Fyrish BESS

784-B067560

Biodiversity Enhancement Feasibility Assessment

TNEI on behalf of Field Fyrish Ltd.

February 2025

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

TETRA TECH

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APPENDICES

EXECUTIVE SUMMARY

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Site Location	The Site is located approximately 1.25 km west of Alness in the Scottish Highlands and is centred at Ordnance Survey National Grid Reference NH 62960 68934.
Proposals	The development proposals consist of the creation and operation of a Battery Energy Storage System (BESS) of up to 200 MW with associated infrastructure (including cable route to substation), access and ancillary works (including landscaping and biodiversity enhancements).
Scope of this Survey(s)	Although BNG is not a mandatory requirement in Scotland, as per The Highland Council's Biodiversity Enhancement Planning Guidance (2024) '*A minimum 10% biodiversity enhancement is required although a higher percentage and/or bespoke measures may be expected where development impacts a non-statutory designated area or a locally important area as designated by the local Authority*'. As a means of demonstrating a development strategy to achieve these conditions; the submission of a BNG assessment is recommended. As such the purpose of this report is to: • Quantify the baseline habitat biodiversity units present on Site; • Quantify the post-development habitat biodiversity units on Site; • Calculate the likely change in biodiversity units from pre- to post-development; and, • Provide a series of post-intervention strategies to ensure the development reaches a minimum of 10% BNG.
Results and Evaluation	The proposed development will result in the loss of 9.81 ha of various habitats, including bramble scrub, broadleaved woodland, neutral grassland, lowland meadow, mixed scrub, and tall herb communities, equating to 31.14 habitat units. The landscaping plan aims to create 27.76 habitat units through a species-rich meadow mix and pockets of broadleaved woodland, with additional enhancements to neutral grassland and tall herb areas, generating 35.81 habitat units. The development requires 81.85 habitat units to meet the 10% biodiversity enhancement target. **With a post-intervention value of 95.05 habitat units, the proposals achieve a 27.74% increase in habitat biodiversity.** The ditch to the south of the development will be retained and there will be no impacts to watercourse units.

Recommendations	**Monitoring and Management** • The lowland meadow habitat was identified at the preliminary level and requires further investigation during a peak flowering season (mid-May to late-September) to accurately determine its distinctiveness and to review the effect this would have on the BNG calculation and ongoing habitat management. **Monitoring and Management** A Habitat Management and Monitoring plan is recommended to ensure successful habitat implementation. This plan should include: • Immediate planting/habitat creation requirements. • Habitat management during the establishment period (up to 5 years). • Long-term management and maintenance for 30 years, in line with BNG requirements. Adherence to this plan will help achieve concise, proportionate, and SMART (Specific, Measurable, Achievable, Reasonable, Time-bound) targets for habitat enhancement and creation. **Faunal Recommendations** Provision of habitats for faunal species is crucial for maximizing biodiversity. Mitigation and enhancement measures for protected species, including birds, amphibians, and invertebrates, are detailed in the Preliminary Ecological Appraisal, alongside targeted species survey recommendations.

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by TNEI on behalf of Field Fyrish Ltd ("the Applicant") in July 2024 to undertake a Biodiversity Net Gain Assessment of an area of land 650 m South of Fyrish Substation, Alness, IV17 0XH, hereafter referred to as "the Site".

This report has been prepared by a Tetra Tech Ecologist of 'capable' competency for this type of report, as per the CIEEM Competency Framework (CIEEM, 2024), and the conditions pertinent to it are provided in Appendix A.

1.2 SITE DESCRIPTION

The Site is located approximately 1.25 km west of Alness in the Scottish Highlands and is centred at Ordnance Survey National Grid Reference NH 62960 68934 (Figure 1). For the purpose of measure biodiversity, the Site boundary includes the BESS compound and areas subject to biodiversity enhancements. As such it differs in shape to the planning application, which includes the wider site ownership.

The Site comprised a large, enclosed field with a mosaic of upland flush, mixed scrub, lowland meadow, and neutral grassland, bounded by broadleaved and coniferous woodland. The Site contains an irrigation ditch along the southwestern boundary. Beyond the Site is a timber processing yard, residential land and a series of grazed and arable fields.

1.3 DEVELOPMENT PROPOSALS

The development proposals consist of the creation and operation of a Battery Energy Storage System (BESS) of up to 200 MW with associated infrastructure (including cable route to substation), access and ancillary works (including landscaping and biodiversity enhancement).

1.4 PURPOSE OF REPORT

Current industry guidance[1] states that planning applications should be supported by a biodiversity strategy. This strategy should be used to inform the Local Planning Authority and detail the baseline biodiversity of a Site in relation to habitats, and if applicable, hedgerows and watercourses. It should then demonstrate the feasible biodiversity unit uplift that can be generated from prescribed interventions onsite and/or offsite. Although BNG is not a mandatory requirement in Scotland, as per The Highland Council's Biodiversity Enhancement Planning Guidance (2024) '*A minimum 10% biodiversity enhancement is required although a higher percentage and/or bespoke measures may be expected where development*

[1] CIEEM (2021): Biodiversity Net Gain Report and Audit Templates. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

impacts a non-statutory designated area or a locally important area as designated by the local Authority', the submission of a BNG assessment is recommended.

As such the purpose of this report is to:

- Quantify the baseline habitat biodiversity units present on Site;
- Quantify the post-development habitat biodiversity units on Site;
- Calculate the likely change in biodiversity units from pre- to post-development; and,
- Provide a series of post-intervention strategies to ensure the development reaches a minimum of 10% BNG, in line with trading rules, if required.

Baseline ecological results are generally considered valid for a period of eighteen months from the date of the survey (CIEEM, 2017). 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.

Scientific names are provided at the first mention of each species using standard nomenclature, which for botanical species follow Stace (2019). Following this, common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 BIODIVERSITY GUIDANCE

The assessment has been completed using DEFRA's Statutory Biodiversity Metric (Department for Environment Food & Rural Affairs (DEFRA), 2024), hereafter referred to as 'the metric'. The associated methods were informed by the User Guide (DEFRA, 2024a) and and Biodiversity Net Gain: Good Practice Principles for Development (Baker, Hoskin, & Butterworth, 2019).

The methodology set out below defines a simplified version of the method used to carry out the BNG assessment. For full details including rules and methodology refer to the guidance documents referenced above.

2.2 HABITAT ASSESSMENT

An extended Habitat Classification Survey was undertaken on the Site on 2nd August 2024 by Tetra Tech Consultant Ecologist Ash Ronaldson BSc (Hons), assisted by Assistant Ecologist Bethany James. The weather conditions were 19°C, 60% cloud cover, dry and with moderate winds.

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) listed 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.

Further detail of habitat descriptions with target notes can be found in the Preliminary Ecological Appraisal undertaken for this project (Tetra Tech, 2024).

2.3 METRIC

The Metric generates a value measured in 'biodiversity units' for a Site before development commences (referred to as the 'baseline') and after development is completed (referred to as 'post-intervention'). The difference (positive or negative) between the two generated values is the output, provided as a percentage change.

The Metric assesses habitat parcel units, including urban trees, separately from linear habitat units which are split into either hedgerows (including line of trees) or rivers. Area habitats are measured in hectares, whereas linear habitats are measured in kilometres. There were no identified hedgerows on Site and as such their specific assessment methods have been excluded from this report.

The Metric calculates an output based on the habitat parcel area / linear habitat length and a range of factors that are associated with its assessed quality. The generated biodiversity value is therefore based on 'quality' factors that are multiplied together. These are detailed in Table 1.

Habitats were separated into parcels either where they were geographically discrete or where there was a change in habitat condition across a single location. Each parcel was recorded and calculated separately

using the Metric. Urban trees are counted as habitat areas, although the method of calculating area is different to other habitat parcels, this is described below.

Trees

For individual trees (not including lines of trees or woodland) their area is calculated from stem diameter, which equates to a specified size group (small, medium or large). Full details on how this is calculated is defined within the User Guide. The number of individual trees of each size is then input to the 'Urban Tree Helper' table within the Metric, and an area is given which is entered into the Metric as a habitat area. Each of the factors listed in Table 1 below are then applied to this area.

The sizes of urban trees are measured using their diameter at breast height (DBH) and defined as:

- Small tree = 7.5 cm - 30 cm
- Medium tree = 30 cm - 60 cm
- Large tree = 60 cm - 90 cm
- Very large tree = >90 cm

Watercourses

A ditch was present to the southwest of the Site. Ditches are assessed separately to larger, more established watercourse features. Whereas established features require a morphological assessment, ditch condition is determined using the Statutory Condition Assessment Sheets (Defra, 2024). The full length of the ditch, which falls within the Site boundary is included in the watercourse module of the Metric.

Table 1 below sets out the methodology for calculating the baseline and post-intervention biodiversity values.

Table 1: Methodology for assessing factors within the Metric

Factor	Baseline	Post-intervention
Habitat type	Habitat types were recorded and mapped using UKhab (Figure 2).	The landscape plans were interpreted (TGP 2024, Drg No. 2214 L01B) and professional judgement used in classifying the designs into the relevant UKHab classifications (Figure 3). Additionally, areas suitable for habitat enhancements and creations were assessed to determine if 10% BNG is feasible onsite.
Area	Habitats were separated into parcels: geographically discrete or a change in habitat condition across a single location. Each parcel was recorded and calculated separately within the Metric. Areas were calculated in hectares to three decimal places using digital mapping in ArcGIS[2].	
Distinctiveness	Distinctiveness value is automatically generated by the Metric based on habitat type. The overall distinctiveness categories used for habitat areas is shown within the User Guide, habitats will be defined as Very Low, Low, Medium, High or Very High.	
Condition	Habitat condition is a score based on the quality of the habitat, judged against the perceived ecological optimum state for that particular habitat. It is, therefore, a means of measuring	

[2] ESRI. ArcGIS online https://www.arcgis.com/index.html

Factor	Baseline	Post-intervention
	variation in the quality of patches of the same habitat type rather than a measure of quality between habitat types. The 'condition assessment'[3] involves assessing each habitat type / parcel against criteria in the associated condition sheet, resulting in a condition score (Good, Moderate or Poor) which is then input into the Metric. Some intensively managed habitats have a pre-defined condition score; and for other very low distinctiveness habitats no assessment is required.	
	A condition assessment was not undertaken during the field survey, with a retrospective assessment undertaken using professional judgement, Site knowledge and photographs. Where insufficient information is available to determine whether a criterion has been satisfied, it is automatically passed.	A precautionary approach was adopted when allocating the condition of habitats which will be created and enhanced in line with prescribed interventions.
Strategic Significance	Strategic significance utilises published local plans and objectives to identify local priorities for targeting biodiversity and nature improvement. It works at a landscape scale and gives additional unit value to habitats that are located in preferred locations for biodiversity and other environmental objectives.	
Time to Target Condition	N/A	Time to target condition is a standard score automatically generated by the Metric based on how long the habitat type takes to establish. The time period to use is the length of time (in years) between the intervention and the point in time the habitat reaches the pre-agreed target quality (i.e. distinctiveness, condition, area). This time will vary between habitat types, between change scenarios (e.g. creation typically takes longer than enhancement).
Difficulty of Creation or Restoring a Habitat	N/A	Habitat creation carries an associated risk based on the difficulty and uncertainty of successfully creating, restoring or enhancing a habitat. A multiplier is therefore applied automatically by the Metric to recognise the difficulty of creating different habitats, detailed in the user guide. Where uncertainties have been identified further work will be required to help give confidence that the habitat creation or restoration will be successful.

Trading Rules

All habitat interventions must take into consideration the trading rules as defined in the Statutory Metric User Guide. The type of trading depends on the distinctiveness and condition of the habitat. As such it is prohibited to enhance a habitat across 'broad habitat groups' if the distinctiveness or condition is not also

[3] Defra. Statutory Biodiversity Metric. Habitat Condition Assessment Sheets and Instructions

enhanced. As per rule 1 of the Statutory Biodiversity Metric (Department for Environment Food & Rural Affairs (DEFRA), 2024a) "*The trading rules of this biodiversity Metric must be followed*" and "*if trading rules have not been satisfied, then a net gain in biodiversity cannot be claimed".*

As BNG is not mandated in Scotland, the emphasis on a development, as set out in The Highland Council's Biodiversity Enhancement Planning Guidance (2024), is to achieve a measurable 10% increase in biodiversity. As a consequence, although an importance consideration, habitats do not need to be replaced on a like-for-like basis, on the grounds that the intervention is ecologically sound.

Irreplaceable Habitats

Fen habitat has been identified on site. This wetland habitat is formed in areas where groundwater moves gently over thin peat or mineral soils. The accumulation of organic material is an extremely slow process and as such these habitats are considered 'irreplaceable'.

2.4 LIMITATIONS

Habitats have been mapped using a 'Minimum Mappable Unit' area of 25m^2 applied in line with UKHab methodology. As such some small areas of habitats have been excluded from the BNG assessment. Given the extent of the post-development landscaping to be implemented, this will not significantly affect the metric calculations undertaken as part of this assessment.

As detailed in Table 1, professional judgement has been used in determining the condition of habitat parcels. To prevent a de-valuation of habitat parcels, a precautionary approach has been adopted. As such where insufficient information is available to adequately assess a habitat parcel against a specific condition criterion, it will automatically satisfy that criterion.

The metric does not override or undermine any existing planning policy or legislation, including the mitigation hierarchy, which should always be considered as the metric is applied. Furthermore, the metric does not change the protection afforded to biodiversity. Existing levels of protection afforded to protected species (such as for bats) and to habitats, are not changed by use of this or any other metric.

Finally, it is important to note that this report does not define the full detailed methodology for BNG assessment, and the guidance documents should be referred to where relevant and if necessary.

3.0 RESULTS

For detailed descriptions of habitats identified on Site, alongside photographs, please review section 3.2 and Appendix B of the associated Preliminary Ecological Appraisal report (Tetra Tech, 2024 ref. 784-B067560_Fyrish BESS_PEA). Information on BNG Legislation and habitat condition assessments are provided in Appendix B and C of this report.

The following section provides a summary of the habitat value in both the baseline and post-intervention stages of the project. For additional clarity the various steps in calculating the Sites biodiversity value are provided in Table D.1 and Table D.2 of Appendix D.

3.1 BASELINE HABITAT UNITS

The Site comprised a mosaic of grassland, scrub and woodland communities, with an isolated area of more saturated ground to the southwest supporting fen habitat. The larger habitat components include a band of bracken *Pteridium aquilinum* encompassing the northern bank of the fen, two areas of birch *Betula sp.* dominated self-seeded woodland and a large swathe of taller herb ruderal species comprising nettle *Urtica dioica*, creeping thistle *Cirsium arvense*, and common hogweed *Heracleum sphondylium.* To the south is a small complex of developed land, mixed scrub and lowland meadow. A shallow ditch is present along the southwestern extent of the Site. It was between 1 m and 3 m wide, with densely vegetated banks and a slow flow westward.

As there is yet to be a published Local Nature Recovery Strategy for The Highland Council, habitats were considered to be of strategic significance if they were formal identified in plans or policies, particularly the Local Biodiversity Action Plan. If formally identified, the habitat was then assessed to determine if it was of a suitable size and/or composition to provide strategic connectivity value to the wider landscape.

With relevance to the habitats identified across the Site, fen, lowland meadow and other broadleaved woodland were formally identified in the *Highland Nature Biodiversity Action Plan* (2021). These were awarded high strategic significance, whilst the remaining habitats were awarded low strategic significance. In relation to the ditch along the southern boundary of the Site, this is considered too narrow to be a burn and does not qualify as a formally identified feature within the biodiversity action plan.

Collectively, the Site habitat assemblage accounts for 74.14 habitat units and 2.50 watercourse units. Table 2 and Table 3 below provide a summary of the baseline habitat value and watercourse value of the Site; respectively.

Table 2: Baseline Habitat Units

Habitat Type / UKHab code	Description *as taken from associated PEA (Tetra Tech 2025)*	Area (ha)	Habitat Distinctiveness	Condition	Strategic Significance	Units
Fens (upland and lowland) / f2c	An area of upland flush was located between the timber yard area of dense bracken with soft rush *Juncus effusus,* horsetail *Equisetum* sp., marsh pennywort *Hydrocotyle vulgaris*, duckweed *Lemna minor*, meadowsweet *Filipendula ulmaria*, and marsh pennywort *Hydrocotyle vulgaris.*	1.405	V.High	Poor	High	25.85
Bracken / g1c	A large area of inaccessible dense bracken	2.178	Low	N/A	Low	4.36
Lowland meadows / g3a	A small parcel comprised of crested dog's tail *Cynosurus cristatus*, Yorkshire-fog *Holcus lanatus*, creeping bent *Agrostis stolonifera*, meadow vetchling *Lathyrus pratensis*, and tufted hairgrass *Deschampsia cespitosa*.	0.030	V.High	Poor	High	0.28
Other neutral grassland / g3c	The main parcel of land located directly north of the timber yard comprised a large swathe of Yorkshire-fog dominated neutral grassland.	1.346	Medium	Poor	Low	5.38
Modified grassland / g4	There is an area of grassland associated with a garden, which was subject to frequent mowing.	0.179	Low	Moderate	Low	0.72
Tall forbs / g3c 81	In association with the large swathe of Yorkshire fog discussed above, were areas dominated by tall herbs including nettle, creeping thistle, and common hogweed.	8.457	Low	Poor	Low	16.91
Bramble scrub / h3d	An earthen mound comprised of dense bramble *Rubus fruticosus* agg. at the base	0.150	Medium	N/A	Low	0.60
Mixed scrub / h3h	Several areas of mixed scrub were recorded throughout the Site, with the dominant species including broom *Cytisus scoparius* and gorse *Ulex europaeus.*	0.155	Medium	Moderate	Low	1.24
Developed land; sealed surface / u1	Developed sealed land servicing buildings and infrastructure.	0.089	V.Low	N/A	Low	0.00
Buildings / u1b5	Buildings identified across the Site.	0.011	V.Low	N/A	Low	0.00

Habitat Type / UKHab code	Description *as taken from associated PEA (Tetra Tech 2025)*	Area (ha)	Habitat Distinctiveness	Condition	Strategic Significance	Units
Other woodland; broadleaved	Two areas of what is considered to be self-set woodland dominated by birch.	4.048	Medium	Poor	High	18.62
Other coniferous woodland / w2c	Planted coniferous woodland comprised of Sitka *Picea sitchensis* and Leyland cypress *Cupressus* × *leylandii* runs adjacent to the west side of the timber yard road.	0.224	Low	Poor	Low	0.45
	Total Area	**18.27**			**Total Units**	**74.41**

Table 3: Baseline Watercourse Units

Habitat Type / UKHab code	Description *as taken from associated PEA (Tetra Tech 2025)*	Length (km)	Habitat Distinctiveness	Condition	Strategic Significance	Units
Ditch / r2	A shallow ditch is present along the southwestern extent of the Site. It was between 1 m and 3 m wide, with densely vegetated banks and a slow flow westward.	0.313	Medium	Moderate	Low	2.50
	Total Area	**0.313**			**Total Units**	**2.50**

3.2 POST-INTERVENTION HABITAT UNITS

The provided Master Landscape Plans (TGP 2024, Drg No. 2214 L01B) was converted into habitat parcels using the UKHab classification system (UK Hab Ltd., 2023). There will be considerable onsite changes, however, the area of fen will not be impacted and retained in its entirety.

The main Site alteration will be the creation of the BESS and associated infrastructure. This will comprise a large rectangular area of urban development featuring a pond to the northeast. Around the peripheries of the development will be native woodland, with canopy species including birch *Betula* spp., alder *Alnus glutinosa*, willow *Salix* spp., rowan *Sorbus aucuparia*, and sessile oak *Quercus petraea* and with a shrub layer dominated by hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa.*

Intermixed between the woodland strips will be wildflower meadows, using a neutral, species-rich mix that contains yellow rattle *Rhinanthus minor* (Mavisbank Meadow Mix (SCM1)[4]). Yellow rattle is a hemiparasitic species used to dampen the growth of vigorous grasses and enhance species-richness in meadows. These will be seeded across the site, including on four bunds scattered to the east of the Site. Where tall herb dominated grassland is present in the baseline and will be replaced by the proposed species-rich meadow, this has been considered a habitat enhancement.

A large Sustainable Urban Drainage System (SUDS) will be positioned to the southeast of the site. The margins of which; will be sown with a mix better suited to more saturated soils, in the aim to develop a wet meadow community (Mavisbank Wet Meadow Mix (SCM2)[5]). It is proposed that trees are planted across the southern grassland components.

The ditch present to the south of the Site will be retained within the final Site layout.

The proposed habitat interventions have been considered in line with the Statutory Condition Assessment Sheets (Defra, 2023). The proposed Site habitats are presented in Figure 3, with the appropriate calculations provided in Tables D.1 to D.3 of Appendix D.

3.3 HEADLINE RESULTS

A summary of the headline results is provided below in Table 4, with an extract of the Metric provided as a companion document to this report.

Table 3: Headline Results

Project Stage	Habitat Type	Units
On Site baseline	Habitat units	74.41
	Watercourse Units	2.50
On Site post-intervention	Habitat units	95.05
	Watercourse Units	2.50

[4] www.scotiaseeds.co.uk/shop/mavisbank-mix/
[5] www.scotiaseeds.co.uk/shop/wet-meadow-mix/

Project Stage	Habitat Type	Units
On Site total net unit change	Habitat units	20.64
	Watercourse Units	0.00
Total percentage change	Habitat units	+27.74
	Watercourse Units	0.00%
Trading rules met?		No

As per rule 1 of the Statutory Biodiversity Metric (Department for Environment Food & Rural Affairs (DEFRA), 2024a) "*if trading rules have not been satisfied, then a net gain in biodiversity cannot be claimed".* Given the loss of lowland meadow and mixed scrub, without providing a like-for-like or better replacement, this contradicts the trading rules. However, the lowland meadow was identified in a preliminary assessment, and further survey (National Vegetation Classification (JNCC 2023)) would be recommended to adequately determine the floristic composition, and its affinity to a lowland meadow community. Additionally, as BNG is not yet a mandatory requirement in Scotland, and it is expected the project will result in a post-intervention gain of 27.74%, it satisfies the current requirements of The Highland Council's Biodiversity Enhancement Planning Guidance.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 CONCLUSION

The proposed development will result in the direct loss of bramble, broadleaved woodland, neutral grassland, lowland meadow, mixed scrub, and tall herb communities. This loss accounts for 9.81 ha, which equates to 31.14 units.

The proposed landscaping plan provides an arrangement of habitats that account for an expected 27.76 habitat units. This is primarily through the establishment of a species-rich meadow mix, which will encompass the Site to the north, east and west, alongside the creation of broadleaved woodland in pockets across the Site. In addition, an area of neutral grassland and areas of tall herbs, not directly impacted by the development, have been targeted for enhancement. This will generate a further 35.81 habitat units.

To achieve the 10% biodiversity enhancement stipulated within The Highland Council's Biodiversity Enhancement Planning Guidance, the development required a total of 81.85 habitat units (i.e. 110%). As the post-intervention Site value is 95.05 habitat units, the proposals achieve a 27.74% increase and **biodiversity enhancement for habitats has been achieved**. The ditch present to the south of the Site will be retained in its current state.

4.2 RECOMMENDATIONS

Landscape Amendments

To appease standard BNG principles as mandated in England, the landscaping proposals could be amended in the following ways:

- The lowland meadow habitat was identified at the preliminary level and requires further investigation during a peak flowering season (mid-May to late-September) to accurately determine its distinctiveness and to review the effect this would have on the BNG calculation and ongoing habitat management.

Monitoring and Management

To deliver successful implementation of the proposed habitats, a Habitat Management and Monitoring plan is recommended. This will detail:

- Any immediate planting/habitat creation requirements or intervention to achieve an enhanced habitat;
- Habitat management requirements during the establishment period (up to 5 years); and
- Long-term management and maintenance requirements for 30 years, in line with BNG requirements.

Adherence to the document will maximise the likelihood that enhancement and/or creation targets are concise, proportionate, and SMART (Specific, Measurable, Achievable, Reasonable, Time-bound) and successful establishment of proposed habitats is achieved.

Faunal Recommendations

Provision of habitats for faunal species, although not currently measured in the Metric, is important for maximising biodiversity. Mitigation and enhancement measures for protected species including birds, amphibians and invertebrates are provided and detailed in the Preliminary Ecological Appraisal and targeted species survey recommendations.

REFERENCES

Baker, J., Hoskin, R., & Butterworth, T. (2019). *Biodiversity Net Gain. Good practice principles for*

Baker, J., Hoskin, R., & Butterworth, T. (2019). *Biodiversity Net Gain. Good Practice Principles for Development: A Practical Guide*. CIRIA, London.

British Standards Institute. (2021). BS 8683:2021 *Process for Designing and Implementing Biodiversity Net Gain Specification*. Available online at www.knowledge.bsigroup.com

Defra. (2024a). *The Statutory Biodiversity Metric: User Guide*. Available online at https://www.gov.uk/government/publications/statutory-biodiversity-Metric-tools-and-guides

Defra. (2024b). *The Statutory Biodiversity Metric Calculation Tool*. Available online at https://www.gov.uk/government/publications/statutory-biodiversity-Metric-tools-and-guides

Highland Nature. (2021). *Biodiversity Action Plan 2021-2026.* Highland Nature. available at: www.highland.gov.uk

Highland Council. (2024). *Biodiversity Enhancement Planning Guidance*. Inverness: Highland Council.

JNCC. (2016). *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit.* Peterborough: JNCC.

Joint Nature Conservation Committee (JNCC). (2023). *National Vegetation Classification (NVC)*. Available at: https://jncc.gov.uk/our-work/nvc/ [Accessed 11 Feb. 2025]

Stace. (2019). *New Flora of the British Isles* (4th ed.). Suffolk: C&M Floristics Middlewood Green.

Tetra Tech. (2024). Fyrish BESS Preliminary Ecological Appraisal. ref. 784-B067560_Fyrish BESS_PEA

The Highland Council. (2024). *Inner Moray Firth Local Development Plan 2.*

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

FIGURES

Site Location Plan

Fyrish BESS

TNEI on behalf of Field

Legend

BESS Compound / Biodiversity Enhancement Area

Notes:

Drawn by: lily.dunwell

Checked by: Bethany James

Figure No. 1

Revision No. A

27 January 2025

0 100 200 300 400 Meters

Scale 1:10,000 @A3

British National Grid

NGR: 262963E 869000N

TETRA TECH

3 Sovereign Square
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United Kingdom
LS1 4ER

Tetra Tech Limited.
Registered in England
number: 01959704

Pre-Development Plan

Fyrish BESS

TNEI on behalf of Field

Legend

- BESS Compound/ Biodiversity Enhancement Area
- g - Grassland
- g1c - Bracken
- g3a - Lowland meadows
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3d - Bramble scrub
- h3h - Mixed scrub
- u - Urban
- u1b5 - Buildings
- f2c - Upland flushes fens and swamps
- w1g - Other woodland, broadleaved
- w2c - Other coniferous woodland
- r1g - Other Standing Water
- r2 - Rivers and streams

Symbology defined by UK Habs. https://ukhab.org/ukhab-documentation/

Notes:

Drawn by: lily.dunwell

Checked by: Rob Gavan

Figure No. 2

Revision No. A

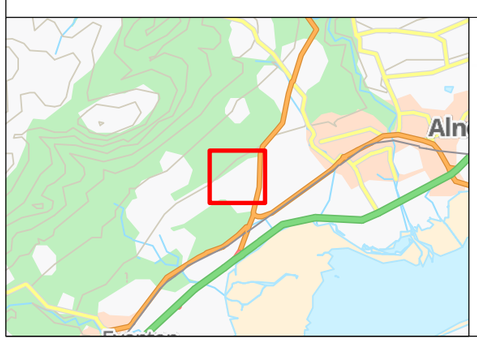
22 January 2025

0 30 60 90 120 Meters

Scale 1:3,000 @A3

British National Grid

NGR: 262984E 868924N



TETRA TECH

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Tetra Tech Limited.
Registered in England
number: 01959704

Post-Development Plan

Fyrish BESS

TNEI on behalf of Field

Legend

- BESS Compound / Biodiversity Enhancement Area
- g3c - Other neutral grassland
- g4 - Modified grassland
- r1g - Other standing water
- u - Urban
- u1b - Developed land, sealed surface
- u1b5 - Buildings
- f2c - Upland flushes fens and swamps
- w1g - Other woodland, broadleaved
- r1g - Other Standing Water
- r2 - Rivers and streams
- Urban Tree

Secondary Codes:
42 - Pond
800 - Road
848 - Sustainable Drainage System

Symbology defined by UK Habs. https://ukhab.org/ukhab-documentation/

Notes:

Drawn by: lily.dunwell

Checked by: Rob Gavan

Figure No. 3

Revision No. A

18 February 2025

0 30 60 90 120 Meters

Scale 1:3,000 @A3

British National Grid

NGR: 263020E 868927N

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APPENDICES

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APPENDIX A: REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of TNEI on behalf of Field Fyrish 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 (LREC), any relevant statutory body or 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: BNG POLICY

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/

Biodiversity Enhancement Planning Guidance The Highland Council (2024)
www.highland.gov.uk/downloads/file/28840/biodiversity_enhancement_planning_guidance

The Highland Council in Scotland has implemented biodiversity policies for development proposals, aiming to enhance biodiversity and leave it in a demonstrably better state than before intervention. The guidance emphasizes the importance of on-Site enhancement, requiring a minimum of 10% biodiversity net gain for medium/large-scale and major developments. While there is no set target for small-scale developments, all proposals are encouraged to incorporate measures from NatureScot’s *Developing with Nature* guidance. Until a Scottish metric is available, the guidance recommends using England's Statutory Metric to quantify biodiversity enhancements and any required off-Site offsetting. Off-Site offsetting can be delivered on land controlled by the developer, through financial payments to the Council (currently unavailable), or via third-party providers. The Council is developing area-specific enhancement opportunities guidance, and developers are encouraged to consider all biodiversity, secure long-term management and monitoring, and demonstrate the overall positive impact on biodiversity resulting from their development.

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.

APPENDIX C: BASELINE CONDITION ASSESSMENT DATA

Grassland: Modified grassland			
Condition Assessment Criteria		**Criteria met (Y/N)**	**Notes / Justification**
1	There are 6 - 8 vascular plant species per m^2 present, including at least 2 forbs **Note - this criterion is essential for achieving Moderate or Good condition.**	Y	No data so assumed satisfied
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Regularly mown
3	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	There was no scrub recorded
4	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	No physical damage recorded
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	N	There was no bare ground recorded
6	Cover of bracken *Pteridium aquilinum* is less than 20%.	Y	There was no bracken recorded
7	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA[4]).	Y	There was no invasive species identified on Site.
	Total Criteria	**5**	**Moderate**

Grassland: Other neutral grassland			
Condition Assessment Criteria		**Criteria met (Y/N)**	**Notes / Justification**
1	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	N	The species recorded are more indicative of improved grasslands. Few neutral indicators are abundant in the sward with a dominance of common hogweed, creeping thistle and broadleaved dock.
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	No data available
3	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	No data available
4	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Y	No data available
5	Combined cover of species indicative of suboptimal condition[3] and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	N	Greater than 5% abundance of species indicative of suboptimal conditions.
6	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type. **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	Y	No data available
	Total Criteria	**4**	**Poor**

*As the grassland failed the first criterion, it cannot achieve moderate or good condition.

Grassland: Lowland meadow			
Condition Assessment Criteria		**Criteria met (Y/N)**	**Notes / Justification**
1	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	N	The species recorded are more indicative of improved grasslands. Few neutral indicators are abundant in the sward with a high frequency of injurious weeds. The recorded species list is also limited, with available photographs suggesting the sward may be more characteristic of other neutral grassland.
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	No data available
3	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Y	No data available
4	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Y	No data available
5	Combined cover of species indicative of suboptimal condition[3] and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	N	Greater than 5% abundance of species indicative of suboptimal conditions.
6	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type. **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	Y	No data available
	Total Criteria	**4**	**Poor**

*As the grassland failed the first criterion, it cannot achieve moderate or good condition.

Tall herb ruderal			
Condition Assessment Criteria		**Criteria met (Y/N)**	**Notes / Justification**
1	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	Single unmanaged rank component.
2	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	The parcel contains different plant species, but these are primarily injurious.
3	Invasive non-native plant species (listed on Schedule 9 of WCA1) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area.	Y	No invasive non-native species were recorded in this location. There was an abundance of injurious weeds, however, these still offer a valuable nectar source.
	Total Criteria	**1**	**Poor**

Other broadleaved woodland						
Condition Assessment Criteria		**Good (3 Points)**	**Moderate (2 Points)**	**Poor (1 Point)**	**Points**	**Notes**
1	**Vegetation and ground flora**	Recognisable NVC plant community and ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	1	No recognizable NVC based on combination of canopy trees and ground flora.
2	**Veteran trees**	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1	No veteran trees present
3	**Age distribution of trees**	Three age classes present	Two age classes present	One age class present	1	Early-semi mature individuals. Self-seeded
4	**Woodland regeneration**	Three regenerative classes present	One or two regenerative classes present	No regenerative classes present	2	Intensive browsing has hampered regeneration.

5	**Woodland vertical structure**	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots	2	One predominant upper canopy structure, and a shrub layer.
6	**Open space within woodland**	10 – 20% of woodland has areas of temporary open space **OR** if the woodland is <10ha the lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	3	Woodland is less than 10 ha and has 5 % open space
7	**Amount of deadwood**	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1	Less than 25 % deadwood
8	**Tree health**	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	3	No indication of disease
9	**Number of native tree species**	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel	3	Unknown so assume highest grading
10	**Cover of native tree and shrub species**	>80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	<50% of canopy trees and <50% of understory shrubs are native	3	As above

11	**Wild, domestic and feral herbivore damage**	No significant browsing damage evident in woodland	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland	1	Major herbivore damage. Both deer grazing and high levels of rabbit.
12	**Invasive plant species**	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	3	No invasive species identified
13	**Woodland disturbance**	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	1	Significant indications of nutrient enrichment, with large stands of nettle and broadleaved dock.
		Condition	**Poor**	**Total Criteria Points**	25	

Other coniferous woodland						
Condition Assessment Criteria		**Good (3 Points)**	**Moderate (2 Points)**	**Poor (1 Point)**	**Points**	**Notes**
1	**Vegetation and ground flora**	Recognisble NVC plant community and ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	1	No recognizable NVC based on combination of canopy trees and ground flora.
2	**Veteran trees**	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1	No veteran trees present
3	**Age distribution of trees**	Three age classes present	Two age classes present	One age class present	1	Two age classes present
4	**Woodland regeneration**	Three regenerative classes present	One or two regenerative classes present	No regenerative classes present	3	Unknown so assume highest grading

5	**Woodland vertical structure**	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots	1	One clear canopy structures.
6	**Open space within woodland**	10 – 20% of woodland has areas of temporary open space **OR** if the woodland is <10ha the lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	3	Woodland is less than 10 ha and has 5 % open space
7	**Amount of deadwood**	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1	Less than 25 % deadwood
8	**Tree health**	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	3	No indication of disease
9	**Number of native tree species**	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel	1	Planted non-native species for ornamental screening
10	**Cover of native tree and shrub species**	>80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	<50% of canopy trees and <50% of understory shrubs are native	1	Planted non-native species for ornamental screening

11	**Wild, domestic and feral herbivore damage**	No significant browsing damage evident in woodland	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland	3	No damage.
12	**Invasive plant species**	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	3	No invasive species identified
13	**Woodland disturbance**	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	1	Associated with lumber yard to the south with nutrient input evident.
		Condition	Poor	**Total Criteria Points**	23	

Mixed scrub

In the northeastern edge of the field there is an area of common gorse *Ulex europaeus* and common broom *Cytisus scoparius* scrub (D)

	Condition Assessment Criteria	**Criteria met (Y/N)**	**Notes / Justification**
1	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). - At least 80% of scrub is native, - There are at least three native woody species, - No single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* or box *Buxus sempervirens*, which can be up to 100% cover).	N	Only broom and gorse woody species present.
2	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	N	Not all age classes present.

3	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA5) and species indicative of suboptimal condition make up less than 5% of ground cover.	Y	No data available
4	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	No data available
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Y	No data available
	Total Criteria	**3**	**Moderate**

Upland Flush and Fen

	Condition Assessment Criteria	**Criteria met (Y/N)**	**Notes / Justification**
1	The water table is at, or near the surface throughout the year - this could be open water or saturation of soil at the surface. There is no artificial drainage, unless specifically to maintain water levels as specified above. Note - this criterion is essential for achieving Good condition.	Y	The soil underfoot was recorded as saturated throughout.
2	The parcel represents a good example of its specific habitat type - the appearance and composition of the vegetation closely matches its UKHab description, with vascular and non-vascular characteristic indicator species consistently present.	N	The species recorded are indicative of sub-optimal wetland habitats, with key indicator species including meadowsweet, marshy pennywort and marsh woundwort. These were accompanied by broadleaved dock, soft rush and duckweed.
3	The water supplies (groundwater, surface water and or rainwater) to the wetland are of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Y	No data available
4	Cover of scrub and scattered trees are less than 10%.	Y	No data available
5	Cover of bare ground is less than 5%.	Y	No data available
6	There is an absence of invasive non-native plant species and species indicative of suboptimal condition make up less than 5% of ground cover.	N	Soft rush and duckweed were recorded as frequent and occasional. These are indicators of sub-optimal conditions.

8	No more than 25% of the habitat area has a continuous cover of litter (such as dead vegetation) preventing regeneration.	Y	No data available
	Total Criteria	**5**	**Moderate**

Ditches			
Condition Assessment Criteria		**Criteria met (Y/N)**	**Notes / Justification**
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Y	No data so assumed satisfied
2	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	N	The ditch had vegetated banks but no emergent / submerged vegetation
3	There is less than 10% cover of filamentous algae and or duckweed Lemna spp. (these are signs of eutrophication).	Y	No data so assumed satisfied
4	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	N	Banks are vegetated by grasses and taller herbs which are not indicative of marginal aquatic vegetation
5	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Y	No data so assumed satisfied
6	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Y	No data so assumed satisfied
7	Less than 10% of the ditch is heavily shaded.	Y	No data so assumed satisfied
8	There is an absence of non-native plant and animal species.	Y	No data so assumed satisfied
	Total Criteria	**6**	**Moderate**

APPENDIX D: BIODIVERSITY CALCULATIONS

Table D.1. Habitat loss and retention

Habitat Type / UKhab code	Total Area (ha)	Total Units	Area Lost	Area Enhanced	Area Retained	Units Retained
Fens (upland and lowland) / f2c	1.405	12.93	0.00	0.000	1.405	12.93
Bracken / g1c	2.178	4.36	2.18	0.000	0.000	0.00
Lowland meadows / g3a	0.030	0.28	0.03	0.000	0.000	0.00
Other neutral grassland / g3c	1.346	5.38	0.86	0.000	0.491	1.96
Modified grassland / g4	0.179	0.72	0.00	0.134	0.042	0.17
Tall forbs / g3c 81	8.457	16.91	2.83	5.627	0.000	0.00
Bramble scrub / h3d	0.150	0.60	0.15	0.000	0.000	0.00
Mixed scrub / h3h	0.155	1.24	0.16	0.000	0.000	0.00
Developed land; sealed surface / u1	0.089	0.00	0.09	0.000	0.000	0.00
Buildings / u1b5	0.011	0.00	0.01	0.000	0.000	0.00
Other woodland; broadleaved	4.048	37.24	3.29	0.000	0.759	6.98
Other coniferous woodland / w2c	0.224	0.45	0.22	0.000	0.000	0.00
Grand Total	**18.490**	**39.59**	**9.810**	**5.760**	**2.700**	**22.04**

Table D.2. Habitat Enhancement

Habitat Type / UKhab code	Area Enhanced	Distinctiveness Enhancement	Condition Enhancement	Mechanism for Enhancement	Units Generated
Other neutral grassland / g3c	0.134	NA	Poor - Moderate	**Mowing and Hay Cutting:** • Delay mowing until late summer to allow wildflowers to set seed. • Vary cutting heights and timings to create structural diversity. • Remove cuttings to reduce soil fertility and encourage wildflower growth	0.91
Tall forbs / g3c 81	5.627	Other neutral grassland / g3c (Low to Medium)	Poor - Moderate		34.90

Habitat Type / UKhab code	Area Enhanced	Distinctiveness Enhancement	Condition Enhancement	Mechanism for Enhancement	Units Generated
				Soil Management: • Avoid using fertilizers and pesticides to maintain low soil fertility, which favors wildflowers over grasses. • Conduct soil testing to monitor nutrient levels and adjust management practices accordingly **Seeding and Planting:** • Introduce native wildflower seeds to increase species diversity. • Use green hay from species-rich meadows to transfer seeds and soil microorganisms **Scrub and Invasive Species Control:** • Regularly remove invasive species and scrub to prevent them from dominating the grassland. • Use manual or mechanical methods for control, avoiding chemical treatments **Monitoring and Adaptive Management:** • Regularly monitor plant species composition and structural diversity. • Adjust management practices based on monitoring results to ensure desired outcomes	
Total Area	**5.761**			**Total Units Generated**	**35.81**

D.3. Habitat Creation

Habitat Type / UKhab code	Area Created	Created Condition	Description of Creation	Units Generated
Developed land; sealed surface	4.564	NA	The main Site component comprising the BESS with associated infrastructure.	0.00
Developed land; sealed surface	0.513	NA	Associated access tracks.	0.00
Modified grassland	0.013	Poor	An area of amenity, mown grassland to the south of the Site.	0.03
Other neutral grassland	2.514	Moderate	Species-rich meadow mixture of a neutral composition scattered across the Site, including vegetated bunds. This will be subject to appropriate management to establish and maintain a structurally diverse sward. There will be a second	16.83

Habitat Type / UKhab code	Area Created	Created Condition	Description of Creation	Units Generated
			meadow component around the SUDS, where the composition will be tailored to the higher moisture regime.	
Ponds (non-priority habitat)	0.023	Moderate	A small pond will be formed to the north of the development area.	0.19
Other woodland; broadleaved	1.567	Moderate	Planted bands of broadleaved woodland will be positioned around the development. It will be planted with native individuals suitable for the ground conditions.	8.45
Rural tree	0.061	Moderate	15 native tree species will be planted to the south and east of the Site within the area of species-rich grassland.	0.19
Sustainable Urban Drainage	0.619	Good	A sustainable urban drainage system will be located to the west of the Site. This will be fed by a Site drainage network from the north. The banks of the SUD will be seeded with native species indicative of pond edges to provide niches and a nectar source for invertebrates.	2.08
Total Area	**9.87**		**Total Units**	**27.76**