

Neilston Greener Grid Park S.36 Application

784-B042549

Biodiversity Enhancement and Management Plan (BEMP)

TNEI (on behalf of Statkraft UK Ltd.)

August 2024

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1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech Ltd was commissioned by TNEI Group (on behalf of Statkraft UK Ltd.) to prepare a Biodiversity Enhancement Management Plan (BEMP) of Neilston Greener Grid Park, part of the Neilston Greener Grid Park S.36 Application, hereafter referred to as “the site”.

This report has been prepared by Consultant Ecologist Ash Ronaldson BSc (Hons) and Senior Ecologist Gabrielle Cruttenden MSc BSc (Hons) ACIEEM and the conditions pertinent to it are provided in Appendix A.

It should be noted that this report is to be read in conjunction with the Landscape and Ecological Management Plan (LEMP) for the site (Tetra Tech, 2024a).

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 and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

1.1 SITE DESCRIPTION

The site is located off the B775 Gleniffer Road in Renfrewshire, 3.9km northwest of Neilston and 15.3km southeast of the centre of Glasgow (Northing: 659853 Easting: 245060 / Ordnance Survey National Grid Reference NS 45060 59853) (Figure 1). The site comprises mainly grassland and scrub habitat with a small number of semi-mature coniferous trees. The surrounding landscape is rural, with pastoral fields surrounding the site and a small woodland with well-used car park to the east.

1.2 DEVELOPMENT PROPOSALS

The proposed development is the formation of an up to 750MW Battery Storage Facility, comprising up to 88 battery storage container blocks and associated infrastructure, storage containers, welfare, diesel generators, CCTV and lighting columns and associated access, internal access roads, hard and soft landscaping, SuDS basin, perimeter fence and underground grid connection cable.

1.3 PURPOSE OF REPORT

This BEMP has been produced with reference to existing ecological data for the site (see Section 2.1) and the site landscaping plan (Figure 2). The Fourth National Planning Framework (NPF4) places climate and nature at the centre of the planning system and includes a cross-cutting outcome to improve biodiversity. Therefore, the aims of this BEMP are as follows:

- To satisfy the requirements for developers to secure positive effects for biodiversity in their developments (Policy 3 of the NPF4).

- Provide a practical guide for the site occupants / owners to facilitate appropriate long-term management and protection of ecologically valuable features on site during the construction phase and a minimum of 10-years post-development.

The following principles and hierarchy (CIEEM, 2018) are used when determining mitigation and management measures:

- **Prevention** – to avoid adverse effects as far as possible by designing out or using preventative measures during works.
- **Reduction** – to minimise adverse effects as far as possible.
- **Compensation** – involves measures of the same value to offset the impact.
- **Enhancement** – to identify opportunities where enhancement measures can be incorporated into the scheme.

Similarly, a distinction is made between types of mitigation measures and how they can be incorporated as follows:

- **Inherent Mitigation** – this is prevention through design, i.e., the design of the site is altered to accommodate an important feature or changed to prevent or reduce a predicted impact.
- **Additional Mitigation** – mitigation measures which are required to reduce the scheme's environmental impact further. This forms the focus of the mitigation description below.

1.4 RESPONSIBILITIES

A mitigation strategy that will negate or minimise the risk of any potential impacts on habitats and contravention of the relevant legislation that has been outlined within this BEMP. It is the responsibility of the developer, Statkraft UK Ltd., the principal contractor and any associated sub-contractors to carry out the works in a manner which will not contravene the legislation (see Appendix B), will not endanger protected species, and with due care to any other wildlife on site.

Construction Phase

Biodiversity Champion

A Biodiversity Champion will be nominated by the client to influence site activities during the **construction phase** in line with the recommendations of this report. The Biodiversity Champion does not need to be the same individual throughout the life of the project; but the responsibility will be passed on as required to maintain a consistent approach.

The Biodiversity Champion does not need to be an ecologist but will be familiar with this report and have sufficient authority and presence on site to influence activities. Usually, a member of the principal contractor team takes this role during the site construction phase. The Biodiversity Champion nominated during the construction phase may not have regular site presence during the entire construction life of the project; therefore, the role of Biodiversity Champion can be transferred to a new individual.

During the construction phase, the role of a Biodiversity Champion is to provide advice to the construction teams on all pertinent ecological issues as highlighted by this BEMP and to check

that the ecological protection and mitigation measures, as specified in this document, are correctly implemented. This is for general ecological oversight of the project, and where complex ecological issues arise, advice should be sought from a suitably qualified ecologist. General responsibilities of the Biodiversity Champion during the Construction Phase are:

- Contacting a suitably qualified ecologist in the event of uncertainties about ecological issues surrounding the development;
- Ensuring that all site contractors know to report any ecological concerns/issues;
- Check and document that an overview of the site's ecological constraints is included within the contractor inductions as appropriate;
- Ensuring that contractors, vehicles and equipment do not impact areas to be retained adjacent to the site;
- Supervising and monitoring the implementation and habitat creation measures as set out in this document;
- If site preparation works are scheduled during the nesting bird season (generally considered to be March-September inclusive), to organise for an Ecological Clerk of Works (ECoW) to undertake a nesting bird check in advance of works that could impact an active nest. If a nesting bird is identified, to implement suitable working methods as advised by the ECoW;
- Supervising the installation of bat and bird boxes at suitable locations as advised by the ecologist; and
- The Biodiversity Champion will take photographs, log the dates and times of inspections, and produce progress reports as appropriate to evidence that the above responsibilities are being upheld.

Contractor

The contractor responsibilities include the following:

- To adhere to the relevant provisions made within this document, and to comply with the advice of the project ecologist and/or Biodiversity Champion; and
- To contact the Biodiversity Champion and/or, if necessary, the project ecologist regarding any uncertainties or activities that may impact on ecological features on site.

Client

The client responsibilities include the following:

- Ensuring that the contractors employed are suitably qualified and experienced to undertake the habitat creation works, whilst maintaining the ecological value of the site;
- Providing to the contractor all information required to allow them to carry out appropriate habitat and landscape management during the construction phase. This includes any updated versions of this BEMP and other related management plans, which will be circulated as soon as possible after being received.

Operational Phase

Biodiversity Champion

A Biodiversity Champion will be nominated by the client, from within the ground maintenance team, to influence site activities during **the operational phase of the project (i.e. for at least 10 years following project handover)** in line with the recommendations of this report. The Biodiversity Champion does not need to be the same individual throughout this time; but the responsibility should be passed on as required to maintain a consistent approach.

The champion does not need to be an ecologist but should be familiar with this report and have sufficient authority and presence on site to influence activities. The Biodiversity Champion nominated following completion of the construction phase may not have regular site presence during the entire operational life of the project; therefore, the role of Biodiversity Champion can be transferred to a new individual as required, for at least the first ten years of the operational life of the project.

During the Operational Phase the role of a Biodiversity Champion is to provide advice to the site management teams on all pertinent ecological issues as highlighted by this BEMP and to check that the ecological protection and mitigation measures, as specified in this document, are correctly implemented. This is for general ecological oversight of the project, and where complex ecological issues arise, advice should be sought from a suitably qualified ecologist. General responsibilities of the Biodiversity Champion during the Operational Phase are:

- Contacting an ecologist in the event of uncertainties about ecological issues surrounding the development;
- Ensuring that all site contractors/grounds maintenance workers know to report any ecological concerns/issues;
- Check and document that an overview of the site's ecological constraints is included within the ground maintenance staff inductions as appropriate;
- Supervising and monitoring the management of newly created habitat as set out in this document;
- Checking from ground level that the external bat / bird boxes are not blocked / removed / damaged.

Where additional issues are identified that are not currently covered in this management plan, or where it is considered that revised maintenance regimes are needed to maximise the ecological value of the site, the Biodiversity Champion should contact a suitably qualified ecologist who can make changes to management prescriptions as appropriate.

The Biodiversity Champion will take photographs, make logbook entries of inspections, and produce progress reports as appropriate to evidence that the above responsibilities are being upheld. This monitoring and review process will be carried out as an integral part of this BEMP.

Contractor

The landscape/ground maintenance contractor responsibilities include the following:

- Providing staff members who are suitably qualified and experienced, and able to carry out the required tasks as per the BEMP.
- The contractor is responsible for alerting the client should there be any tasks for which they do not have the appropriate resources or capability.

- Ensuring that they have received and understood all appropriate information prior to works commencing on site during the operational phase.
- The contractor is equally responsible for ensuring that they carefully study any updated documents which are produced, ensuring that they are fully understood, and any changes are communicated across the whole team.
- Providing to the client, where appropriate, evidence of compliance with the management plan.
- Alerting the client and/or appointed ecologist to any potential ecological issues arising, and for ceasing any works which may cause ecological disturbance or harm until further notice.
- The contractor will endeavour to monitor the success of the new and retained plants on site and will apply remedial measures where required.
- Carrying out maintenance and monitoring on the ecological features installed on site including checking bird boxes from ground level for damage / obstruction. This will be conducted outside of the nesting bird season. If required within the nesting bird season, this will follow a pre-works check by a suitably qualified ecologist.
- The contractor is responsible for reporting back to the client, should any remedial action be required on any ecological features.

A copy of this BEMP will be provided to the landscape / ground maintenance contractor by the Biodiversity Champion.

1.5 KEY CONTACT DETAILS

In the event of ecological queries or assistance being required, please contact:

- Principal Ecologist, Elaine Anderson
07970 777 024
Elaine.Anderson@tetrattech.com
- UK Tetra Tech Ecology Team
Ecology.uk@tetrattech.com

1.6 TIMESCALES

Details of timescales of the implementation of all proposed works are provided in Appendix C.

2.0 BASELINE INFORMATION

2.1 PREVIOUS ECOLOGICAL SURVEYS

Tetra Tech completed a Preliminary Ecological Appraisal (PEA) of the main BESS site in 2022 (Tetra Tech, 2022), and of the cable route and Phase 1 area in 2023 (Tetra Tech, 2023). Breeding bird surveys of the site were also undertaken (Tetra Tech, 2024b). Following updates to plans for the site, further survey commissions were received to undertake a PEA of additional areas of land to the west of the substation in May 2024 (Tetra Tech, 2024c).

2.2 DESIGNATED SITES

As identified in the ecological appraisal reports (Tetra Tech, 2022, 2023), there are two designated sites of conservation value within 10km: Sergentlaw Moss Site of Importance for Nature Conservation (SINC) which is located directly adjacent to the southwest section of the site, and Black Cart Special Protection Area (SPA), 6.9km north. Sergentlaw Moss is known to support a population of large heath butterfly *Coenonympha tullia*, and Black Cart SPA is designated due to regularly supporting a wintering population of whooper swan *Cygnus cygnus*.

2.3 HABITATS

The habitats on site were predominantly grassland, with occasional areas of raised bog/mire. A line of trees and scrub habitat was also present along the roadside. For a full Phase 1 Habitat Plan and habitat assessment, please refer to the associated Preliminary Ecological Appraisals (Tetra Tech, 2022, 2023 and 2024c).

2.4 PROTECTED OR NOTABLE SPECIES

Badger

No direct evidence of badger *Meles meles* was recorded during the surveys, however, mammal paths through the grassland at the north of the site was observed, suggesting the site may be used by large mammals for commuting. Nearby woodland areas are considered suitable for sett creation, foraging, and commuting by badger.

Bats

Mature trees on the site were considered to provide suitable sheltered foraging resource for foraging bats, with woodland edge habitat within the buffer areas to the east and west also providing foraging resources.

No potential roosting features were identified, and the trees are therefore considered to have negligible suitability to support roosting bats.

Nesting Birds

Swallow *Hirundo rustica* were confirmed to be breeding on site, with breeding meadow pipit *Anthus pratensis* and willow warbler *Phylloscopus trochilus* also considered probable.

Reptiles

Stone dykes and areas of grassland and scrub habitat, particularly at the north of the site where some ground is exposed, are considered likely to support reptiles such as common lizard *Zootoca vivipara*.

Pine Marten

No evidence of pine marten was found on site during the survey, however, mature trees on site and woodland to the northeast of the site have suitability to support this species as they collectively form a larger area of suitable habitat and could be used by dispersing pine marten.

Red squirrel

No evidence of red squirrel was found on site during the survey, however, mature trees on site and woodland to the northeast of the site have suitability to support this species as they collectively form a larger area of suitable habitat and could be used by dispersing squirrels.

Amphibians

The site is considered suboptimal to support these species due to the lack of permanent standing water/ponds, however, the wet ditch and grassland habitats may be used opportunistically by common amphibian species, particularly in their terrestrial phase.

Invertebrates

There is suitable habitat across the site for terrestrial invertebrates, although these are unlikely to support a significant assemblage or be a notable or unique resource within the landscape.

3.0 PRE- AND MID-CONSTRUCTION SPECIES ENHANCEMENTS

3.1 BATS

Bat boxes

Additional enhancements that can be easily incorporated into the development scope include the provision of bat boxes. Three boxes will be placed on suitable retained trees within the site, or adjacent woodland areas. The tree mounted bat boxes will face south for additional warmth, and be positioned at least 4 m from the ground, with the entrances free from overhanging branches.

Suitable bat boxes include:

Schwegler 1FF bat box

Made of woodcrete and is expected to last approximately 25 years. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats. Woodcrete (75% wood sawdust, concrete and clay mixture). It can be mounted on buildings or trees.

Width: 27cm; Height: 43cm; Weight: 8.3kg



Harlech woodstone bat box

Made from woodstone, the Harlech is a small cavity bat box that offers excellent insulation and minimum condensation for roosting bats. It can be mounted on buildings or trees.

Width: 15cm; Height: 27.5cm; Weight: 4kg



Beaumaris woodstone bat box

Comes in small and large versions and is suitable for mounting on buildings or trees.

Small –29 x 40 x 7cm

Large 38 x 50 x 7cm

Weight: 8kg.



Vincent Pro bat box

A tried and tested design by the Vincent Wildlife Trust.

Width: 23.5cm; Height: 72cm; Weight: 6.9kg



The boxes are designed to mimic natural roost sites and to provide a stable environment.

Lighting

It is recommended that on-site lighting should be avoided where possible, to reduce potential impacts to bat species utilising the site. However, any on-site lighting that is required will be designed in line with ILP guidance (Institute of Lighting Professionals (ILP), 2023) and will consider the following measures:

- Install lamps at the lowest permissible density;
- Lights will be designed to be as low to the ground as possible (specifically not above 8m);
- Directional lighting will be used to avoid light spillage, particularly towards retained trees, the tree line, hedgerows, watercourses and any new bat roosting features incorporated into the design;
- Hoods / cowls can be used to direct light below the horizontal plane (ideally at an angle less than 70 degrees); and
- Lights will be switched off at night (particularly during the months of April to October inclusive when bats are active), or at least motion-sensored.

The lighting design for the site will be reviewed by the project ecologist, and a separate technical note issued.

3.2 NESTING BIRDS

Bird boxes

During the breeding bird surveys conducted on site (Tetra Tech, 2024b), swallow were confirmed to be breeding on the site, and meadow pipit and willow warbler were considered probable breeders. Ten further bird species were considered to possibly be breeding on site.

The design proposal does not suggest opportunity to recreate sheltered swallow nesting features, although this could be considered in any future plans for built infrastructure.

As such, three bird boxes will also be incorporated into the development scope to provide additional biodiversity enhancement on site. Where possible, it is recommended that bird boxes suitable for passerines (such as song thrush) are placed 1.5 m below each bat box, to make sure that nesting birds have somewhere to nest and do not inhabit the bat boxes. Boxes will be placed on the north, east, or west aspects of mature trees around the edges of the site, providing additional long-term nesting habitat on site.

Use of boxes such as the Vivara woodstone box (or similar) will provide long-term nest box solution requiring limited replacement, unlike wooden boxes which need regular replacement due to weathering.

The Vivara woodstone box is available with a variety of entrance sizes, suitable for a range of breeding bird species:

Vivara Pro Barcelona WoodStone Open Nest Box

Suitable for bird species such as wrens, robins, spotted flycatchers, pied and grey wagtails, song thrushes and blackbirds.



Vivara Pro Seville 32mm / 28mm WoodStone Nest Box

Suitable for bird species such as blue tits, tree sparrows, house sparrows, great tits, crested tits, nuthatches, coal tits and pied flycatchers.

The provision of additional tree, hedgerow and scrub planting on site will also provide nesting provision for a wide variety of breeding bird species on site. For full details, please refer to the associated LEMP (Tetra Tech, 2024a).



3.3 RED SQUIRRELS

Nest boxes

To enhance the site and surrounding area for red squirrel, a squirrel nest box will be erected in the surrounding woodland to offer suitable shelter for this species.

The squirrel nest box will be positioned at a height of at least 3-4 m on a suitable mature tree, and face east or west to be out of direct sunlight, but in a position which is protected from prevailing rain and wind as is practical.

Bedding matter, including hay, straw and / or dry leaf litter can be used to half-fill the nest box during installation.

Suitable squirrel nest boxes include:

Red Squirrel Nest Box

The box is made from natural timber with and has both front and side entrance holes. A front shelf and front indentations allow for easy entrance and exit of the box and the angled roof means that rain will run off the top, keeping the interior dry. The nesting chamber is very deep and has an internal ladder. The wood does not require any treatment.

Height: 540 mm; Width: 200 mm; Depth 430 mm

Weight 3 kg



Red Squirrel House

This plywood Red Squirrel House has been designed with a wide entrance hole that will allow squirrels to take their young into the house easily. A platform runs around the sides of the house which makes entering and exiting easier for juveniles.

Height: 440 mm; Width 375 mm; Depth 390 mm

Weight 7.8 kg

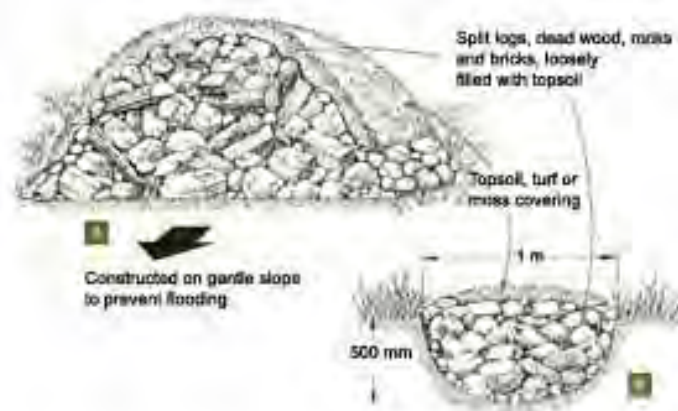


3.4 HERPETOFAUNA (REPTILES AND AMPHIBIANS)

Hibernacula / refugia

Log piles, rocks and deadwood under dense ground cover provide herpetofauna hibernacula. As such, one hibernaculum will be created on site. This will provide important places for reptiles and amphibians to rest during the day, or during cold and / or dry weather. Hibernacula will be c.2 m² long, a minimum of 0.5 m wide and c.1 m in height, and comprise of log or debris piles, with a cap composed of topsoil and turf covering.

This will be best placed as close as possible to the new SUDS feature on site. The below image demonstrates hibernacula examples.



3.5 INVERTEBRATES

Insect houses / hotels

Additional enhancements for invertebrates can also be easily met within the development scope by including insect houses on any retained trees on or adjacent to site, and the provision of an insect hotel. As such, it is recommended that one insect hotel and two insect houses are incorporated into the development. These features will help to provide a variety of niches for a diverse range of invertebrates to inhabit, and therefore help to increase the terrestrial species diversity on site. For specifications, please contact a suitably qualified ecologist.

The insect houses and hotel will be positioned in a south-facing position to best attract a variety of species. Placing the insect houses / hotel within 600 m of wetland and / or wildflower habitat, such as the marshy grassland and lowland raised bog, will help to attract important pollinator species.

Furthermore, the provision of native planting on site (Tetra Tech, 2024a) will look to provide a variety of food sources for terrestrial invertebrate and further encourage a variety of native invertebrates to utilise the suitable habitats on site.

3.6 HEDGEHOGS

Hedgehog highways

Where any permanent fencing is to be constructed, small 15 x 15 cm mammal holes will be installed within the base of these fences. 'Hedgehog Highway' signs (available from NHBS) will be installed above these holes to prevent them being filled in in the future. This will help to maintain their permanency and so the connectivity for small mammals, such as hedgehogs, to the site and surrounding landscape.

Nest boxes

Additional nest boxes for other notable species, such as hedgehog are also easy enhancements to be incorporated into the development scope. One hedgehog nest box will be included within the woodland adjacent to site, located as far away from the roads as is practical. The entrance will be orientated east or south facing to shield the entrance from prevailing rain and wind. The nest box can be left as is, partially buried, incorporated into a log pile or compost heap or covered in leaf litter as desired. If buried, it is recommended that some roofing felt is placed beneath the runners to create a cavity beneath the box and reduce the humidity in the interior.

Bedding matter, including hay, straw and / or dry leaf litter can be used to half-fill the nest box during installation.

Suitable hedgehog nest boxes include:

Hedgehog Nest Box

This nestbox has been designed and ultimately tested extensively by the Hedgehog Preservation Society. The final nest design has also been approved by Dr. Pat Morris of London University.

Height: 22 cm; Width: 38 cm; Length 47 cm



4.0 POST-CONSTRUCTION SPECIES ENHANCEMENT MANAGEMENT STRATEGY

4.1 MONITORING

An annual inspection of each of the nest boxes (bats, birds, red squirrels, hedgehogs, and invertebrates) installed will be undertaken by the Biodiversity Champion to monitor the condition and number of boxes present on site.

For the bat and red squirrel boxes, and bird nest boxes during the nesting bird season (March-September inclusive), these inspections will be **external only and undertaken from ground level only with no handling of boxes** to prevent contravention of legislation outlined in Appendix B. Where it is considered necessary to inspect the interior of the boxes, this must be done by a suitably licensed ecologist.

Where any nest boxes are missing during the inspections, these will be replaced on a like-for-like basis at the earliest opportunity.

Where any nest boxes are damaged and require replacement:

- **Bat and red squirrel** boxes must only be disturbed by a suitably licenced and experienced ecologist. In this instance, the damaged boxes will remain in situ until a suitably licenced and experienced ecologist can inspect the boxes and determine a course of action for replacement.
- Where any **bird** boxes require replacement, this will be undertaken outside of the nesting bird season (March-September inclusive). Where this is not possible (e.g. for health and safety reasons), a suitably qualified ecologist will undertake a nesting bird check to verify the absence of nesting birds from the nest boxes that require replacement. Where an active nest is identified, these will be protected from disturbance via an exclusion zone. The size of this exclusion buffer will be dependent on the species of bird found nesting and will be demarcated using hazard tape until they are no longer in use, and all chicks have fledged. Only when all chicks are fledged will the nest box be able to be replaced.
- **Hedgehog and invertebrate** nest boxes that require replacement will be first inspected by the Biodiversity Champion to determine the presence of any hedgehogs or invertebrates within the nest boxes. Where these species are absent, the nest boxes can be replaced immediately. Where hedgehogs or invertebrate species are present, these species will remain undisturbed and the damaged nest box will remain in situ, until a suitably qualified ecologist can be contacted to determine the course of action for replacement.

REFERENCES

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- Tetra Tech. (2022). *Neilston BESS Ecological Appraisal*. Leeds: Tetra Tech.
- Tetra Tech. (2023). *Neilston BESS Cable Route Preliminary Ecological Appraisal*. Edinburgh: Tetra Tech.
- Tetra Tech (2024a). *Neilston BESS Landscape and Ecology Management Plan*. Edinburgh: Tetra Tech.
- Tetra Tech (2024b). *Neilston BESS Breeding Bird Survey Report*. Edinburgh: Tetra Tech.

FIGURES

Figure 1 – Site Location Plan

Figure 2 – Landscaping Plan



Site Location Plan

Neilston

TNEI



Legend

 Site boundary

Notes:

Drawn by: HANNAH.HAMILTON

Checked by: AR

Office: Southampton

Figure No. 1

Revision No. A

02 July 2024

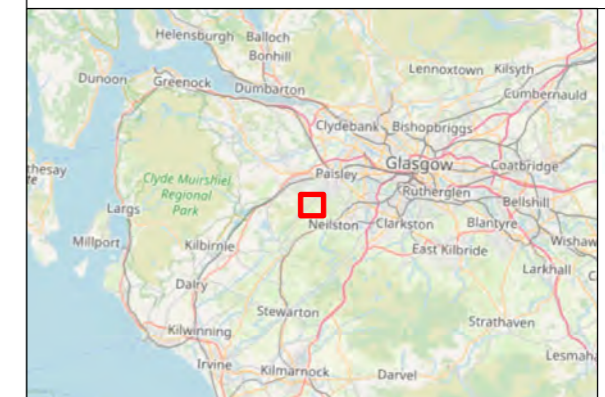
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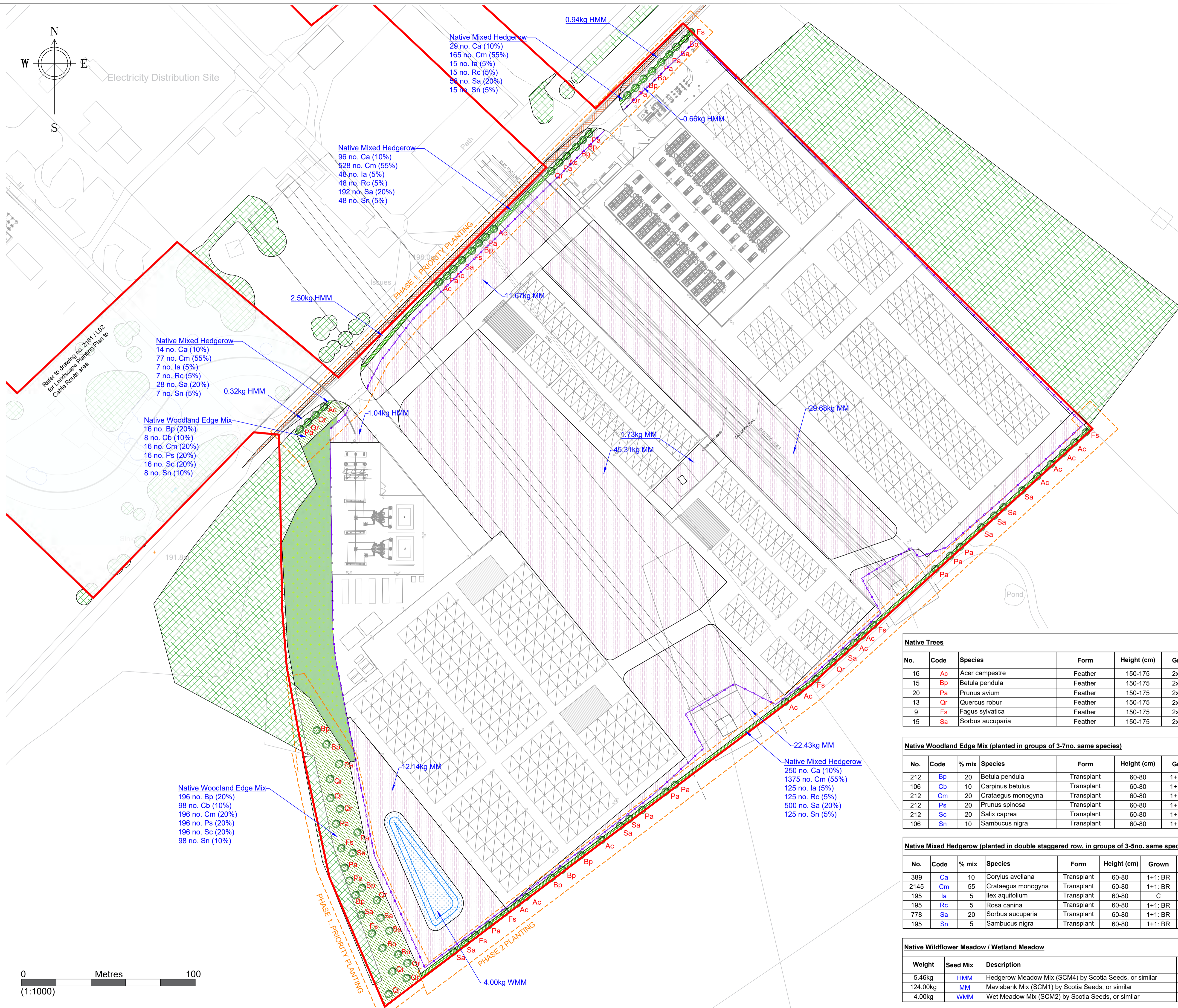
British National Grid

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The Pavilion, 1st Floor
Botleigh Grange
Office Campus
Hedge End
Southampton
Hampshire, SO30 2AF



- Legend**
- Site Boundary
 - Existing Vegetation to be Retained
 - Existing Grassland to be Retained
 - Existing Overhead Cables and Buffer
 - 3.4 m High Palisade Fence
 - Proposed Native Tree
 - Proposed Native Woodland Edge Mix
 - Proposed Native Mixed Hedgerow
 - Proposed Native Wildflower Meadow
 - Proposed Native Wetland Meadow
 - Proposed Planting Phases
 - Visibility Splay

- Notes**
1. Topsoil: Where necessary, topsoil shall be a minimum of 400mm deep over new planting areas and graded to fall. Imported topsoil must be BS 3882:2015 compliant and existing topsoil must be cultivated in accordance with BS 3882:2015 outside Root Protection Areas (RPAs) of existing trees. No cultivation should take place in wet / waterlogged conditions and within the RPAs of existing trees.
 2. Trees: Native trees to be planted in pits 800x800x450mm or dimensions of roots / rootball, whichever is greater. Tree to be supported by 1no. stake and bio-degradable tie, as per detail drg. 2120/D01. All native trees shall be of local provenance.
 3. Proposed Native Woodland Edge Mix: Bare root shrubs to be planted at rate of 0.3no. plants per m² (i.e. 1.8m centres). Planting areas cultivated to 150mm depth, in pits 150 x 150 x 150mm, as per detail drg. 2120/D01. All plants shall be of local provenance.
 4. Proposed Native Mixed Hedgerow: Hedges to comprise a double staggered row of plants 400mm apart within each row, overall 5no. plants per linear metre. Species mixed throughout the hedge line in random groups of 3/5. 500mm wide trench excavated to take plants and topsoil cultivated to 450mm depth as per detail drg. 2120/D01, prior to application of fertiliser. All plants shall be of local provenance.
 5. Mulch: All tree and hedge planting areas to be covered using coarse bark mulch 50-75mm depth.
 6. Planting Phases: Planting adjacent to the road corridor and along southwestern edge of Site will be implemented as advanced Phase 1 Priority Planting. Other planting will be undertaken in subsequent phase commensurate with equipment being brought to site.
- All planting to be undertaken in accordance with planting season (Nov - March for bare root plants). Wildflower Meadow to be sown upon completion of the works at first available season (Spring sowing from March to May, or Autumn sowing from Mid-August to late September)

Native Trees

No.	Code	Species	Form	Height (cm)	Grown	Breaks
16	Ac	Acer campestre	Feather	150-175	2x: BR	3
15	Bp	Betula pendula	Feather	150-175	2x: BR	3
20	Pa	Prunus avium	Feather	150-175	2x: BR	3
13	Qr	Quercus robur	Feather	150-175	2x: BR	3
9	Fs	Fagus sylvatica	Feather	150-175	2x: BR	3
15	Sa	Sorbus aucuparia	Feather	150-175	2x: BR	3

Native Woodland Edge Mix (planted in groups of 3-7no. same species)

No.	Code	% mix	Species	Form	Height (cm)	Grown	Spacing
212	Bp	20	Betula pendula	Transplant	60-80	1+1: BR	0.3/m ²
106	Cb	10	Carpinus betulus	Transplant	60-80	1+1: BR	0.3/m ²
212	Cm	20	Crataegus monogyna	Transplant	60-80	1+1: BR	0.3/m ²
212	Ps	20	Prunus spinosa	Transplant	60-80	1+1: BR	0.3/m ²
212	Sc	20	Salix caprea	Transplant	60-80	1+1: BR	0.3/m ²
106	Sn	10	Sambucus nigra	Transplant	60-80	1+1: BR	0.3/m ²

Native Mixed Hedgerow (planted in double staggered row, in groups of 3-5no. same species)

No.	Code	% mix	Species	Form	Height (cm)	Grown	Pot size	Spacing
389	Ca	10	Corylus avellana	Transplant	60-80	1+1: BR	N/A	5/m
2145	Cm	55	Crataegus monogyna	Transplant	60-80	1+1: BR	N/A	5/m
195	Ia	5	Ilex aquifolium	Transplant	60-80	C	2L	5/m
195	Rc	5	Rosa canina	Transplant	60-80	1+1: BR	N/A	5/m
778	Sa	20	Sorbus aucuparia	Transplant	60-80	1+1: BR	N/A	5/m
195	Sn	5	Sambucus nigra	Transplant	60-80	1+1: BR	N/A	5/m

Native Wildflower Meadow / Wetland Meadow

Weight	Seed Mix	Description	Sowing rate
5.46kg	HMM	Hedgerow Meadow Mix (SCM4) by Scotia Seeds, or similar	3.0g / m ²
124.00kg	MM	Mavisbank Mix (SCM1) by Scotia Seeds, or similar	3.0g / m ²
4.00kg	WMM	Wet Meadow Mix (SCM2) by Scotia Seeds, or similar	3.0g / m ²

Rev.A 21/08/24 Update site layout. Add scale bar.



Project Neilston Greener Grid Park
Section 36 Application

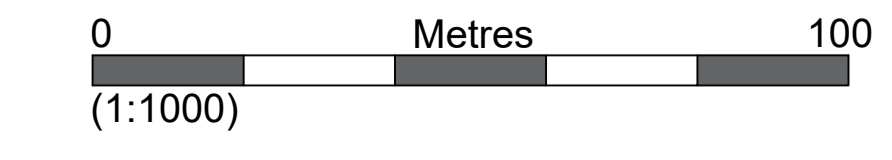
Title Landscape Planting Plan
- Main Compound

Date	Scale	Drawn	Checked
07/06/24	1: 1000 @ A1	MJ	NH

Job	Suitability	No.	Issue	Revision
2161	-	L01	A	A

LI WORKSTAGE: 0/1 2 3 4 5 6

DISCLAIMER:
Do not scale from this drawing.
All dimensions to be verified on site prior to commencement of works.
Drawing to be read in conjunction with related TGP drawings, consultants drawings and any other relevant information.
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APPENDICES

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APPENDIX A: REPORT CONDITIONS

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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: 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 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 (79/1409/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-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 LBAP's 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 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.

Scotland Planning Policy Framework

Scottish planning policy is contained within National Planning Framework 3 (The Scottish Government, 2014) with the following relevant to biodiversity within the section "Valuing the Natural Environment".

Paragraph 194 details NPF Policy Principles which states the planning system should:

- "conserve and enhance protected sites and species, taking account of the need to maintain healthy ecosystems and work with the natural processes which provide important services to communities;
- protect and enhance ancient semi-natural woodland as an important and irreplaceable resource, together with other native or long-established woods, hedgerows and individual trees with high nature conservation or landscape value; and
- seek benefits for biodiversity from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats"

Regarding the delivery of this:

"195. Planning authorities, and all public bodies, have a duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity."

To manage development the following applies:

"202. The siting and design of development should take account of local landscape character. Development management decisions should take account of potential effects on landscapes and the natural and water environment, including cumulative effects. Developers should seek to minimise adverse impacts through careful planning and design, considering the services that the natural environment is providing and maximising the potential for enhancement."

Renfrewshire Local Development Plan 2021 (Renfrewshire Council, 2021)

POLICY ENV 2

“Development proposals will consider the potential impacts on natural heritage. Development proposals should protect and restore degraded habitats, enhance and promote access to Renfrewshire's natural environment and minimise any adverse impacts on habitats, species, network connectivity or landscape character.

Developments must not have an adverse effect on the integrity of sites protected for their natural conservation interest or the wider biodiversity and geo-diversity of the area. All proposals will be assessed in terms of the mitigation hierarchy of Avoid/Reduce/Compensate, the cumulative

impact of development based on the precautionary principle and should protect, and where possible enhance:

- Natura 2000 and Ramsar sites; Protected Species;
- SSSI's;
- Wild land;
- LNRs, SINCs and wildlife corridors;
- Biodiversity;
- Landscape character and setting;
- Clyde Muirshiel Regional Park;
- Trees - Ancient and semi- natural woodland in line with the Scottish Government's Control of Woodland Removal Policy and Clydeplan's Forestry and Woodland Strategy, significant trees including those covered by Tree Preservation Orders, hedgerows, and trees within Conservation Areas.”

APPENDIX C: MANAGEMENT AND MONITORING TIMETABLE

	Action	Timing	Year										
			1	2	3	4	5	6	7	8	9	10	
Bat boxes	Installation	Pre- OR mid-construction											
	External inspection	Annually	X	X	X	X	X	X	X	X	X	X	X
	Replacement	As required (after consultation with ecologist)											
Bird boxes	Installation	Pre- OR mid-construction											
	External inspection	Annually	X	X	X	X	X	X	X	X	X	X	X
	Replacement	As required (October-February)											
Red squirrel nest boxes	Installation	Pre- OR mid-construction											
	External inspection	Annually	X	X	X	X	X	X	X	X	X	X	X
	Replacement	As required (after consultation with ecologist)											

Neilston Greener Grid Park S.36 Application
 Biodiversity Enhancement and Management Plan (BEMP)

	Action	Timing	Year										
			1	2	3	4	5	6	7	8	9	10	
Invertebrate houses / hotels	Installation	Pre- OR mid-construction											
	External inspection	Annually	X	X	X	X	X	X	X	X	X	X	X
	Replacement	As required											
Hedgehog Highways	Installation	Mid-construction											
Hedgehog nest boxes	Installation	Pre- OR mid-construction											
	External inspection	Annually	X	X	X	X	X	X	X	X	X	X	X
	Replacement	As required											
Herpetofauna hibernacula / refugia	Installation	Pre- OR mid-construction											