cumulative adverse impacts that affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water, air and soil, including peat; and
- Secure the maintenance and enhancement of ecosystem resilience and resilient ecological networks by improving diversity, extent, condition, and connectivity.

1.7. Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, 2009), which is referred to by the PPW, provides further guidance in respect of statutory obligations for protecting and enhancing biodiversity and geological conservation and their effects within the planning system and is a material planning consideration.

1.8. Local planning policies of relevance to ecology, biodiversity and/or nature conservation have been set out in Table 1 below.

Table 1. Summary of regional and local planning policy relating to ecology

Policy	Summary
Replacement Bridgend Local Development Plan 2018 to 2033	
Sp17: Conservation and Enhancement of the Natural Environment	Development which will conserve and, wherever possible, enhance the natural environment of the County Borough will be favoured. Development proposals will not be permitted where they will have an adverse impact upon: 1) The integrity of the County Borough's country side; 2) The character of its landscape; 3) Its biodiversity and habitats; and

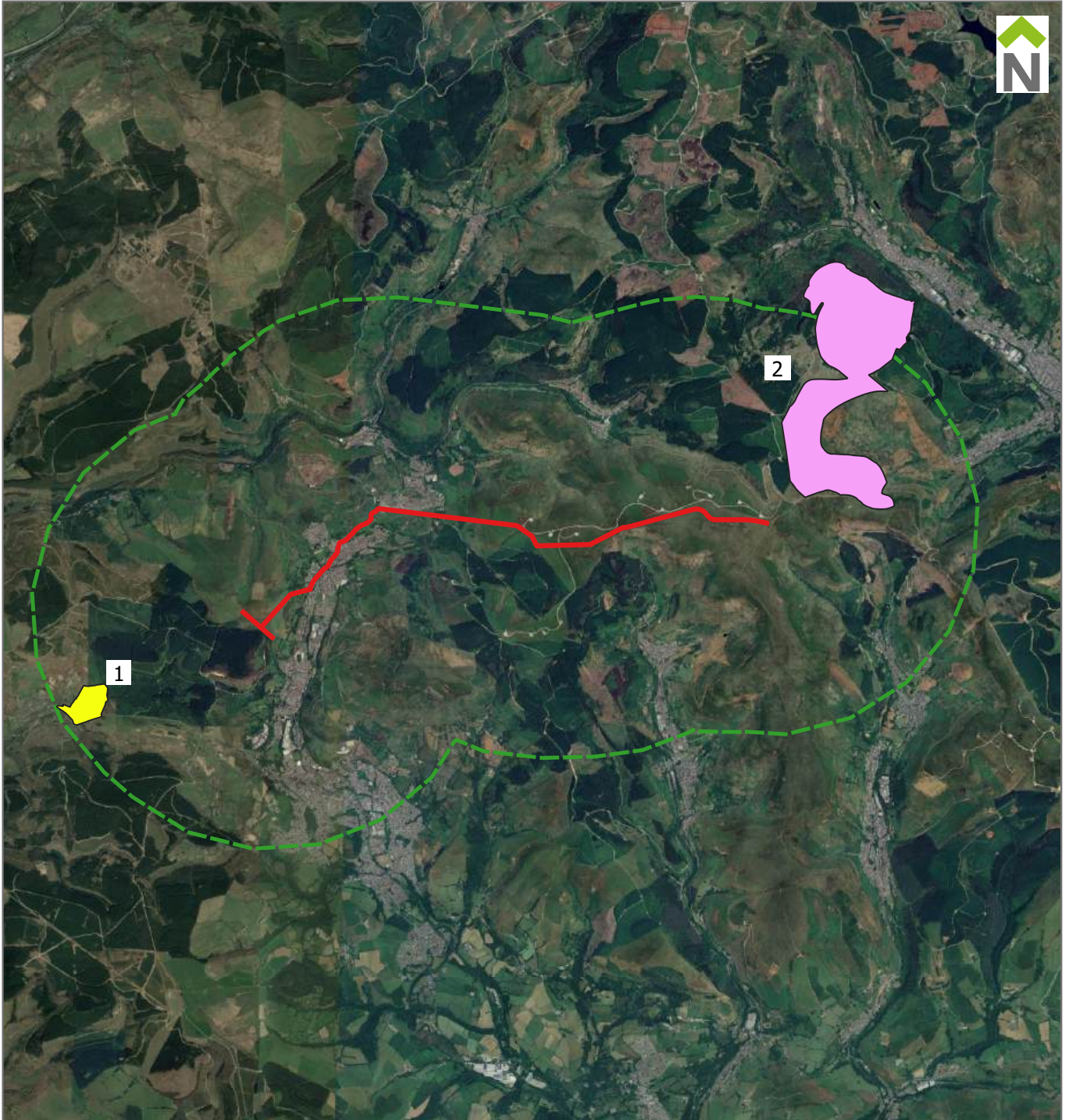
Policy	Summary
	<p>4) The quality of its natural resources including water, air and soil.</p> <p>Areas having a high and/or unique environmental quality will be protected and the following strategically important areas within the County Borough will specifically be protected from inappropriate development which directly or indirectly impacts upon them:</p> <ul style="list-style-type: none"> • SP17(1) Natura 2000 Network Sites (including Special Areas of Conservation (SACs); • SP17(2) Sites of Special Scientific Interest (SSSIs); • SP17(3) Kenfig and Merthyr Mawr National Nature Reserves (NNRs); • SP17(4) The Glamorgan Heritage Coast. • SP17(5) Mynydd Margam Registered Historic Landscape. <p>The weight to be afforded to environmental designations in the determination of relevant planning applications will be based on their statutory or non-statutory status and geographical scale of designation.</p> <p>Proposals likely to have direct or indirect adverse effects on Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites, must be subject to Habitats Regulations Assessment (HRA). This includes development proposals on allocated sites where this plan indicates a project level HRA is required and any other development proposals likely to have adverse effects on SACs/SPAs/Ramsar sites.</p>
DNP5: Local and Regional Nature Conservation Sites	<p>Development within or adjacent to a:</p> <p>DNP5(1) Local Nature Reserve (LNR); DNP5(2) Site of Importance for Nature Conservation (SINC); or DNP5(3) Regionally Important Geodiversity Site (RIGS); must be compatible with the nature conservation or scientific interest of the area, whilst promoting their educational role.</p> <p>Developments which would have an adverse impact on these sites will not be permitted unless the benefits associated with the development can be demonstrated to outweigh the harm and/or the harm can be reduced or removed by appropriate mitigation and/or compensation measures.</p>
DNP6: Biodiversity, Ecological Networks, Habitat and Species	<p>All development proposals must contribute to biodiversity net gain and improved ecosystem resilience, as demonstrated through planning application submissions. Development proposals must maintain, protect and enhance biodiversity and ecological networks / services. Particular importance must be given to maintaining and enhancing the connectivity of ecological networks which enable the dispersal and functioning of protected and priority species.</p> <p>Development proposals that result in an adverse effect on the connectivity of biodiversity and ecological networks and/or have a significant adverse effect on the resilience of protected habitats and species will only be permitted where:</p> <p>1) The need for development outweighs the nature conservation importance of the site;</p>

Policy	Summary
	<p>2) It can be demonstrated that there is no satisfactory alternative location for the development which avoids nature conservation impacts;</p> <p>3) A functional connected element of the natural resource is retained as part of the design of the development; and</p> <p>4) Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area. Where this is not feasible, compensation measures designed to conserve, enhance, manage and, where appropriate, restore natural habitats and species must be provided. Compensatory provision must be of comparable or greater ecological value to that lost as a result of the development.</p> <p>A Project Level Ecological Impact Assessment (EclA) must accompany development proposals on allocated sites with any identified likely significant adverse effects (premitigation) in relation to SA Objective 9 (Biodiversity, Geodiversity and Soil).</p>
DNP7: Trees, Hedgerow and Development	<p>Development that would adversely affect trees, 'special trees', woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted.</p> <p>Development proposals on sites containing or adjacent to, trees will be required to assess the trees in line with BS 5837:2012 Trees in relation to design, demolition and construction. The assessment must include:</p> <ol style="list-style-type: none"> 1) a tree survey; 2) an arboriculture impact assessment; 3) an arboriculture method statement; 4) and/or a tree protection plan. <p>Where trees are to be replaced a scheme for tree replacement must be agreed prior to the commencement of development, including details of planting and aftercare.</p> <p>If tree works are recommended, the works must comply with BS 2998:2010 Tree Works. Recommendations.</p>
Nath Port Talbot Local Development Plan (2011-2026)	
Policy SP 15: Biodiversity and Geodiversity	<p>Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed through the following measures:</p> <ol style="list-style-type: none"> 1. The identification of the following Internationally and Nationally designated sites within the County Borough to enable their protection: <ol style="list-style-type: none"> (a) Special Areas of Conservation (SACs) and Ramsar Sites; (b) Sites of Special Scientific Interest (SSSIs); (c) National Nature Reserves (NNRs). 2. The identification and protection of sites of regional and local importance; 3. The protection of important natural heritage features. LDP Objective: OB 15
Policy EN6: Important Biodiversity and Geodiversity Sites	<p>Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) site. or S42 habitats or species will only be permitted where:</p>

Policy	Summary
	<p>1. They conserve and where possible enhance the natural heritage importance of the site; or</p> <p>2. The development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the Site.</p> <p>Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable.</p>
Policy EN 7: Important Natural Features	<p>Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows / field boundaries, watercourses or ponds will only be permitted where:</p> <p>1. Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or</p> <p>2. The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed.</p>

Appendix C

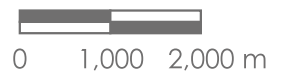
Desk Study Information




- Site boundary
- Sites of Special Scientific Interest
- Local Nature Reserve (LNR)
- National Nature Reserves (NNR)

Distance and direction from the Site:

- 1. Bryn Tip LNR c. 2.4km south-west
- 2. Mynydd Ty-isaf SSSI c.460m north-east



 <p>3 Ripple Court, Brockeridge Park, Twynning, Tewkesbury GL20 6FG † 01386 751100 e fewkesbury@csaenvironmental.co.uk w csaenvironmental.co.uk</p>	<p>Project Upper Ogmore Wind Farm</p>	<p>Date June 2024</p>	<p>Drawing No. CSA/6891/105</p>
	<p>Drawing Title National Designations 3km Search</p>	<p>Scale Refer to scale</p>	<p>Rev -</p>
	<p>Client Fisher German</p>	<p>Drawn GG</p>	<p>Checked BK</p>



- Proposed route
- 10km buffer
- Ramsar
- Special Protected Areas (SPA)
- Special Areas of Conservation (SAC)

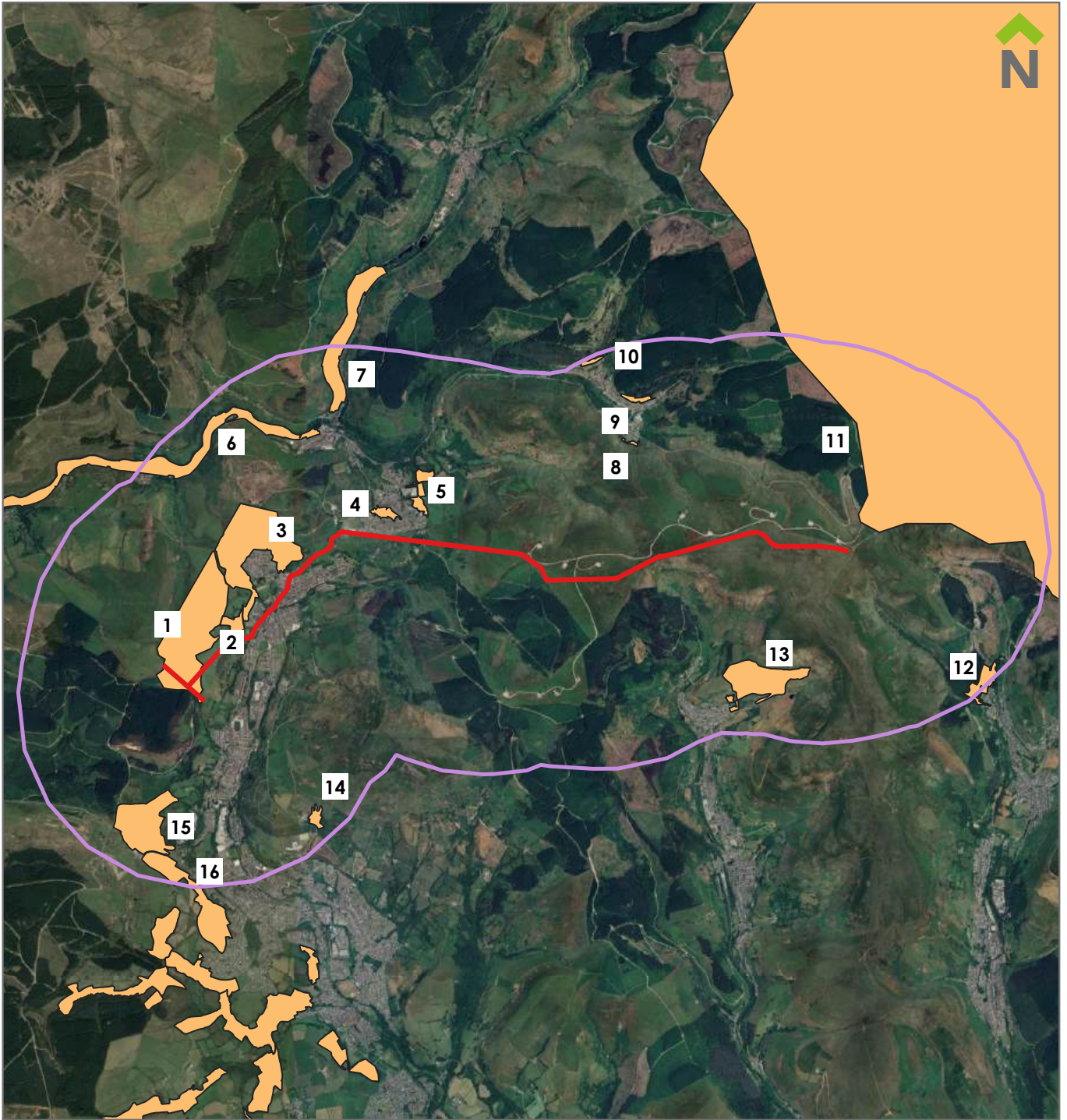
Distance and direction from the Site:

1. Blackmill Woodlands c. 8.7km south
2. Cefn Cribwr Grassland c. 10km south



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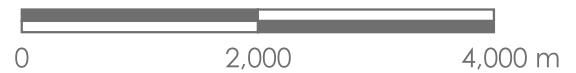
Project	Upper Ogmore Wind farm	Date	August 2024	Drawing No.	CSA/6891/106
Drawing Title	International Designations 10km Search	Scale	Refer to scale	Rev	-
Client	Fisher German	Drawn	BK	Checked	CT



- Site boundary
- 2km buffer
- SINC

Ref	SINC	Distance from route
1	Caerau West	On-site
2	Tudor West	c. 0.09km north
3	Caerau North	c. 0.08km west
4	Parc Croeserw	c. 0.2km
5	Nant y Wern	c. 0.3km north
6	Afan Mineral Railway	c. 1.2km north
7	Scotch Street	c. 1.4km north

Ref	SINC	Distance from route
8	Scotch Street	c. 1km north
9	Caroline Street	c. 1.6km north
10	Gwynfi Street	c. 2km north
11	Rhondda Cynon Taf	c. 0.3km east
12	Nant-y-Moel Farm	c. 2km south
13	Blaengarw North-East	c. 1.2km south



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Project Upper Ogmore Wind Farm

Drawing Title Non-designated Sites

Client Fisher German

Date
July 2024

Scale
Refer to scale

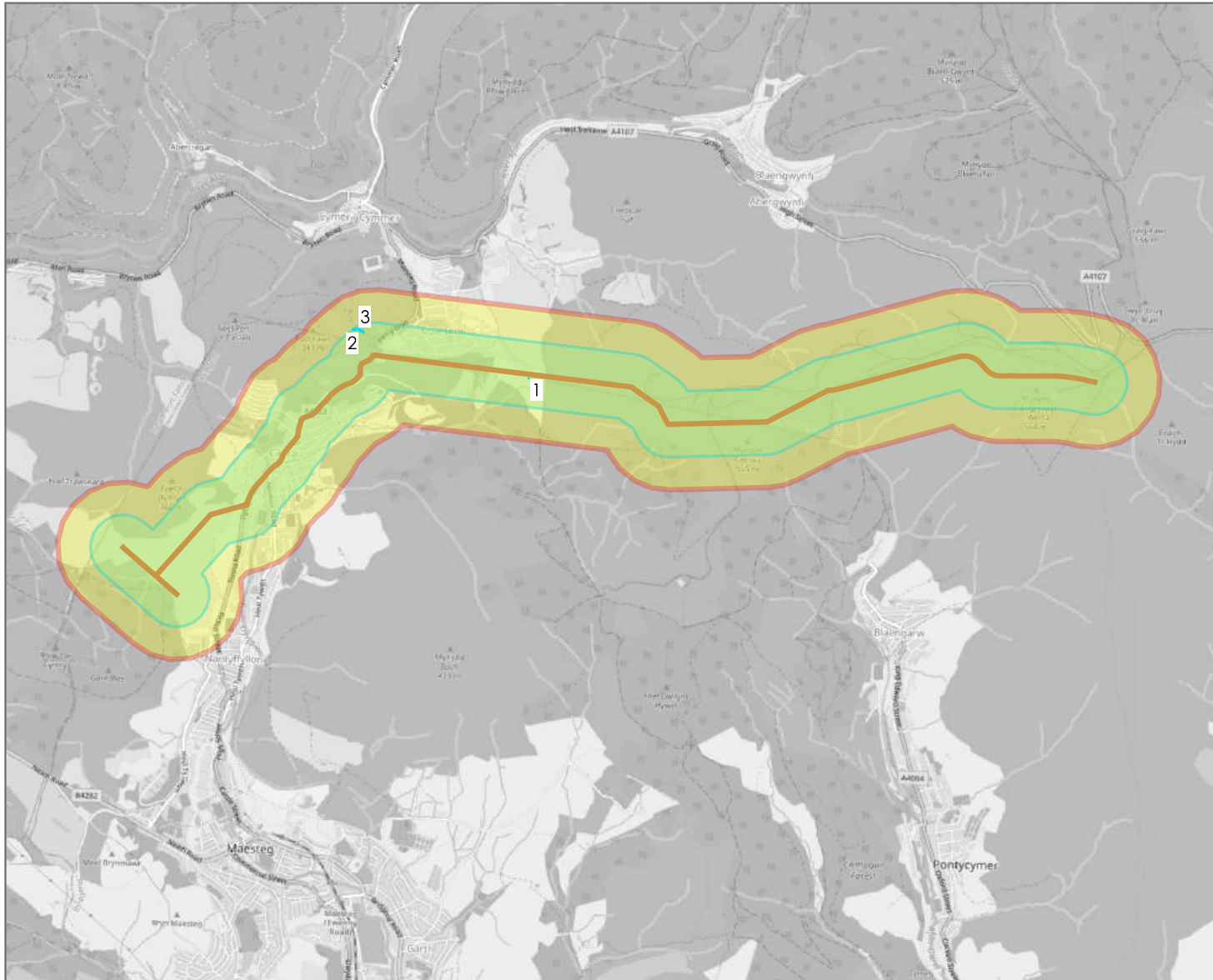
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BK

Drawing No.
CSA/6981/104

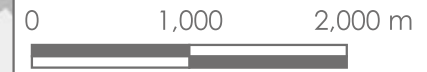
Rev

-

Checked
CT



- Site boundary
- 250m buffer
- 500m buffer
- Ponds:
 - 1. On-site
 - 2. c.160m north-west
 - 3. c. 210m north-west



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Project	Upper Ogmore (Archae)
Drawing Title	500m Pond Search
Client	Fisher German


Date	May 2024	Drawing No.	CSA/6891/103
Scale	Refer to scale	Rev	-
Drawn	GG	Checked	XX



Appendix D




Habitat Summary Table




Table 1. UK Habitat Classification Survey Results (Areas Habitats)




Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
E-W section	Upland rush pasture	g1b, 14, 102	<p>Upland rush pasture was only present along the northern east to west section and comprised a grass-dominated habitat characterised by the presence of scattered soft rush <i>Juncus effusus</i> (secondary code 14; scattered rushes) and generally species poor vegetation influenced by the grazing pressure of sheep (secondary code 102; sheep grazed)</p> <p>Dominant grasses included perennial rye grass <i>Lolium perenne</i>, tufted hair grass <i>Deschampsia cespitosa</i>, red fescue <i>Festuca rubra</i> and sweet vernal grass <i>Anthoxanthum odoratum</i>. The rushes appear in varying amounts, from occasional separate tussocks to dominating thick swards. Areas of the upland rush pasture appear to be of an improved nature, with frequent herb species including red clover <i>Trifolium pratense</i>, hawkbit <i>Leontodon sp</i> and creeping buttercup <i>Ranunculus repens</i>.</p>	
E-W section	Upland acid grassland	g1b	<p>The upland acidic grassland varied between spongy vegetation with frequent mosses to tussocky vegetation of soft rush, purple moor grass <i>Molinia caerulea</i> and matt grass <i>Nardus stricta</i>. The underlying vegetation included grass species such as sheep's fescue <i>Festuca ovina</i>, meadow grass <i>Poa sp.</i>, perennial rye grass and bent grasses <i>Agrostis sp.</i>, as well as a number of frequent herb species including marsh thistle <i>Cirsium palustre</i>, willowherb <i>Epilobium sp.</i>, sheep's sorrel <i>Rumex acetosella</i>.</p> <p>The upland acidic grassland habitat across the survey area showed variation in sward diversity and vegetation, with some areas dominated by matt grass whilst others were dominated by purple moor grass. The upland areas surrounding Target Note 1 (TN1) (see Habitats Plan; see Appendix A) were characterised by scattered heathland indicator species (<25% cover) including heather <i>Calluna vulgaris</i>, bilberry <i>Vaccinium myrtillus</i> and bracken <i>Pteridium aquilinum</i>.</p>	



Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
			<p>On the steep slope on the western aspect (TN2) where sheep grazing is not present, the grassland exhibited a lush sward with a greater species diversity and higher frequency of herb species. Frequent grasses included purple moor grass, Yorkshire fog and tufted hair grass, with herb species including as heath bedstraw <i>Galium saxatile</i>, angelica <i>Angelica sylvestris</i> and tormentil <i>Potentilla erecta</i>, as well as scattered soft rush and at least one other species of rush <i>Juncus sp.</i> Heathland indicator species were also present in low abundances, as well as patches of bramble <i>Rubus fruticosus agg.</i> and willow <i>Salix sp. scrub.</i></p>	
E-W section	Purple moor grass and rush pasture	f2b	<p>The priority habitat 'purple moor grass and rush pasture' comprises a similar composition to the upland acidic grassland and upland rush pasture habitats identified on-site. This priority habitat is often associated with a rich sward of species including devils-bit scabious <i>Succisa pratensis</i> and ragged robin <i>Lychnis flos-cuculi</i> with a number of sedges and rushes, with spark-flowered rush <i>Juncus acutiflorus</i> usually abundant. Due to the botanical survey being undertaken early in the season for some plant species it is possible that a greater number of these were present within the sward than could be identified at the time of survey.</p> <p>The area south of Brynheulog Road has been classified as purple moor grass and rush pasture based on the dominance of purple moor grass and presence of a greater number of herb species compared to other similar habitats across the survey area, these included tormentil <i>Potentilla erecta</i>, foxglove <i>Digitalis purpurea</i> and heath bedstraw <i>Galium saxatile</i>. Data Map Wales priority habitat maps also identified this area as purple moor grass and rush pasture of high sensitivity.</p>	

Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
E-W section	Heathland	h1 (105)	<p>Two areas of heathland were identified within the survey area, see target note TN3 and TN4 on the Habitats Plan; Appendix A. Along the northern stretch of the route an area at TN3 of c.10m in length and c. 3m in width existed along the boundary of upland acidic grassland to the west and plantation conifer woodland to the east. Dominant species included heather and gorse <i>Ulex europaeus</i>, with frequent bilberry and foxglove at a lower abundance. To the south of Croeserw an area of burnt heathland (TN4) existed amongst purple moor grass and rush pasture (secondary code 105).</p>	 <p>TN3 heathland</p>  <p>TN4 burnt heathland</p>

Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
F1	Upland acid grassland	g1b	Unmanaged acid grassland with individual mature trees and a quarry. Access was limited to the field due to the topography, so it was surveyed from the southern boundary of Field F2. The grassland species were dominated by sweet vernal grass, sheep's fescue and purple moor grass. Herb species present included fox gloves, sheep's sorrel, tormentil, hoary plantain and hard fern.	
F2	Upland acid grassland	g1b	Field F2 had a short sward, managed by sheep grazing. Occasional ant hills and moss hills are present throughout the field. Species composition includes sheep sorrel, tormentil, field woodrush, common sorrel, marsh thistle, and sweet vernal grass. A band of mature oak trees are present along the central spine of the field and along the northern boundary between Field F2 and F3.	
F3	Upland acid grassland	g1b	Sheep grazed acid grassland with similar species composition to Field F2. Grass species were dominated by sweet vernal grass with occasional field wood rush and spring sedge. Dense bracken stands were present within the western sections of the field and continued down to the boundary of Field F1.	

Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
F4	Modified grassland	G4	Sheep grazed modified grassland, with evidence of previous draining. The species composition and diversity was significantly lower than adjacent fields south and east of Field F4. Sward height is short and consistent throughout the field with occasional patches of soft rush. Grass species is dominated by perennial rye with very few other species. Herb species were rare in places, species included field wood rush, common sorrel, blinks and creeping buttercup.	
F4a	Gorse scrub	h3e	An area of dense gorse scrub is present within the south-western boundary of Field F4 adjacent to Field F5.	
F5, 6, 7	Modified grassland	g1b6	Fields F5 to F7 were modified in nature and heavily grazed by sheep and horses. In areas where grazing was less intense, such as the north-west corner of Field F7, species composition was in line with that of upland acid grassland with occasional moss covered ant hills. Sweet vernal grass dominated the grass species diversity with occasional sheep's fescue, field wood rush and spring sedge also present. Herb species included yarrow, common sorrel and sheep's sorrel.	

Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
F8	Upland acid grassland	g1b	Upland acid grassland, abundant ant hills, sheep grazed. The upland acidic grassland varied between spongy vegetation with frequent mosses to tussocky vegetation of soft rush, purple moor grass <i>Molinia caerulea</i> and matt grass <i>Nardus stricta</i> . The underlying vegetation included grass species such as sheep's fescue <i>Festuca ovina</i> , meadow grass <i>Poa sp.</i> , perennial rye grass and bent grasses <i>Agrostis sp.</i> , as well as a number of frequent herb species including marsh thistle <i>Cirsium palustre</i> , willowherb <i>Epilobium sp.</i> , sheep's sorrel <i>Rumex acetosella</i> . The field was currently managed through the grazing of sheep with frequent ant hill across its entirety.	
F9	Upland acid grassland	g1b	Similar to the composition of Field F1, Field F9 was managed through sheep grazing and had occasional ant hill and moss patches across its entirety. Sweet vernal grass dominated the grass species composition with red fescue and Yorkshire fog also present. Herb species included sheep sorrel, tormentil, common sorrel, heath bedstraw, foxglove, greater plantain and common dog violet. A bank to the east of the field leading down to the access track had abundant gorse, bracken and bramble present along its entirety.	
F10	Purple moor-grass and rush pasture and upland acid grassland	f2b	A large area of purple moor grass dominated habitat with very few other species present. Towards the northern extremities of the field the species composition transitioned to areas of dense soft rush pasture where water vole latrines were noted. The field had no sign of recent management with historic disused stone fence posts bounding the field to the east and north. Small patches of bracken and gorse are present on the valley side to the south of the field leading down to the stream corridor. Other less frequent species present included heath wood-rush,	

Habitat Reference	Habitat Type	UKHab Codes	Description	Photograph
F11	Upland rush pasture	g3c8 14	<p>The upland rush pasture comprised a grass-dominated habitat characterized by the presence of soft rush <i>Juncus effusus</i> and generally species poor vegetation influenced by the grazing pressure of sheep.</p> <p>Dominant grasses included perennial rye grass <i>Lolium perenne</i>, tufted hair grass <i>Deschampsia cespitosa</i>, red fescue <i>Festuca rubra</i> and sweet vernal grass <i>Anthoxanthum odoratum</i>. The rushes appear in varying amounts, from occasional separate tussocks to dominating thick swards. Areas of the upland rush pasture appear to be of an improved nature, with frequent herb species including red clover <i>Trifolium pratense</i>, hawkbit <i>Leontodon sp</i> and creeping buttercup <i>Ranunculus repens</i></p>	
F12	Purple moor-grass and rush pasture	f2b	<p>Similar to that of field F10 with dense areas of purple moor grass. Wet, boggy ditches were present within areas of the field and were dominated by rush species including, spiked rush, soft rush, club rush and hare's tail cotton grass.</p>	

Appendix E

Habitats and Flora Species List

Table 1. Habitat Polygons

Site Name	Upper Ogmores Windfarm Section						
Survey Date and Surveyor(s)	30/04/2024						
Scientific Name	Common Name	Upland acidic grassland	Upland rush pasture	Sparsley vegetated land	Scrub	Purple moor grass	Broadleaved woodland
Ferns							
<i>Asplenium scolopendrium</i>	Hart's-tongue fern						x
	Fern						x
<i>Pteridium aquilinum</i>	Bracken	x				x	x
Herb Species							
<i>Anthriscus sylvestris</i>	Cow parsley	x					x
<i>Bellis perennis</i>	Daisy	x					x
<i>Calluna vulgaris</i>	Heather	x				x	
<i>Cerastium sp.</i>	Common mouse-ear	x		x			
<i>Chamerion angustifolium</i>	Rosebay willowherb	x				x	x
<i>Cirsium arvense</i>	Creeping thistle		x			x	
<i>Cirsium palustre</i>	Marsh thistle	x	x	x			
<i>Cotoneaster sp.</i>	Cotoneaster						x
<i>Digitalis purpurea</i>	Foxglove	x				x	
<i>Epilobium sp.</i>	Willowherb	x	x				
<i>Equisetum arvense</i>	Field horsetail	x					x
<i>Filipendula ulmaria</i>	Meadowsweet						x
<i>Galium aparine</i>	Cleavers	x					
<i>Galium saxatile</i>	Heath bedstraw					x	
<i>Galium sp.</i>	Bedstraw	x					
<i>Heracleum sphondylium</i>	Hogweed	x					x
<i>Hyacinthoides x massartiana</i>	Non-native bluebell	x				x	x
<i>Hypericum sp.</i>	St John's-wort	x					
<i>Leontodon sp.</i>	Hawkbit	x		x			
<i>Lotus comiculatus</i>	Common bird's-foot-trefoil	x					
<i>Lotus pedunculatus</i>	Greater Bird's-foot-trefoil					x	
<i>Plantago lanceolata</i>	Ribwort plantain	x					
<i>Potentilla anserina</i>	Silverweed	x					x
<i>Potentilla erecta</i>	Tormentil	x				x	
<i>Potentilla reptans</i>	Creeping cinquefoil	x					x
<i>Ranunculus repens</i>	Creeping buttercup	x	x	x			x
<i>Rumex acetosa</i>	Common sorrel					x	
<i>Rumex acetosella</i>	Sheep's sorrel	x	x			x	
<i>Rumex sp.</i>	Dock	x					
<i>Scorzonoides autumnalis</i>	Autumn hawkbit					x	
<i>Senecio jacobaea</i>	Common ragwort	x					
<i>Taraxacum officinale agg.</i>	Dandelion	x		x		x	
<i>Trifolium pratense</i>	Red clover		x				
<i>Trifolium sp.</i>	Clover	x	x	x		x	x
<i>Urtica dioica</i>	Common nettle	x	x	x			x
<i>Vaccinium myrtillus</i>	Bilberry	x					
<i>Vicia sativa</i>	Common vetch	x					
Sedges and Rushes							
<i>Carex sp.</i>	Sedge		x				
<i>Carex flacca</i>	Glaucous sedge	x				x	
<i>Juncus sp.</i>	Rush	x					
<i>Juncus effusus</i>	Soft-rush	x	x	x			
<i>Juncus inflexus</i>	Hard rush					x	x
<i>Luzula campestris</i>	Field wood-rush	x				x	
<i>Luzula multiflora</i>	Heath wood-rush	x	x				
Grasses							
<i>Agrostis sp.</i>	Bent grass					x	x
<i>Agrostis stolonifera</i>	Creeping bent		x				
<i>Angelica sylvestris</i>	Wild angelica	x				x	
<i>Anthoxanthum odoratum</i>	Sweet vernal-grass	x				x	
<i>Briza media</i>	Quaking grass	x					
<i>Dactylis glomerata</i>	Cock's-foot	x				x	x
<i>Deschampsia cespitosa</i>	Tufted hair-grass	x	x				x
<i>Festuca sp.</i>	Fescue	x				x	
<i>Holcus lanatus</i>	Yorkshire-fog	x				x	
<i>Lolium perenne</i>	Perennial rye-grass	x	x	x	x		x
<i>Molinia caerulea</i>	Purple moor-grass	x				x	
<i>Nardus stricta</i>	Mat-grass	x	x				
<i>Schedonorus arundinaceus</i>	Tall fescue	x					
<i>Schedonorus pratensis</i>	Meadow fescue	x					
Woody Species							
Coniferous							
<i>Larix decidua</i>	Larch						x
<i>Picea sp.</i>	Spruce	x					x
<i>Pinus sp.</i>	Pine						x
Broadleaved							
<i>Acer pseudoplatanus</i>	Sycamore						x
<i>Corylus avellana</i>	Hazel						x
<i>Fagus sylvatica</i>	Beech						x
<i>Ilex aquifolium</i>	Holly						x
<i>Quercus robur</i>	Pedunculate oak				x		
<i>Quercus sp.</i>	Oak	x			x		x

Scientific Name	Common Name						
		Upland acidic grassland	Upland rush pasture	Sparsley vegetated land	Scrub	Purple moor grass	Broadleaved woodland
<i>Rubus fruticosus</i> agg.	Bramble	x			x		x
<i>Salix caprea</i>	Goat willow	x				x	x
<i>Salix</i> sp.	Willow	x			x		
<i>Sorbus aucuparia</i>	Rowan						x
<i>Ulex europaeus</i>	Gorse	x					

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