784-B066659

Preliminary Ecological Appraisal

This report version has sections redacted to remove location detail of sensitive ecological features, commonly at risk of persecution.

TNEI on behalf of Field

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EXECUTIVE SUMMARY

Contents	Summary		
Site Location	The site is located approximately 1km south of Beauly in the Scottish Highlands and is centred at Ordnance Survey National Grid Reference NH 52446 44471.		
Proposals	The development proposals consist of the creation and operation of a 100 MW battery energy storage system (BESS) on the site.		
Scope of this Survey(s)	 The purpose of this report is to: Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence. Present the results of an extended Habitat Classification Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and evidence of protected fauna or habitats capable of supporting such species. Evaluate potential ecological receptors on site and within the zone of influence; identify any constraints to the site's development and make any recommendations for further surveys, mitigation, or enhancement. 		
Results and Evaluation	The site hosts a variety of broad habitats and has the potential to support several protected species such as badger, otter, nesting birds and bats. The development proposals could have potential impacts on nearby statutory designated sites due to the hydrological connectivity between the River Beauly and the estuarine designated sites (Inner Moray Firth Ramsar/SPA, Moray Firth SAC/SPA and Beauly Firth SSSI).		
Recommendations	Good practice methods must be followed to prevent harm to protected species, including avoidance, mitigation and enhancement measures detailed in this report. The report also outlines habitat enhancement opportunities to improve site biodiversity, such as plating regimes and habitat creation. Consult with the local planning authority to determine the need for a Habitats Regulation Assessment due to the potential impacts on statutory designated sites. To mitigate potential impacts, a Construction Environmental Management Plan (CEMP)/Ecological Method Statement (EcMS) must be implemented during development construction and operation.		
Conclusion	Provided the measures within this report for further mitigation and enhancement can be adopted, it is anticipated that a design could be brought forward for this site that would be compliant with current local and national biodiversity planning policy, including NPF4 and legislations.		

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by TNEI on behalf of Field Beauly Ltd (the Applicant) in July 2024 to undertake a Preliminary Ecological Appraisal (PEA) to support a planning application for the creation of a Battery Energy Storage System (BESS) and associated development at a site an area of land at Dunballoch Farm near Beauly, in The Highland Council (THC) administrative area, hereafter referred to as "the site".

This report has been prepared by Assistant Ecologist Bethany James BSc (Hons).

1.2 SITE DESCRIPTION

The site is located approximately 1km south of Beauly in the Scottish Highlands and is centred at Ordnance Survey National Grid Reference NH 52446 44471 (Figure 1). It comprises a large grassland pasture which at the time of the survey was used by grazing sheep. There are two electrical pylons within the field with overhead cables running from east to west. The southeast site boundary is walled by an old dry-stone dyke, behind which is extensive woodland. The wider landscape is largely a mix of pastoral and arable farmland, conifer plantations and areas of mixed woodland. The River Beauly is located west of the site and runs adjacent to the southwest boundary line.

1.3 DEVELOPMENT PROPOSALS

The development proposals consist of the creation and operation of a Battery Energy Storage System (BESS) of up to 100 MW with associated infrastructure, access and ancillary works (including landscaping and biodiversity enhancement).

1.4 PURPOSE OF REPORT

The purpose of this report is to:

- Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence.
- Present the results of an extended Habitat Classification Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species and evidence of protected fauna or habitats capable of supporting such species.
- Evaluate potential ecological receptors on site and within the zone of influence; identify any constraints to the site's development and make any recommendations for further surveys, mitigation, or enhancement.

Baseline ecological results are generally considered valid for a period of eighteen months from the date of the survey. It is suggested that baseline data is maintained valid until pre-construction checks as recommended in section 4 of the report. The recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on, however, it is assumed that habitats are likely to remain unchanged.

Scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 HISTORIC SURVEYS

No previous reports relevant to the site have been identified.

2.2 DESK STUDY

The desktop study comprised two elements:

- A data search obtained from The National Biodiversity Network (NBN) Atlas in July 2024 and Highland Biological Recording Group (HBRG) in September 2024; and
- Online element including a search using: NatureScot Sitelink (<u>https://sitelink.nature.scot</u>), Scotland's Environment Map (<u>https://map.environment.gov.scot/sewebmap</u>), and Ordnance Survey (OS) and Aerial Imagery (<u>https://www.bing.com/maps</u>).

The geographical extent of the search area was related to the significance of sites and species and potential zones of influence. For this site the following search areas were considered appropriate:

- 10km for sites of International Importance (e.g. Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar sites);
- 2km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI), protected or otherwise notable species and non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS));
- 2km for biological records, and
- 1km for ancient woodland and mapped priority habitats.

The data search did not cover Tree Preservation Orders (TPOs); or Conservation Areas designated for their special architectural and historic interest.

2.3 FIELD SURVEYS

The following methodologies have been used to identify the ecological receptors present on or near to the site and which are relevant to the proposed development. Survey extended beyond the site to a distance of 50m where accessible.

2.3.1 Habitats

An extended Habitat Classification Survey was undertaken in site on 8th August 2024 by Tetra Tech Consultant Ecologist Ash Ronaldson BSc (Hons) assisted by Assistant Ecologist Bethany James BSc (Hons). The weather conditions were warm and dry at 16°C, with 100% cloud coverage and a light airy wind.

The habitats present on site were mapped in accordance with the UK Habitat Classification Professional Edition – Version 2.0 (UK Hab Ltd., 2023), hereafter referred to as 'UKHab'. The habitats have been classified to a minimum of 'Level 3' (in accordance with UKHab), to identify the presence of any Habitats of

Principal Importance (HPIs) listened on the Scottish Biodiversity List (NatureScot, (2020). Where habitats occur in multiple areas of the site or are of different condition, additional polygons of the same habitat have been mapped so that their condition may be assessed independently.

The minimum recording unit for habitat is $25m^2$ or 5m length for linear habitats (such as hedgerows or watercourses). Dominant plant species were recorded for each habitat present using standard nomenclature, with the scientific names for vascular (flowering) plant species follow those in the New Flora of the British Isles (Stace, 2019). Nomenclature for bryophytes follows Mosses and Liverworts of Britain and Ireland (Atherton *et al.* 2010). Relative plant species abundance was estimated using the DAFOR¹.

2.3.2 Protected and Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), Schedule 5 of the Wildlife and Countryside Act (W&CA) 1981 (as amended), those given extra protection under Section 2 of the Nature Conservation (Scotland) Act 2004, and species included in the Highland Nature Biodiversity Action Plan (Highland Nature, 2021).

The presence of some species was determined using standard best practice guidance and are listed below.

Badger

The site was surveyed for evidence of badger *Meles meles* setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell, & Jefferies, 1989).

Beaver

The site was surveyed for evidence of beaver *Castor fiber* such as feeding signs, food caches, scentmounds, slides, dams, burrows, lodges and canals using standing advice for planning consultations (NatureScot, 2024).

Otter

The site was assessed for its suitability to support otter *Lutra lutra* using standing Government advice (Chanin, 2003).

Bats

Roosting Bats - Buildings / Structures / Trees

Any suitable buildings, structures or trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023) – hereafter referred to as the 'BCT Guidelines'.

Foraging / Commuting Bats

¹ The DAFOR scale has been used to estimate the frequency and cover of the different plant species as follows: Dominant (D), Abundant (A), Frequent (F), Occasional (O), Rare (R), The term 'Locally' (L) is also used where the frequency and distribution of a species are patchy and 'Edge' (E) is also used where a species only occurs on the edge of a habitat type

Potential habitat for foraging and commuting bats were assessed on site according to the BCT Guidelines.

Birds

Bird Species identified at the time of survey were noted and nesting birds recorded as seen. An assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

Great Crested Newt & Common Amphibians

The site was appraised for its suitability to support great crested newt *Triturus cristatus* based on guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Beckett, & Foster, 2001). This appraisal also considered waterbodies within 500m of the site and their potential to be used for breeding newts.

Habitat suitability and evidence of other common amphibians was recorded on site where relevant.

Reptiles

The site was appraised for its suitability to support reptiles using guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003).

Invertebrates

The site habitats were appraised for suitability to support assemblages of invertebrates and commented on in the report as appropriate.

Other Species

The site was also appraised for its suitability to support other protected or notable fauna with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

Invasive Non-native Species

Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended by the Wildlife and Natural Environment (Scotland) Act 2012.) was recorded as seen as well as non-native/exotic species (perhaps not listed in legislation) which could be deemed to have a negative impact on the site's ecology and ecosystems.

2.4 LIMITATIONS

Any absence of desk study records cannot be relied upon to infer absence of a species/habitat as the absence of records may be a result of under-recording within the given search area.

The River Beauly south of the site was not safely accessible in all areas during the survey; therefore, it was not possible to search for discreet field signs of protected species within those areas. Some areas of bracken and vegetation adjacent to the site boundary, but within the survey buffer, was dense or impenetrable at the time of the survey making it impossible to effectively search for a variety of protected species field evidence.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. This survey focuses on assessing the potential of the site to support species of note,

which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation, from only a single visit. This report cannot, therefore, be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

3.0 RESULTS & EVALUATION

3.1 PROTECTED SITES

European and National designated sites identified within 10km of the proposed development are presented in Table 1 with the designation, qualifying features and proximity from the development site also indicated.

Site Name	Designation	Distance and direction from Site	Reasons for designation
Inner Moray Firth	SPA	0.88km N	Inner Moray Firth SPA qualifies under Article 4.1 by regularly supporting populations of European importance of the Annex 1 species: osprey <i>Pandion haliaetus</i> ; common tern <i>Sterna</i> <i>Hirundo, and</i> bar-tailed godwit <i>Limosa lapponica</i> . The Inner Moray Firth SPA further qualifies under Article 4.2 by regularly supporting populations of European importance of the migratory species: greylag goose <i>Anser anser</i> ; red-breasted merganser <i>Mergus serrator</i> , and redshank <i>Tringa totanus</i> , as well as regularly supporting in excess of 20,000 individual waterfowl.
Inner Moray Firth	Ramsar	0.89km N	 Inner Moray Firth Ramsar site qualifies under Ramsar Criterion 1 by virtue of it containing a variety of wetland types: Intertidal mudflats and sandflats supporting areas of saltmarsh are exceptionally well represented throughout the Inner Moray Firth. On the Beauly Firth a large area of saltmarsh covers the mudflats and sandflats. The bays at Munlochy, Longman and Castle Stuart are particularly dominated by extensive mudflats. Of specific importance are the large and dense eelgrass beds. At Whiteness Head, there are sand dunes and a shingle bar. The shingle bar encloses a building intertidal system including, sandflats and associated saltmarsh. Sand dunes and further extensive areas of sandflats, lie to the southwest of the bar. Inner Moray Firth Ramsar site also qualifies under: Ramsar Criterion 2 by supporting osprey and common tern. Ramsar Criterion 5 by regularly supporting waterbirds in numbers of 20,000 individuals or more.

Table 1. Statutory and non-statutory designated sites identified during the desk study

			• Ramsar Criterion 6 by regularly supporting 1% or more of
			the individuals in a population of waterbirds.
Moniack Gorge	SAC	3.42km ESE	Moniack Gorge is a steep wooded ravine with predominantly base-rich soils. This is one of only three UK sites where Annex II species green shield-moss <i>Buxbaumia viridis</i> has been recorded in recent years. Twenty-three sporophytes were recorded on four logs at three places in 1999, which represents a large proportion of the known UK population.
Moray Firth	SPA	3.47km NE	The Moray FirthSPA) qualifies under Article 4.1 by regularly supporting a non-breeding population of European importance of the following Annex 1 species: great northern diver <i>Gavia</i> <i>immer</i> , red-throated diver <i>Gavia stellata</i> , and Slavonian grebe <i>Podiceps auritus</i> . The Moray Firth SPA qualifies under Article 4.2 by regularly supporting populations of European importance of the following migratory species: greater scaup <i>Aythya marila</i> , common eider <i>Somateria mollissima</i> , long-tailed duck <i>Clangula</i> <i>hyemalis</i> , common scoter <i>Melanitta nigra</i> , velvet scoter <i>Melanitta fusca</i> , common goldeneye <i>Bucephala clangula</i> , red- breasted merganser, and European shag <i>Phalacrocorax</i> <i>aristotelis</i> .
Moray Firth	SAC	5.57km NE	The Moray Firth supports the only known resident population of Annex II species bottlenose dolphin <i>Tursiops truncatus</i> in the North Sea. Dolphins are present all year round, and, while they range widely in the Moray Firth, they appear to favour particular areas. Although not a primary reason for selection of this site, Moray Firth also qualifies by the presence of sandbanks which are slightly covered by sea water all the time – an Annex I habitat.
Conon Islands	SAC	8.86km NNW	Conon Islands is an example of a relatively unmodified dynamic alluvial forest system – a rare situation in Europe. It provides one of the most complete examples in the SAC series of a transition from woodland through scrub and freshwater fen to saltmarsh communities. The upper part of the site supports alder <i>Alnus glutinosa</i> wood, which is subject to regular inundation, and which gives way downstream to alder and willow <i>Salix</i> spp. woodland. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae</i>) is an Annex I habitat.
Monadh Mor	SAC	9.96km NNE	Monadh Mor is the last remnant of an extensive complex of woodland and swamp communities with Scandinavian affinities which once occupied a large part of the summit of the Black Isle ridge in north-east Scotland. Monadh More SAC upports a complex mosaic of well-drained ridges and wet hollows formed by glacial processes with a resultant landscape supporting many areas of open water. The wet hollows support lochans and the streams into which they drain are fringed by extensive stands of M4 <i>Carex rostrata – Sphagnum recurvum</i> mire which represent relatively extensive examples of Transition mires and quaking bogs. The ridges are free-draining and are largely wooded with Scots

			pine <i>Pinus sylvestris</i> and birch <i>Betula</i> spp., while more extensive hollows support bog on which stunted pine is abundant. These communities are classed as bog vegetation (M18 <i>Erica tetralix –</i> <i>Sphagnum papillosum</i>) with scattered trees. This site represents one of the largest areas of Bog woodland in a single location in the UK.
Beauly Firth	SSSI	0.88km NNE	The Beauly Firth is a shallow estuary located immediately west of Inverness, reaching inland as far as the town of Beauly. It is important for its coastal plants including substantial colonies of the nationally rare estuarine sedge <i>Carex recta</i> , saltmarsh habitats, and wintering wildfowl and waders.

Ancient Woodland and Priority Habitats

There are eleven ancient woodland habitats within 1km of the site, including Croiche Wood, Long Wood, and nine further unnamed woodland parcels. Of these ancient woodland sites, four are classified as ancient (of semi-natural origin), and seven as long-established (of plantation origin). The closest of these woodlands lies directly adjacent to the southern site boundary and east of the farm buildings.

3.2 HABITATS

The following habitats have been identified through our assessment. A UKHab map can be found in Figure 2, with detailed Target Notes and Photographic Plates included in Appendix B, as appropriate.

Habitat	Result	Importance assessment
w1g Other broadleaved woodland	Outside and directly adjacent to the northeast site boundary is an area of semi-mature broadleaved woodland (TN1) mainly comprising silver birch <i>Betula pendula</i> with occasional rowan <i>Sorbus aucuparia</i> .	Local
<u>Secondary codes:</u> 202 Young tree – self-	Semi-mature broadleaved woodland lines southwestern field boundary and continues west/northwest, adjacent to the River Beauly and within the buffer zone (TN2).	
set 521 Unmanaged	West of the site boundary, separating the site from a smaller grassland field, is a strip of semi-mature broadleaved trees (TN3). This area was too wet to access from the west and too dense to access from the east therefore was not thoroughly surveyed.	
	Running adjacent to the A862, at the northern point of the site, is a tree line of silver birch (TN4).	
w1f7 Other Lowland mixed deciduous woodland	The northeastern woodland continues to line the east of the site with the addition of occasional Sitka spruce <i>Picea sitchensis</i> (TN5).	Local – Highland Nature Biodiversity Action Plan (BAP) 2021 priority
<u>Secondary codes:</u> 202 Young tree – self- set 521 Unmanaged	The woodland is fragmented by an area of bracken which then continues into the woodland understory before transitioning into an extensive, dense area of semi- mature/mature mixed woodland located behind a stone wall (TN6). The species are predominantly silver birch and Sitka spruce. This area breaks at an area of dense scrub before	habitat National – Scottish Biodiversity List (SBL) habitat

Table 2. Habitats

Habitat	Result	Importance assessment
612 Fence 839 Track 853 Mortared wall	continuing south of the site until reaching the banks of the River Beauly (TN7).	
c1a Arable field margins <u>Secondary codes:</u> -	The field is bounded by creeping thistle <i>Cirsium arvense</i> and nettle <i>Urtica dioica</i> scrub (TN8). Soft rush <i>Juncus effusus</i> (O) and cock's foot <i>Dactylis glomerata</i> (O) occur amongst the scrub as the border continues southeast (TN9), eventually leading to a patch of mixed scrub.	National – SBL habitat
h3h Mixed scrub <u>Secondary codes:</u> 853 Mortared wall	In the northeastern edge of the field there is an area of common gorse <i>Ulex europaeus</i> and common broom <i>Cytisus</i> <i>scoparius</i> scrub (D) (TN10). The mixed woodland transitions into dense broom scrub adjacent to the southeast site boundary (TN11). The southwestern edge of the grassland field, behind the fence line, is dense nettle scrub with occasional broadleaf dock <i>Rumex obstusfolius</i> and creeping thistle (TN12). This area was inaccessible during the survey. The banks of the River Beauly adjacent to the site contain areas of bramble <i>Rubus fruticosus</i> scrub with occasional common hogweed <i>Heracleum sphondylium</i> , nettle, meadowsweet <i>Filipendula ulmaria</i> and bracken (TN13).	Local
h3e Bramble scrub <u>Secondary codes:</u>	Running adjacent to the A862, at the northern point of the site, is a line of bramble (A) and creeping thistle (A) scrub (TN14). This area stops at the silver birch tree line before becoming nettle and thistle scrub again at the north- northeast point of the site (TN15).	Local
g4 Modified grassland <u>Secondary codes:</u> 102 Sheep grazed	The main body of the site is modified grassland comprising perennial ryegrass <i>Lolium perenne</i> (D) and white clover <i>Trifolium repens</i> (F) (TN16). At the time of the survey this area was used by grazing sheep.	Local
C1b5 Rye-grass and clover ley <u>Secondary codes:</u>	West of the red line boundary, there is a grassland field of approximately 3.6 hectares. This comprised white clover (F) and perennial ryegrass (D) (TN17).	Local
g3c Other neutral grassland <u>Secondary codes:</u>	West of the site, between the two grassland fields, is a large clearing which houses two electrical pylons. This area comprises wet, marshy grassland dominated by Juncus sp., with occasional creeping thistle, common hogweed, meadowsweet, Yorkshire fog <i>Holcus lanatus</i> , tufted hairgrass <i>Deschampsia cespitosa</i> and alder <i>Alnus glutinosa</i> (R) (TN18). Northwest of the clearing is an area of reed canary grass <i>Phalaris arundinacea</i> (TN19).	Local

Habitat	Result	Importance assessment
g1c Bracken <u>Secondary codes:</u> 128 Tall or tussocky sward	Directly east of the site boundary, there is a break in the two broadleaved woodland parcels which was previously cleared for routing the electrical pylons. This area is a moderately steep, inclined slope with dense bracken (A) and silver birch (R) (TN20).	Local
u1b5 Buildings <u>Secondary codes:</u> 833 Barn	There are four agricultural farm buildings to the north of the site, near the site access. B1 is a large traditional stone steading with pitched and hipped slate roofs which adjoins two stone barns with pitched corrugated asbestos roofs. The building is one to one-and-a-half storeys high with wooden doors/frames (including two wooden hayloft doors), and three sections also include metal fascia at the roof level. B2 and B3 are more modern metal agricultural sheds with corrugated metal roofs. B2 is mostly open, whereas B3 is fully enclosed and features concrete lower walls. B4 is a small, old wooden shed with corrugated metal roof.	Negligible

3.3 PROTECTED AND NOTABLE SPECIES

Data retrieved from the Highland Biological Recording Group (HBRG) (all data) and the National Biodiversity Network (NBN) Atlas (records from 2000 onwards) confirmed the records of several protected and notable species within 2km of the site. Relevant data are discussed in Table 3 below.

Protected and notable species identified as a receptor for the site are detailed in Table 3. For species with legal protection arising from persecution, such as badgers, some details are purposefully omitted but can be provided on request to inform the masterplan.

Table 3. Species

Species	Legal protection	Result	Importance assessment
Badger	Protection of Badgers Act 1992; Wildlife and Countryside Act 1981 (as amended) Schedule 6.	The HBRG data search returned four records of badger within 2km of the site, the most recent of which was from 2018, located approximately 1.3km northwest. had several visible mammal holes; however, vegetation was too dense at the time of the survey to gain safe access to search for badger signs. also had evidence of probable badger spoil heaps, however, the area was not accessible during the survey therefore the feature has not been categorised. A badger latrine is present with at least ten dung pits, A mammal hole was observed within the site buffer, which was typical of a badger sett, however, no conclusive signs were found.	Local
Pine marten	Conservation (Natural Habitats, &c.) Regulations 1994 (as amended); Wildlife and Countryside Act 1981 (as amended) Schedule 5.	The HBRG data search returned two records of pine marten within 2km of the site, the most recent of which was from 2005 and located approximately 70m east. No signs of pine marten were observed during the field survey; however, these are expected to be present in the adjacent woodland and assumed active within the wider landscape.	Local – Highland Nature BAP 2021-2026 priority species National – Scottish Biodiversity List (SBL) species

Species	Legal protection	Result	Importance assessment
Red squirrel	Wildlife and Countryside Act 1981 (as amended) Schedules 5 and 6.	The HBRG data search returned five records of red squirrel within 2km of the site, the closest of which was located 530m southeast. NBN holds 29 records of red squirrel within the same 2km radius. No signs of red squirrel were observed during the field survey; however, these are expected to be present in the adjacent woodland and assumed active within the wider landscape.	National – SBL species Local – Highland Nature BAP 2021-2026 priority species
Other notable terrestrial mammals	Wildlife and Countryside Act 1981 (as amended).	The HBRG data search returned four records of European hedgehog <i>Erinaceus europaeus</i> within 2km of the site, and NBN holds nine records of brown hare <i>Lepus europaeus</i> within the same area. Brown hare was observed within the red line boundary of the site during the field survey. The stone wall at the southeast of the site had a gap allowing mammal access, likely used by rabbit or fox (TN23) A mammal hole was observed southwest of the site (TN24). This was located between the field edge and banks of the River Beauly, close to the water's edge with an obvious trail leading to the river, however, was heavily disturbed by sheep.	Local
Beaver	Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), which include beavers as a European Protected Species.	The HBRG and NBN data searches did not return any records of beaver within 2km of the site. Evidence of beaver activity, fresh gnaw markings, were observed approximately 400m from the western site boundary line along the banks of the River Beauly (TN25). Further downstream, approximately 500m – 1km from the northern site boundary were fresh signs of beaver foraging (TN26/27). Older signs of beaver were found upstream, approximately 520m west from the centre of the site (TN28). The River Beauly to the south of the site was not safely accessible during the survey.	Local – Highland Nature BAP 2021-2026 priority species
Otter	Conservation (Natural Habitats, &c.) Regulations 1994 (as amended); Wildlife	The HBRG data search returned two records of otter within 2km of the site, both from 2004 and located approximately 1.2km east.	National – SBL species

Species	Legal protection	Result	Importance assessment
	and Countryside Act 1981 (as amended) Schedules 5 and 6.	No direct evidence of otter presence was found within the site boundary and buffer area. A burrowed mammal hole was found next the water's edge, approximately 300m from the western site boundary line (TN29) which was typical of an otter holt. Terrain and vegetation made many areas of the riverbank inaccessible which made searching for discreet signs of otter activity difficult. Otter are, however, expected to be present in the River Beauly and assumed active within the wider catchment.	European protected species
Water vole	Wildlife and Countryside Act 1981 (as amended) Schedule 5.	The HBRG and NBN data search did not return any records of water vole within 2km of the site. No direct evidence of water vole was found during the field survey. Terrain and vegetation made many areas of the riverbank inaccessible which made searching for discreet signs of water vole activity difficult. Water voles are, however, expected to be present in and around the River Beauly and assumed active within the wider catchment. The well-vegetated banks of the River Beauly provide suitable resource/habitat for water vole and the water course is anticipated to act as a vector for local populations.	Local – Highland Nature BAP 2021-2026 priority species
Bats	Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), Wildlife and Countryside Act 1981 (as amended) Schedules 5 and 6.	The HBRG data search returned three records of bats within 2km of the site comprising Daubenton's bat <i>Myotis daubentonii</i> , soprano pipistrelle <i>Pipistrellus pygmaeus</i> and unknown pipistrelle species. NBN also holds 57 bat records within the same radius, including 36 records of Daubenton's bats, five records of soprano pipistrelle, two records of common pipistrelle <i>Pipistrellus pipistrellus</i> , and a brown long- eared bat roost. The remaining records are of unknown pipistrelle <i>Pipistrellus</i> sp. and unknown bat species. <u>Roosting Bats</u> There are four farm buildings directly adjacent to the site. B1 is an older stone building. Features which may be used by bats as access points or roosts include open/missing doors, gaps at wall heads, in stonework, and under slipped tiles, and areas of lifted lead flashing. This building provides high bat roost suitability (BRS). B2 and B3 are more modern metal agricultural sheds, with B2 being mostly open and B3 enclosed featuring concrete lower walls. Roosting opportunities for bats are limited to gaps where metal sections join or overlap; therefore, these buildings provide low BRS.	Local – Highland Nature BAP 2021-2026 priority species National – SBL species

Species	Legal protection	Result	Importance assessment
		 B4 is a small wooden shed with corrugated metal roof. Numerous gaps behind the rough timber planks in varying condition provide roosting opportunities for crevice-dwelling bat species, and the building is of moderate BRS. Older buildings and mature trees throughout the wider landscape provide roosting opportunities for a range of bat species. <u>Foraging and Commuting Bats</u> The River Beauly and its riparian edges provide foraging resources and commuting routes suitable for all species of bat resident in Scotland. Woodland parcels, tree lines, and hedgerows throughout the wider landscape also provide habitat suitable for foraging and commuting, with open farmland also likely to be used for foraging by a range of bat species. 	
Birds	Wildlife and Countryside Act 1981 (as amended).	 The NBN data search returned 936 records of birds comprising 64 species within 2km of the site. Of the species recorded, two are W&CA Schedule 1, 15 are Birds of Conservation Concern 5 (BoCC) red listed, and 17 BoCC Amber listed. Notable recorded species likely to use the site and/or directly adjacent habitats include barn owl <i>Tyto alba</i>, kingfisher <i>Alcedo atthis</i>, house martin <i>Delichon urbicum</i>, linnet <i>Carduelis cannabina</i>, skylark <i>Alauda arvensis</i>, spotted flycatcher <i>Muscicapa striata</i>, swift <i>Apus apus</i>, tree sparrow <i>Passer montanus</i>, and yellowhammer <i>Emberiza citrinella</i>. Species observed on site during the field survey include blue tit <i>Cyanistes caeruleus</i>, common buzzard <i>Buteo buteo</i>, carrion crow <i>Corvus corone</i>, chiffchaff <i>Phylloscopus collybita</i>, long-tailed tit <i>Aegithalos caudatus</i> and red kite <i>Milvus milvus</i>. 	Local – Highland Nature BAP 2021-2026 priority species (Red kite)
GCN and Common Amphibians	<i>GCN:</i> Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). <i>Common amphibians:</i> Wildlife and Countryside Act 1981 (as amended).	The HBRG and NBN data searches returned two records of great crested newt, one record of common toad <i>Bufo bufo</i> , three records of palmate newt <i>Lissotriton helveticus</i> , five records of common frog <i>Rana temporaria</i> , and three records of newt <i>Lissotriton</i> sp. within 2km of the site. No evidence of GCN or other common amphibians was found on site during the survey. The absence of standing water on site means GCN are unlikely to be present. The areas of boggy ground surrounded by vegetation of varying heights may be used opportunistically by amphibians in their terrestrial phase. The woodland and long vegetation present along the River Beauly also provide suitable habitat for aquatic amphibians.	Local National – SBL species

Species	Legal protection	Result	Importance assessment
Reptiles	Wildlife and Countryside Act 1981 (as amended).	The HBRG and NBN data searches returned six records of slow-worm <i>Anguis fragilis</i> and five records of common lizard <i>Zootoca vivipara</i> within 2km of the site. No evidence of reptiles was found on site during the survey. The stone wall along the eastern boundary of the site could be used by reptiles as a refugium/hibernaculum, with scrub habitats providing additional refugia. The short sward alongside the wall has rocks/stones sticking out in places, provide basking opportunities for reptiles and the areas of boggy ground may be used opportunistically for refuge and hibernacula. The woodland and long vegetation present along the River Beauly also provide suitable habitat for amphibians.	Local
Invertebrates	Some invertebrates are protected under the Wildlife and Countryside Act 1981 (as amended).	The HBRG and NBN data search returned records of two notable invertebrates within 2km of the site: median wasp <i>Dolichovespula saxonica</i> and vagabond cluster fly <i>Pollenia vagabunda</i> . Both species are UK IUCN Red List species. A common carder bee <i>Bombus pascuorum</i> and a white-tailed bee <i>Bombus lucorum</i> were observed during the field survey. The grazed grassland within the red line boundary provides minimal habitat suitability for invertebrates; however, a variety of habitats are present within the 50m buffer zone and these would be suitable for a range of invertebrate species.	Local National – IUCN Red List species
Invasive species	Wildlife and Countryside Act 1981 (as amended) Schedule 9; Environmental Protection Act 1990.	The HBRG and NBN data searches returned eight records of American mink <i>Neovision vision</i> within 2km of the site, the closest of which was located in the southwest corner of the site in 2013. No invasive species were observed on site during the field survey. The site provides minimal habitat suitability for invasive species; however, the surrounding habitats including the River Beauly provide opportunities for a range of invasive species.	Local – Highland Nature BAP listed Highland invaded species (American mink)

4.0 **RECOMMENDATIONS**

4.1 MITIGATION AND FURTHER SURVEY

All of the works outlined below in Table 4 should be assumed as likely requirements for the pre-planning stage to inform a planning application, unless otherwise stated.

Table 4. Mitigation and Further Survey / Assessment

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
Designated sites	The River Beauly at the west of the site feeds into the Beauly Firth SSSI before emptying into the Inner Moray Firth Ramsar/SPA and Moray Firth SPA. The Moray Firth is of high risk to the negative impacts of marine and surface water pollution waters as per the Natura 2000 – Standard Data form for SPA's and SAC's, therefore, due to hydrological connectivity between the sites there is potential for impact. It is recommended that the local planning authority be contacted to determine the need for a Habitats Regulation Assessment (HRA) to assess any potential impact to the Beauly Firth SSSI that may arise from development.	 A HRA may be required for the proposed development and further mitigation may be required upon completion of this assessment. Impacts to the surrounding area, including the Beauly Firth SSSI, must be considered as part of an Ecological Method Statement (EcMS)/Construction Environmental Management Plan (CEMP). The CEMP/EcMS must ensure that construction and operation of the development causes no damage/destruction to the River Beauly to reduce the risks of erosion, sedimentation and pollution. Wastewater during development must be disposed of appropriately and any water run-off from construction into the nearby watercourse must be authorised by SEPA. 	As the site is primarily managed farmland, there are no enhancement opportunities for the designated sites. The local planning authority will advise of any required enhancement measures following appropriate mitigation.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
Habitats	No further survey or assessment is recommended.	 The development will result in the loss of predominantly modified grassland and mixed scrub, as such any removed vegetation should be replaced elsewhere on-site using wildlife friendly planting and native plant species to increase the ecological value of the site. Diverse native species planted in a way which could augment the River Beauly riparian habitats, contributes to the wider ancient designated woodlands, or possibly provides shelter belts or increased connectivity. All works must follow best practice working methods as detailed in the EcMS/CEMP to minimise any impacts to habitats both on site and in the surrounding area. Native thicket-type vegetation could be planted around the perimeter development to reduce noise/visual disturbance to surrounding habitats. Removed topsoil should be reused during landscaping where possible to minimise soil disturbance and retain soil biota. 	 The use of green screens/facades around the development using native tall shrubs and climbing plants would further reduce visual disturbance. Diverse native hedgerows could be introduced to linear boundaries. Habitat management planning is recommended as per the Biodiversity Enhancement outcomes.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
Badger	A targeted badger survey is required when vegetation constraints have reduced in the Autumn/Winter months. Construction within 30m of sett features will need to be assessed.	 Foraging habitats for badger should not be fragmented or isolated due to the development. During works, appropriate good practice precautionary working methods should be adopted, including but not limited to: A check prior to works to ensure that no setts have been created since the ecological survey. Should a badger be encountered or suspected within the site prior to or during works, a suitably qualified ecologist should be contacted. Back-filling or coverage of excavations overnight or sloping the sides to 45° or less to provide an exit to any animal entering the excavation. Checking the site/stored materials at the beginning of each day. Any temporarily exposed open pipe system should be capped in a way as to prevent badger or other mammals from gaining access. Unnecessary lighting should be avoided, as should illumination of adjacent habitat features. 	 The conversion of "secondary" or "other" habitat to primary badger foraging habitat will enhance the site for badger. For example, introduce grazing or mowing to rough grassland; convert arable land to broadleaved woodland. Any new trees and hedgerows are recommended to incorporate native species with a high proportion of fruit- bearing species such as rowan and elder to provide foraging opportunities for badger.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
		• Landscape connectivity should be retained to allow badgers to move freely between habitats.	
Pine Marten	A targeted protected species survey for pine marten is recommended ahead of construction works commencing. Construction within 250m of pine marten presence or potential den sites will need to be assessed.	Good practice working methods (as detailed above for badger) must be followed throughout the works to minimise the likelihood of any disturbance, injury or mortality of protected or notable mammals.	The installation of den boxes amongst existing riparian woodland is suggested to enhance sheltering resources for pine marten.
Red Squirrel	 A targeted protected species survey for red squirrel is recommended ahead of construction works commencing. Construction near to trees containing red squirrel dreys will need to be assessed: within 50m during red squirrel breeding season (February to September inclusive) within 5m or one tree's distance during non-breeding season. 	 Good practice working methods should adopted throughout the works as a precautionary approach. Pre-works surveys must check for any new dreys that may have arisen between survey and the start of construction. If there is confirmed presence of red squirrel dreys, vegetation clearance/tree removal must take place during the non-breeding season of red squirrels (February to September inclusive). If this is not possible further licensing and survey may be required. 	New woodland plantation should include native species such as Scots pine, yew <i>Taxus baccata</i> , juniper <i>Juniperus</i> <i>communis</i> , hazel <i>Corylus avellana</i> , holly <i>Ilex</i> <i>aquifolium</i> and rowan to benefit red squirrels.
Otter	A targeted protected species survey for otter is recommended. All suitable otter habitat within 200m of the proposed works will need to be assessed.	• Pre-works surveys must check for any potential otter holts which may have arisen between survey and the start of construction. If so, seek confirmation from an ecologist.	Augmenting riparian habitat with appropriate planting will increase the robustness of a connected sheltered corridor for otter to move and rest freely along the river corridor.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
		 A work exclusion zone must be implemented around any otter holts or shelters (200m for breeding sites, 30m for non-breeding/resting sites). Construction works must avoid working in the vicinity of potential otter habitat during hours of darkness (within two hours after sunrise and two hours before sunset). Any temporarily exposed open pipe system should be capped in a way as to prevent otter or other mammals from gaining access. Back-filling or coverage of excavations overnight or sloping the sides to 45° or less to provide an exit to any animal entering the excavation. Unnecessary lighting at night should be avoided and not illuminate riparian or river habitat. Otter-proof fences must be used to ensure otters will not access the development site during and after works. 	
Beaver	A targeted protected species survey for beaver is recommended. Habitat within 20m of freshwater and 50m of the proposed works will need to be assessed; the survey should be extended to suitable habitat within the affected areas.	 Good practice working methods (as detailed above for otter) must be followed throughout the works to minimise the likelihood of any disturbance, injury or mortality of protected or notable mammals. 	General improvement of riparian habitat as per Biodiversity Enhancement assessment.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
		• Unnecessary lighting at night should be avoided and not illuminate riparian or river habitat.	
Water Vole	for a pre-construction survey for water vole is recommended ahead of works commencing. Construction within 10m of suitable habitat, within water vole range, will need to be checked.	 Good practice working methods (as detailed above for badger) must be followed throughout the works to minimise the likelihood of any disturbance, inquiry or mortality of protected or notable mammals. Riparian buffer strips will allow water voles to disperse and improve connectivity between habitats. 	General improvement of riparian habitat as per Biodiversity Enhancement assessment.
Other protected or notable mammals	No further survey or assessment is recommended.	Good practice working methods (as detailed above for badger) must be followed throughout the works to minimise the likelihood of any disturbance, inquiry or mortality of protected or notable mammals.	The creation of additional green corridors is likely to enhance the site in terms of its suitability to support hedgehog and would improve connectivity to permit movement of the species; it is recommended that the proposed development (where possible) is designed to increase opportunities to hedgehog.
Bats	A series of static bat recording was undertaken in parallel with this appraisal to analyse species diversity and help interpret how bats utilise the site's habitats. The results of which will be reported separately. A broad mitigating strategy is summarised in this table.	 Good practice working methods should be followed throughout the works as a precautionary approach. The farm buildings adjacent to the site should be assumed to host roosting bats and passing works traffic must avoid risks of disturbance to these buildings such as noise, vibration and lighting. No reduction in habitat 	 The installation of bat boxes in adjacent woodland or trees within landownership (as directed by an ecologist) is recommended to increase roosting resource in the surrounding area for bats. The inclusion of native, nectar rich planting species in the landscape plan

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
	No further bat activity surveys are required as the client has confirmed no construction works to the farm buildings.	 connectivity or quality surrounding the buildings is predicted to occur. The CEMP must include mitigation to avoid disturbance to commuting and foraging bats i.e. avoiding unnecessary lighting at night. A lighting strategy must be designed in line with the bats and artificial lighting in the UK guidelines with the inclusion of using bat sensitive lighting on the development (Collins, 2023). Lighting duration must be limited to necessary times using sensors or timers to reduce the impacts of artificial lighting to bats and other wildlife. Where lighting is required, LED lighting which utilises less-disruptive wavelengths are required. 	is recommended to increase foraging resources for bats.
Birds	A data collection and consultation exercise should be undertaken with NatureScot and the Royal Society of Protection of Birds; to identify the presence of known Schedule 1 bird nest sites/territories within the site and wider area and records of grazing by wintering birds. At this stage of the appraisal, it is considered that the loss of modified grassland and the subsequent enhancement of riparian,	 Vegetation clearance should take place outside of the bird nesting season where possible (March-August inclusive). If this is not possible, a nesting bird check must be conducted by an experience ecologist no more than 24 hours before vegetation clearance. Should a nest be found, an appropriate buffer must be 	 The installation of bird boxes in adjacent woodland and trees (as directed by an ecologist) is recommended to increase nesting resource for birds. Introducing seeding and fruiting native species into new woodland planting and hedgerows is recommended to provide foraging and nesting opportunities for birds.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
	 grassland and woodland habitats would not have a significant effect on breeding or wintering birds at the site. Any requirement for breeding or non-breeding season surveys would be established through the desk study and consultation described above. To ascertain breeding birds associated with the site an adapted Common Bird Census could be conducted on four separate visits between April-July inclusive (following Gilbert et al., 1998). A broad mitigation strategy is included in this table. 	 implemented which may constrain works. Noise, lighting, vibration and human activity can affect nesting birds in adjacent habitats and therefore cognisance of this in work planning as well as guidance from a project ecologist/ECoW during construction is advised. 	
GCN and Common Amphibians	No further survey or assessment is recommended.	• Good practice working methods are recommended as a precautionary approach during works to reduce the likelihood of disturbance, injury and/or mortality of GCN or common amphibians occurring.	Any built or retained rock piles should be kept free from encroaching vegetation.
Reptiles	No further survey or assessment is recommended.	• Good practice working methods are recommended as a precautionary approach during works to reduce the likelihood of disturbance, injury and/or mortality of reptiles.	Any built or retained rock piles should be kept free from encroaching vegetation.
Invertebrates	No further survey or assessment is recommended.	To reduce risks to invertebrates, the EcMS/CEMP must be followed, limiting	Introduction of butterfly banks and/or insect hotels would further enhance the

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
		pollution both within the site and across the surrounding landscape	site for invertebrates. It is recommended that any loss of vegetation is reinstated with suitable nectar rich plants.
Invasive species	No further survey or assessment is recommended. It is possible that invasive plants may appear each spring based on any localised seed sources. Therefore, maintaining baseline survey data annually is suggested.	 During works, appropriate biosecurity measures should be adopted as advised by the Beauly Catchment Biosecurity Plan 2021-2023 (Beauly Fishery Board, 2021) and SEPA's "<i>Biosecurity and management</i> of invasive non-native species for construction sites and controlled activities" guidelines (SEPA, n.d), including but not limited to: Pre-construction checks and risk assessments carried out for INNS. Toolbox talks ensuring site workers are aware of what the species look like. Maintain good site hygiene, personnel working on or between sites ensure clothing and footwear are cleaned where appropriate to prevent spread. Disposal of contaminated wash water, silt and other solids is dealt with in a responsible manner to avoid pollution and spread of INNS. 	Monitoring and recording of any American mink sightings during construction and operation is encouraged to assist the control efforts of the Scottish Invasive Species Initiative (Scottish Invasive Species Initiative, n.d.).

5.0 CONCLUSIONS

The development proposals are considered to have the potential to impact the statutory designated sites (Beauly Firth SSSI, Inner Moray Firth Ramsar/SPA, and Moray Firth SAC/SPA) due to hydrological connectivity. It is recommended to contact the local planning authority as soon as possible to determine the need for a Habitats Regulation Assessment.

The development may be positioned in a disturbance range of nesting Schedule 1 birds such as Osprey. In the absence of any survey results for Osprey in this appraisal, it is suggested that this risk is addressed via consultation with NatureScot.

The site and its immediate surrounds have the potential to support protected species such as badgers, nesting birds, bats, beavers, and otters.

Key recommendations include:

- Conduct targeted surveys for European protected species, otter, beaver and bat and develop Species Protection Plans.
- Maintain baseline data on protected species (i.e. badger, pine marten and red squirrel) leading to pre-construction checks.
- Consult on the need for ornithological study and Habitat Regulations Appraisal.
- Prior to construction, publish the specification of the avoidance and mitigation measure specific to this project within aConstruction Environmental Management Plan (CEMP).
- Prior to construction include light pollution mitigation in the CEMP and design a lighting strategy in line with BCT guidelines.
- Reflect vegetation loss in landscape design and increase ecological value with wildlife-friendly planting and native species.
- Use native species planting within landscaping to promote appropirate habitat features.
- Reuse or recycle materials obtained through development.
- Appoint an Ecological Clerk of Works to audit and/or advise the construction process with regard ecological receptors.
- Clear vegetation outside the bird nesting season or commission a nesting bird check if unavoidable.
- Adopt biosecurity measures as advised by the Beauly Catchment Biosecurity Plan and SEPA.

Habitat enhancement measures are expected to be included within Biodiversity Enhancement habitat management plans such as grassland management and improvement and expansion of woodland using native species. Other options available to the project might include artificial shelters for pine marten, bats and birds, creating butterfly banks or insect hotels, and monitoring American mink sightings to support invasive species control efforts. These opportunities for enhancement would contribute to compliance with NPF4 Policy 3.

Provided the measures within this report for further survey and mitigation can be adopted, it is anticipated that a design could be brought forward for this site that would be compliant with current local and national biodiversity planning policy.

REFERENCES

- Atherton, I., Bosanquet, S., Lawley, M. (2010) [Eds.]: Mosses and liverworts of Britain and Ireland: a field guide.
- Beauly Fishery Board. (2021). Beauly Catchment Biosecurity Plan 2021-2030.
- BSI. (2013). *BS 42020 a code of practice for biodiversity in planning and development.* London: BSI Group. Retrieved from https://www.bsigroup.com/LocalFiles/en-GB/biodiversity/BS-42020-Smart-Guide.pdf
- Chanin. (2003). *Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10.* Peterborough: English Nature.
- CIEEM. (2017). Guidelines for Preliminary Ecological Appraisal (2nd ed.). Winchester: CIEEM.
- Collins. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th ed.). London: The Bat Conservation Trust.
- Gent, & Gibson. (2003). *Herpetofauna Workers' Manual*. Peterborough: JNCC.
- Harris, Cresswell, & Jefferies. (1989). *Surveying badgers. An occasional publication of the mammal society – No. 9.* London: Mammal Society.
- Highland Nature. (2021). Biodiversity Action Plan 2021-2026. Highland Nature.
- JNCC. (2016). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. Peterborough: JNCC.
- Langton, Beckett, & Foster. (2001). Great Crested Newt Conservation Handbook. Halesworth: Froglife.
- NatureScot. (2024). *Standing advice for planning consultations Beavers.* Retrieved from NatureScot: https://www.nature.scot/doc/standing-advice-planning-consultations-beavers
- Oldham, Keeble, Swan, & Jeffcote. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (Triturus cristatus). *Herpetological Journal*, 10 (4), 143-155.
- Scottish Invasive Species Initiative. (n.d.). *Mink Control Project*. Retrieved from Scottish Invasive Species Initiative: https://www.invasivespecies.scot/mink-control-project
- SEPA. (n.d). Biosecurity and management of invasive non-native species for construction sites and controlled activities.
- Stace. (2019). New Flora of the British Isles (4th ed.). Suffolk: C&M Floristics Middlewood Green.
- The Highland Council. (2024). Inner Moray Firth Local Development Plan 2.

UK Hab Ltd. (2023). Uk Habitat Classification Version 2.0. Retrieved from Https://www.ukhab.org

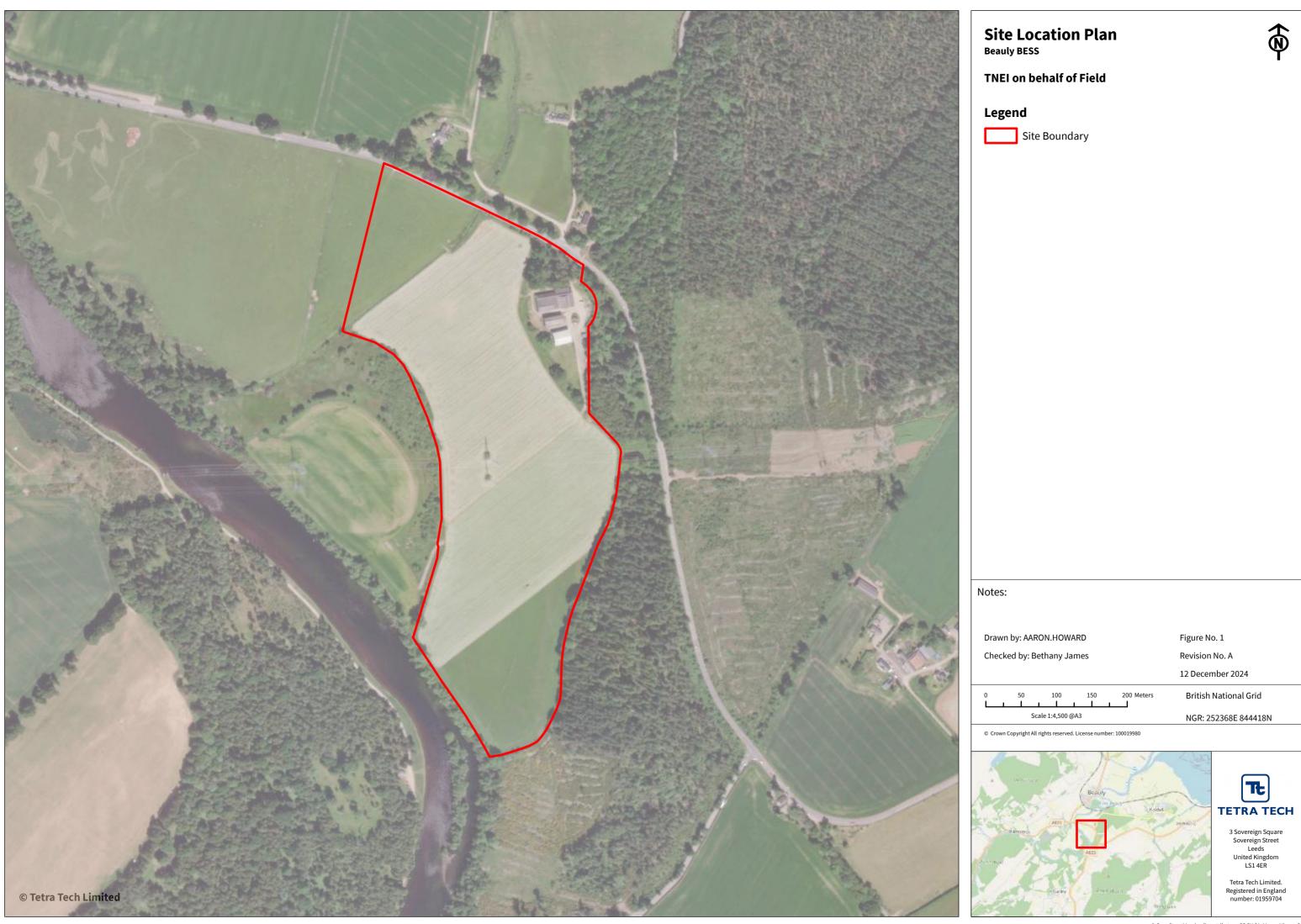
FIGURES

Figure 1 – Site Location Plan

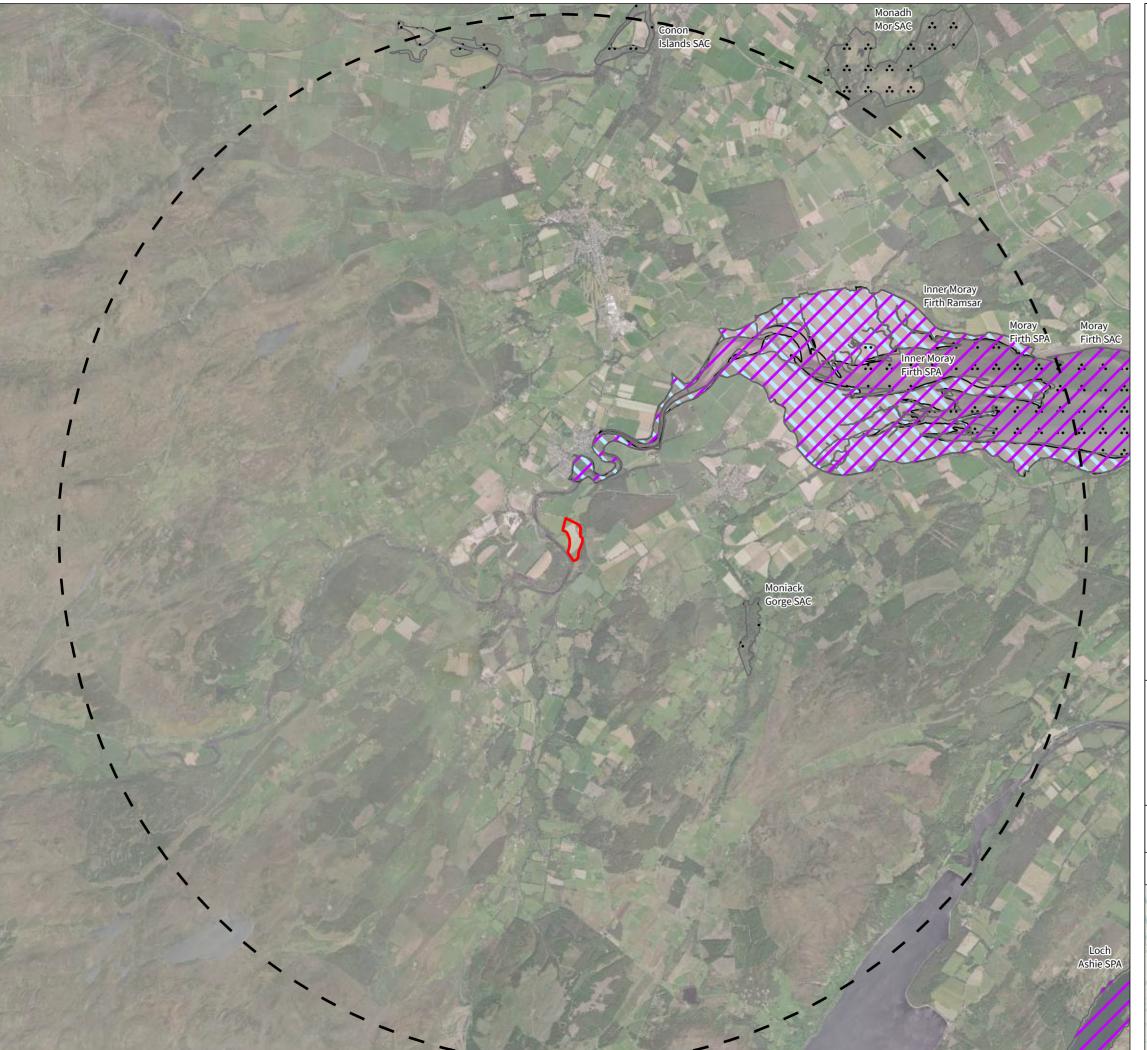
Figure 2a & 2b – Designated Sites

Figure 3 – UKHab Map





Notes:



International and National Sites within 10 km

Beauly BESS

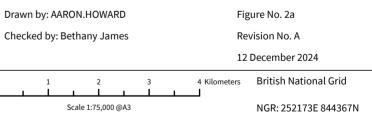
TNEI on behalf of Field

Legend

- Ramsar
- Site Boundary **F__** Site Boundary 10 km Buffer Special Protection Area (SPA) Special Area of Conservation (SAC)

Data Sources: Ramsar Special Protection Areas Special Areas of Conservation

Symbology similar to that used within the MAGIC Application



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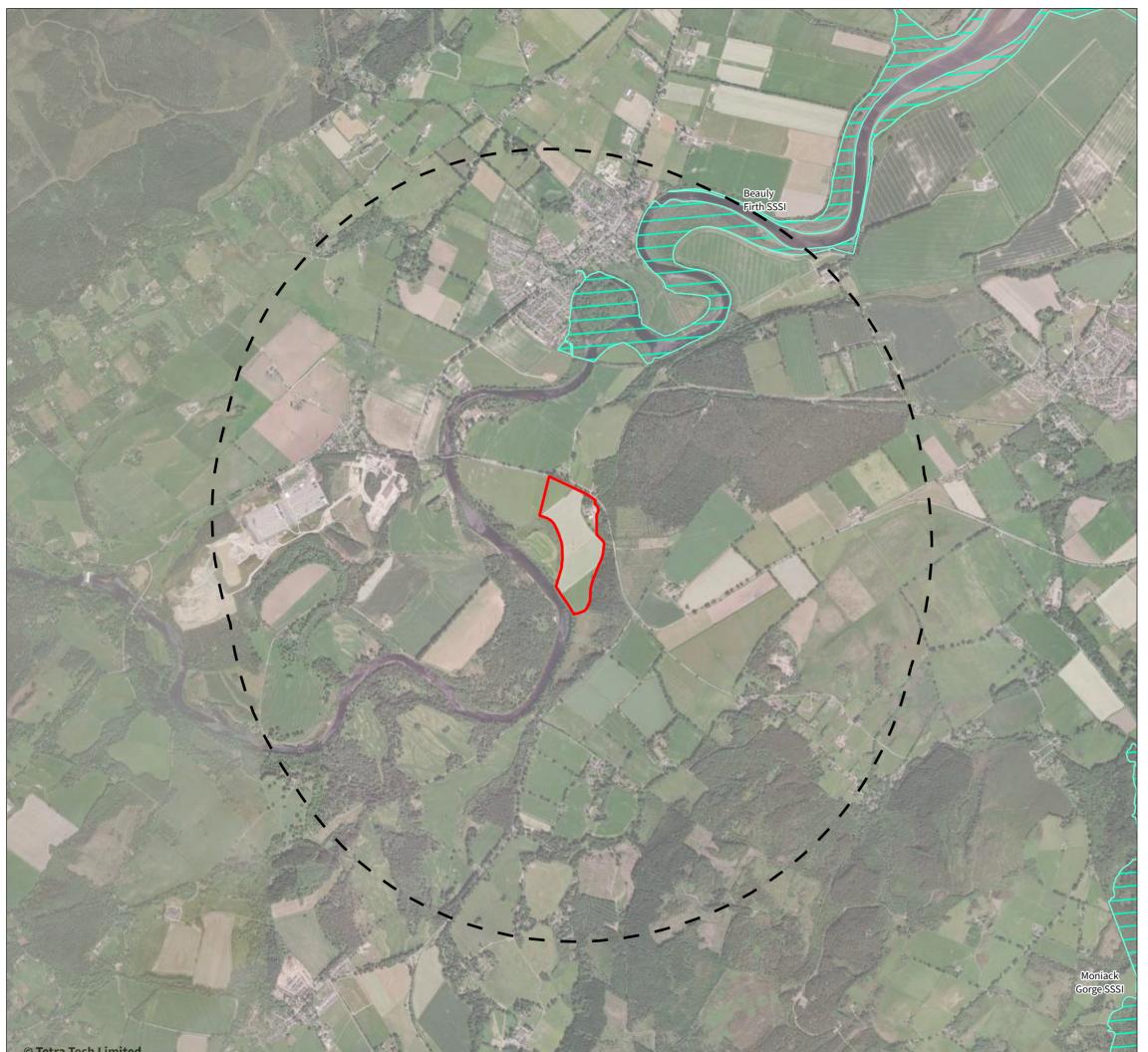
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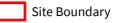
Local Sites within 2 km

Beauly BESS



TNEI on behalf of Field

Legend



Site Boundary 2 km Buffer

Sites of Special Scientific Interest (SSSI)

Data Sources: Sites of Special Scientific Interest

Notes: Symbology similar to that used within the MAGIC Application

Drawn by: AARON.HOWARD

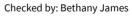
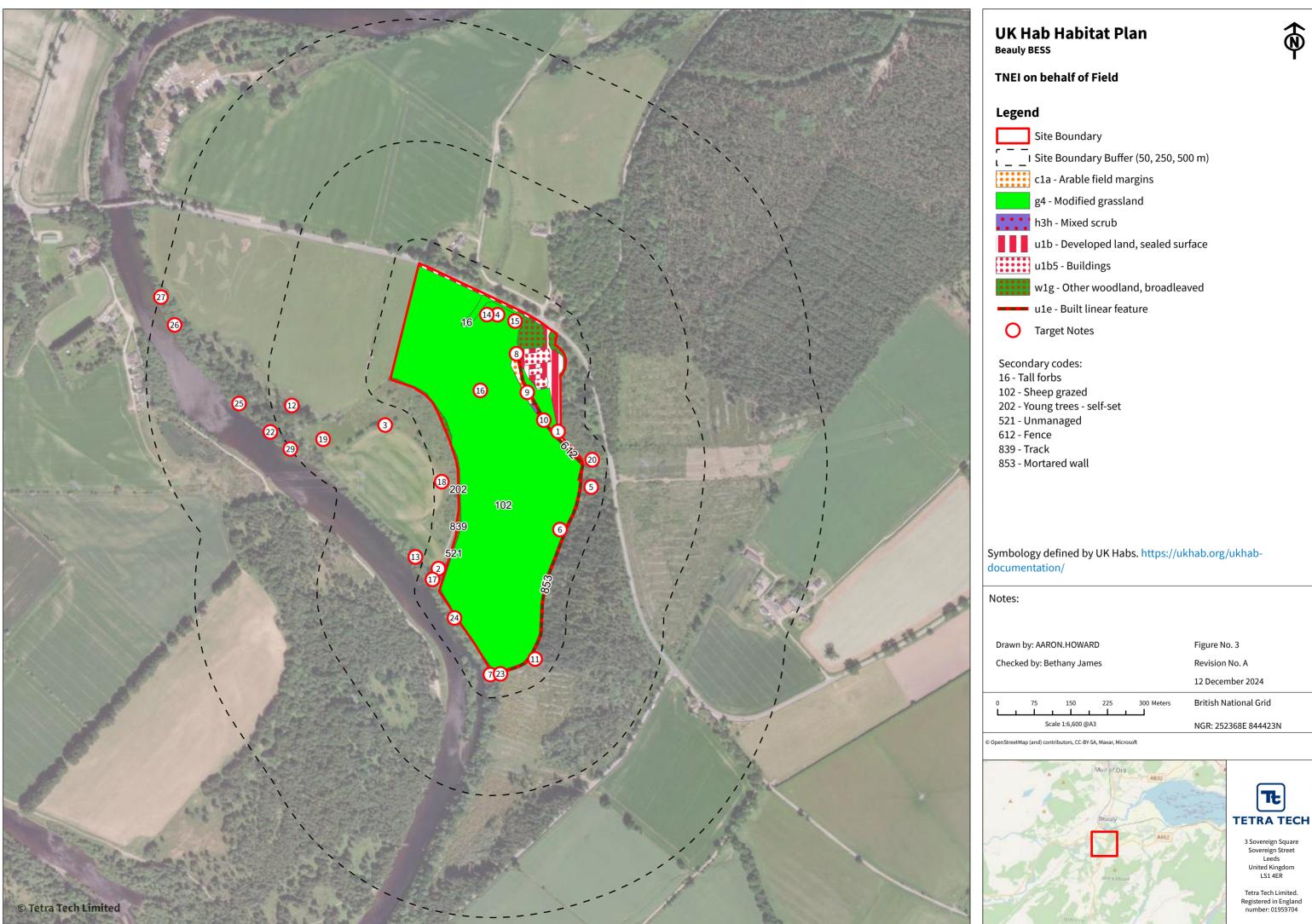




Figure No. 2b Revision No. A

12 December 2024 British National Grid





APPENDICES

APPENDIX A: REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of TNEI on behalf of Field Beauly Ltd ("the Client") for the proposed uses stated in the report by Tetra Tech Limited ("Tetra Tech"). Tetra Tech exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

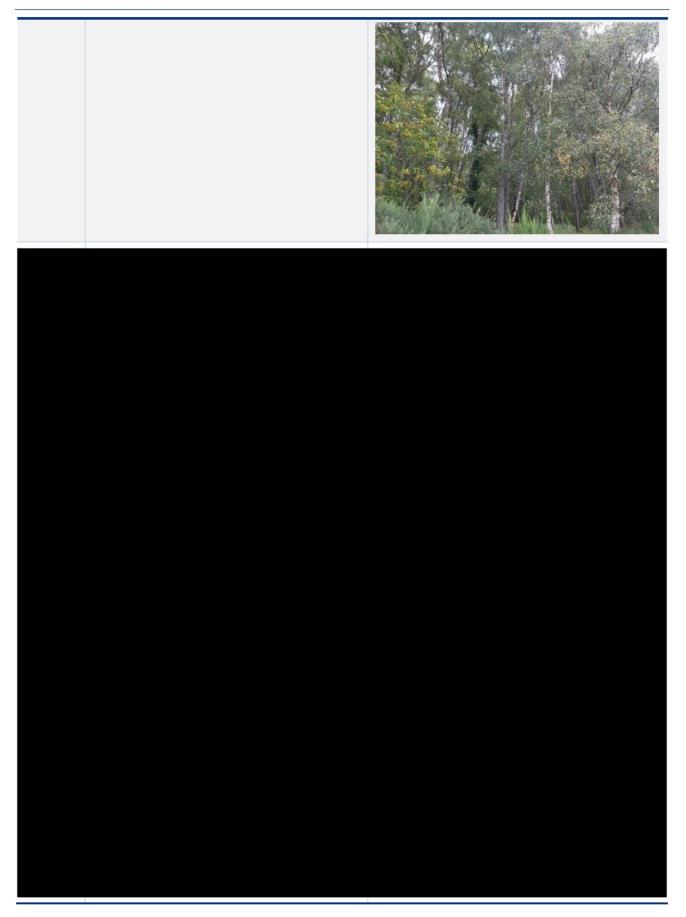
Tetra Tech reserves the right to share this Report and any related materials, surveys, drawings and/or documents at any time with the relevant Local Ecological Records Centre (LERC), any relevant statutory body or any equivalent organisation as Tetra Tech may reasonably require from time-to-time.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

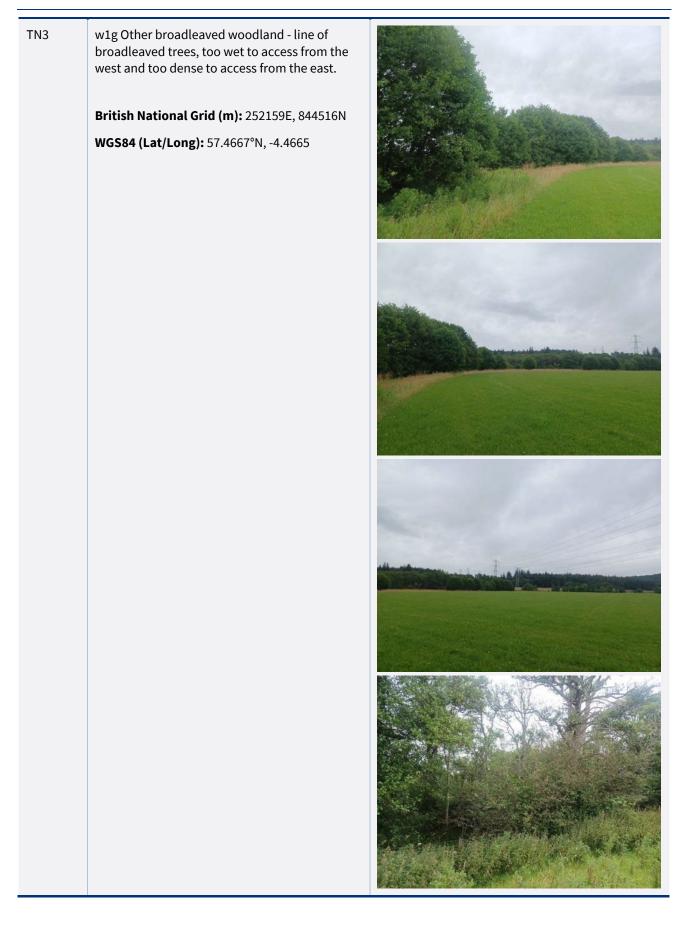
APPENDIX B: TARGET NOTES & SURVEY DATA

Target Notes

Target Note	Description	Photographic Plates
Target Note	Descriptionw1g Other broadleaved woodlandSecondary codes: 202 Young tree - self-set 521 UnmanagedBritish National Grid (m): 252516E, 844495N WGS84 (Lat/Long): 57.4667°N, -4.4606°E	<image/>

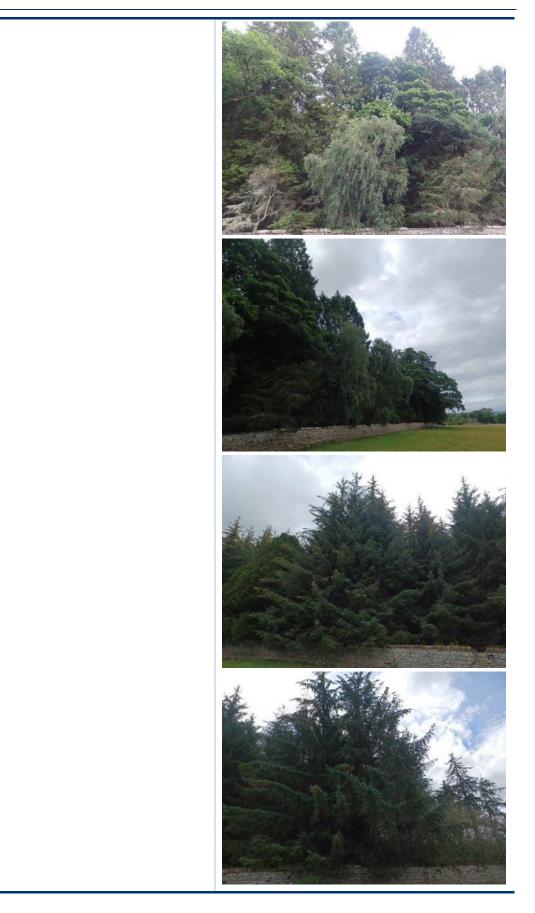


Beauly BESS Preliminary Ecological Appraisal



TN4	w1g Other broadleaved woodland - line of silver birch. British National Grid (m): 252382E, 844734N WGS84 (Lat/Long): 57.4688°N, -4.4629°E	
TN5	 w1f7 Other lowland mixed deciduous woodland with bracken understory. Potential badger spoil heaps but inaccessible at time of survey. <u>Secondary codes:</u> 202 Young tree – self-set 521 Unmanaged 612 Fence British National Grid (m): 252579E, 844383N WGS84 (Lat/Long): 57.4657°N, -4.4594°E 	

		<image/>
TN6	Transition into w1f7 other lowland mixed deciduous woodland. <u>Secondary codes:</u> 202 Young tree – self-set 521 Unmanaged 853 Mortared wall British National Grid (m): 252516E, 844298N WGS84 (Lat/Long): 57.4649°N, -4.4604°E	



TN7	w1f7 Other lowland mixed deciduous woodland. Secondary codes: 521 Unmanaged 853 Mortared wall British National Grid (m): 252381E, 843999N WGS84 (Lat/Long): 57.4622°N, -4.4625°E WGS84 (Lat/Long): 57.4622°N, -4.4625°E	<image/>
TN8	h3h Mixed scrub - Thistle and nettle scrub around field edges. British National Grid (m): 252431E, 844656N WGS84 (Lat/Long): 57.4681°N, -4.4621°E	

		<image/>
TN9	c1a Arable field margins - Nettle and thistle scrub with some juncus and cock's foot. British National Grid (m): 252450E, 844583N WGS84 (Lat/Long): 57.4674°N, -4.4617°E	<image/>

		<image/>
TN10	h3h Mixed scrub - dense gorse and broom scrub. British National Grid (m): 252486E, 844526N WGS84 (Lat/Long): 57.4669°N, -4.4611°E	<image/>

TN11	h3h Mixed scrub - dense broom scrub. <u>Secondary codes:</u> 853 Mortared wall British National Grid (m): 252468E, 844032N WGS84 (Lat/Long): 57.4625°N, -4.4611°E	<image/>
TN12	h3h Mixed scrub - Dense nettle scrub – inaccessible. British National Grid (m): 251968E, 844548N WGS84 (Lat/Long): 57.467°N, -4.4697°E	

		<image/>
TN13	h3h Mixed scrub - bramble scrub with occasional hogweed, nettle, meadowsweet and bracken. British National Grid (m): 252222E, 844243N WGS84 (Lat/Long): 57.4643°N, -4.4653°E	

		<image/>
TN14	h3e Bramble scrub - Bramble and thistle scrub. British National Grid (m): 252380E, 844735N WGS84 (Lat/Long): 57.4688°N, -4.463°E	

TN15	h3h Mixed scrub - nettle and thistle scrub. British National Grid (m): 252424E, 844730N WGS84 (Lat/Long): 57.4687°N, -4.4622°E	

TN16

g4 Modified grassland.

Species	List:

<u></u>			
Common Name	Latin Name	DAFOR	
Perennial rye- grass	Lolium perenne	1 - Dominant	
White clover	Trifolium repens	3 - Frequent	

British National Grid (m): 252357E, 844585N

WGS84 (Lat/Long): 57.4674°N, -4.4633°E



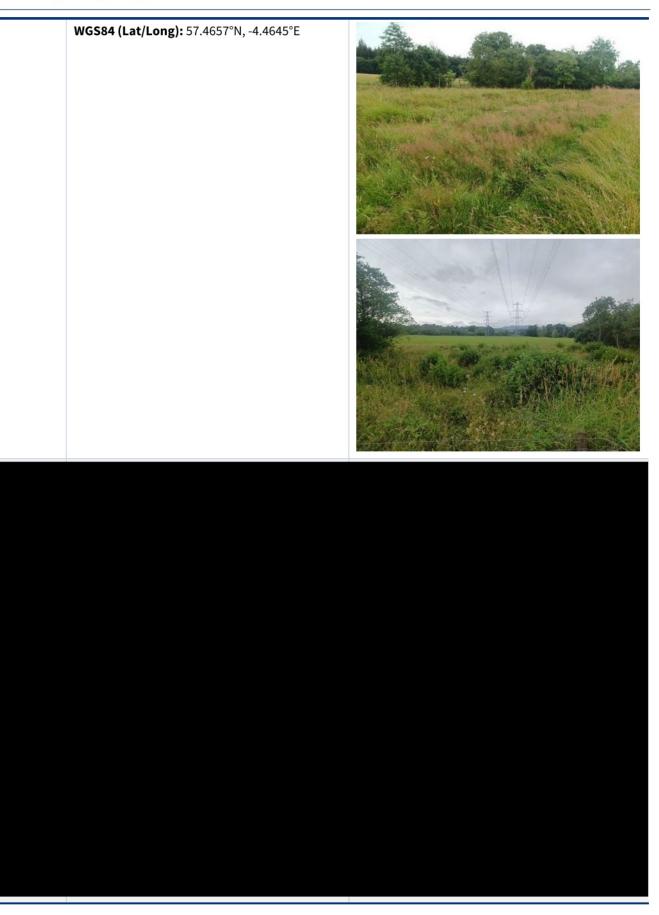
TN17

perennial ryegrass field.

WGS84 (Lat/Long): 57.4639°N, -4.4647°E

				<image/>
TN18	g3c Other neu dominated gra Species List:	tral grassland assland/scrub.	- wet juncus	
	Common Name	Latin Name	DAFOR	
	Soft rush	Juncus effusus	1 - Dominant	Constant and a series
	Common hogweed	Heracleum sphondylium	3 - Frequent	A State State State State
	Creeping thistle	Cirsium arvense	3 - Frequent	
	Meadowsweet	Filipendula ulmaria	3 - Frequent	
	Tufted hairgrass	Deschampsia cespitosa	3 - Frequent	
	Yorkshire fog	Holcus lanatus	3 - Frequent	
			1	

British National Grid (m): 252275E, 844396N

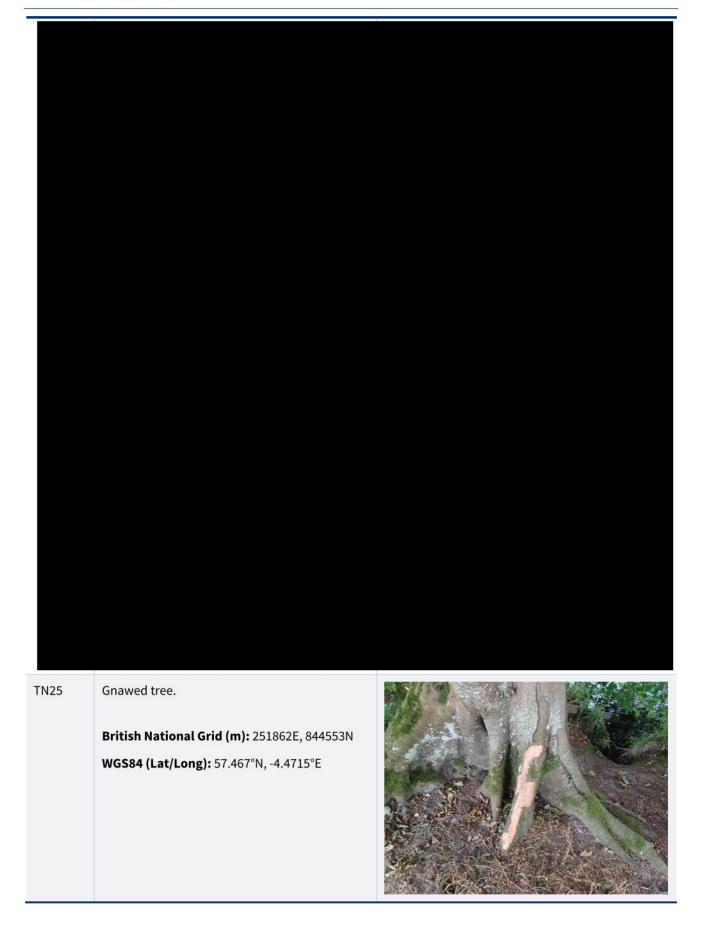






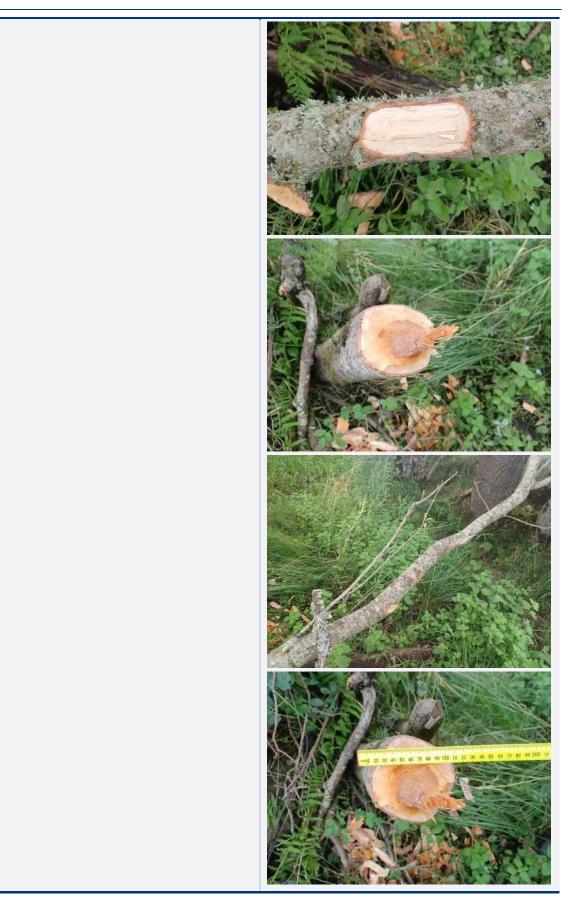






TN26	Beaver foraging. British National Grid (m): 251728E, 844722N WGS84 (Lat/Long): 57.4684°N, -4.4738°E	

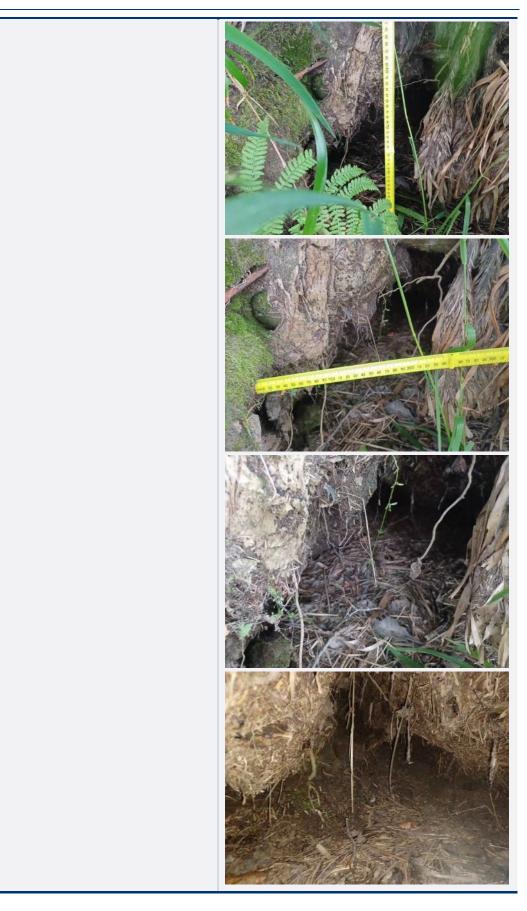
		<image/>
TN27	Beaver foraging. British National Grid (m): 251703E, 844769N WGS84 (Lat/Long): 57.4689°N, -4.4743°E	





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TN28	Older beaver foraging signs.	
	British National Grid (m): 251926E, 844502N	
	WGS84 (Lat/Long): 57.4665°N, -4.4704°E	
TN29	Burrowed mammal hole next to River Beauly. British National Grid (m): 251966E, 844465N WGS84 (Lat/Long): 57.4662°N, -4.4697°E	



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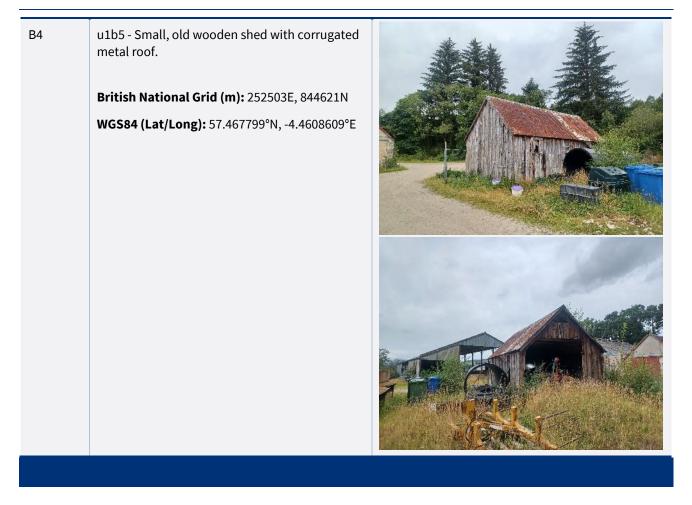
B1







B2	u1b5 - Modern metal agricultural shed with	
	corrugated metal roof. British National Grid (m): 252472E, 844622N WGS84 (Lat/Long): 57.467797°N, -4.4613759°E	
B3	u1b5 - Modern metal agricultural shed with corrugated metal roof. British National Grid (m): 252482E, 844596N WGS84 (Lat/Long): 57.467572°N, -4.46111801°E	



APPENDIX C: KEY LEGISLATION

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation (Natural Habitats, &c) Regulations 1994 (as amended) in Scotland, the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, via the Conservation (Natural Habitats, &c) Regulations 1994 (as amended) in Scotland, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9. It is recommended that plant material of these species is disposed of as bio-bazardous waste, and these plants should not be used in plant

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Environmental Protection Act 1990

The Act imposes a classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed *Reynoutria japonica*, with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act.

Protection of Badgers Act 1992

The main legislation protecting badgers in England, Scotland. and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger".

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2021 (Stanbury *et al*, 2021) and identified 70 red list species, 103 amber species, and 72 green species. The criteria are complex, but generally:

Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.

Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed.

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAPs may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

Its application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.

National Planning Framework

National Planning Framework 4 (NPF4) is the top tier of planning policy. The Framework provides guidance to local authorities and other agencies on planning policy and the operation of the planning system.

"Policy 1 gives significant weight to the nature crisis to ensure that it is recognised as a priority in all plans and decisions. Policy 4 protects and enhances natural heritage, and this is further supported by Policy 5 on soils and Policy 6 on forests, woodland and trees. Policy 20 also promotes the expansion and connectivity of blue and green infrastructure, whilst Policy 10 recognises the particular sensitivities of coastal areas.

Protection of the natural features of brownfield land is also highlighted in Policy 9, and protection of the green belt in Policy 8 will ensure that biodiversity in these locations is conserved and accessible to communities, bringing nature into the design and layout of our cities, towns, streets and spaces in Policy 14.

Most significantly, Policy 3 plays a critical role in ensuring that development will secure positive effects for biodiversity. It rebalances the planning system in favour of conserving, restoring and enhancing biodiversity and promotes investment in nature-based solutions, benefiting people and nature. The policy ensures that Local Development Plans (LDPs) protect, conserve, restore and enhance biodiversity and promote nature recovery and nature restoration. Proposals will be required to contribute to the enhancement of biodiversity, including by restoring degraded habitats and building and strengthening nature networks. Adverse impacts, including cumulative impacts, of development proposals on the natural environment will be minimised through careful planning and design, taking into account the need to reverse biodiversity loss. Development proposals for national, major or Environmental Impact Assessment (EIA) development will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks, so they are in a demonstrably better state than without intervention. Proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity."

See here for full details: https://www.gov.scot/publications/national-planning-framework-4/

Inner Moray Firth Local Development Plan 2 (The Highland Council, 2024)		
Policy 2 Nature protection, restoration and enhancement	All developments must enhance biodiversity, including, where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. Any potential adverse impacts of development proposals on biodiversity, nature networks and the natural environment must be minimised through careful planning and design and following the mitigation hierarchy. Design and layouts must show how they have considered enhancing biodiversity, safeguarding the services that the natural environment provides and building the resilience of nature by enhancing nature networks and maximising the potential for restoration. Non-statutory planning guidance on the provision of nature-based solutions and biodiversity enhancements, including developer contributions where appropriate, will be prepared by the Council. This guidance will be used to inform development proposals.	