



Uskmouth BESS

Landscape and Ecology Management Plan (LEMP)

R02

17 April 2025

Prepared on behalf of SAE Renewables

Uskmouth BESS

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This LEMP has been prepared by:



With input from Tetra Tech:



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Prepared by: Christine Vundamina CMLI (Tir Collective) Fraser McCarter (Tetra Tech)		Checked by: Lee Morris CMLI (Tir Collective)	Approved By: Lee Morris CMLI (Tir Collective)
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1.0 Introduction

1.1 Background

- 1.1.1 Tir Collective has been instructed by SAE Renewables to prepare this Landscape and Ecological Management Plan (LEMP) with Ecology input from Tetra Tech, and other specialists on the project team. The LEMP relates to the proposed BESS on land at Uskmouth Power Station, Newport.
- 1.1.2 The LEMP provides details of mitigation and enhancement requirements during the construction, operational, and decommissioning phases, and a management framework during the operational phase. The implementation of the LEMP is central to protecting the landscape, visual and ecological importance of the Site. This document covers the operational lifetime of the project (50 years).

2.0 Scope and Aims

- 2.1.1 The aim of the LEMP is to provide details of the measures proposed to protect ecological receptors (habitats and species) and prescriptions for the creation and management of the new and retained habitats.
- 2.1.2 The LEMP should be read in conjunction with information used to support the planning application including the Preliminary Ecological Appraisal, Reptile Survey Report, and Great Crested Newt Survey Report (Tetra Tech, 2024; 2025a; 2025b) and the detail provided on the Landscape Masterplans drawings, included in **Appendix 4** of this report:

- **L.100: Landscape Masterplan**

2.2 The Site

- 2.2.1 The site is located immediately to the south of Uskmouth Power Station, along the southern side of the Usk River. Newport docks is circa 1.1km to the north of the site, along the north side of the Usk River. Newport City centre is circa 5km to the north of the site.
- 2.2.2 The site comprises a large sized rough grassland/scrub field, containing stored ash, disused railway tracks and an area of storage. Boundaries are largely lined by mature scrub, corrugated fence and wire fences.
- 2.2.3 The site field forms part of Uskmouth Power Station along the edge of the Usk River. The landscape that contains the site is heavily influenced by industrial activity and energy production. The site field is large and regular in shape, with boundaries that follow the internal tracks of Uskmouth Power Station to the northwest, east, south and west. The northeast boundary is defined by a scrub and corrugated fence and wire fence.

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- 2.2.4 The site is situated on the relatively flat banks of the Usk River and contains a large area of Ash storage in the west and an area of storage in the northeast. The highest point of the site is in the centre of the western part of the site with a high point of 15m AOD (Above Ordnance Datum). The site falls in a northerly direction with a low point of 8m AOD in the east.
- 2.2.5 A line of pylon towers and overhead cables crosses the site in its eastern extents and a further set of pylon towers and overhead cables crosses the landscape immediately to the east and west of the site.

2.3 Development Proposals

- 2.3.1 The proposed BESS would involve the installation of 168 battery units (also known as Battery Energy Storage System (BESS), HV substation for a temporary period of 50 years, associated infrastructure and environmental benefits, as shown on the overall landscape masterplan drawing **L.100 in Appendix 4**.
- 2.3.2 Access to the battery storage area would be provided by an existing access track to the west and south of the battery storage area

3.0 Landscape Design Concepts

3.1 Key design concepts

- 3.1.1 The below list defines the key landscape design concepts which have guided the preparation of the landscape proposals.
- 3.1.2 Protection of retained habitats, which are of ecological and nature conservation interest, including retention of existing trees and mature scrub, where possible and enhancement / creation of ecologically valuable habitats and features, including:
- Retention and protection of existing trees and vegetation along site boundaries.
 - A suitable buffer established around the root protection zone of each tree/ tree group to be retained.
 - Creation of buffers to boundaries, ditches and ponds, between sensitive boundary habitats and development footprint.
 - Some native shrub planting is proposed along the site boundaries to help screen and filter views of the proposed development. Species chosen will be native species of local provenance.
 - Creation of areas of species-rich grassland in site margins around the BESS installation.
 - Creation of a species-rich grassland understorey to mature scrub.

- 3.1.3 The management and maintenance objectives have been formulated to achieve and fulfil the overall design concepts.

3.2 Design objectives

- 3.2.1 Design objectives aim to establish planting to:

- Reduce the visual impact of the proposed development when viewed from publicly accessible locations.
- Reduce the visual impact of the development when viewed from public rights of way.
- Protect, enhance and maintain any retained habitats and the wildlife they support.

3.3 Phases of Development

- 3.3.1 The phasing regime for habitat creation / enhancement will be carried out as follows:

- **Phase 1:** Planting to be carried out in the first season following construction completion (see Appendix 4 drawings)
- **Phase 2:** Ongoing habitat management, native tree and shrub planting management, years 2-40 (refer to Sections 5.0 Protection Measures, Management Objectives and Prescriptions and 8.0 Annual Maintenance Schedule).
- **Phase 3:** Reinstatement / restoration and ongoing landscape and ecological management specification (refer Section 9.0 Restoration).

3.4 Management objectives

- 3.4.1 Management objectives will involve short term and long-term commitments to achieve and fulfil the overall design concepts.

Short term objectives (0-5 years):

- Successfully establish planting;
- Remove undesirable species/weeds from the planting areas e.g. buddleia and sea buckthorn;
- Invasive giant hogweed control and eradication plan to fully remove the species from the site and prevent spread of species offsite (specialist contractor required);
- Replace dead plants within the structure planting where necessary;
- Provide sufficient resources including necessary labour, materials and machinery;
- Protect and maintain retained existing habitats of high ecological value e.g. trees and ponds;

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- Provide artificial hibernacula for reptiles and great crested newts.

Long term objectives (5-50 years):

- To carry out periodic maintenance as necessary;
- Overall, maintain and enhance the biodiversity and ecological value of the site.

3.4.2 With all aspects of landscape management, it is essential that the principle of an 'on-going commitment' is established and that sufficient resources are made available to ensure continuity.

3.5 Maintenance objectives

3.5.1 Maintenance objectives will include planting checks through the growing season and maintenance to ensure that the planting is establishing and is consistent with the original design intentions. This will involve continuous / ongoing routine operations throughout the year, for which a detailed maintenance schedule is to be followed.

3.6 Monitoring

3.6.1 Monitoring is an essential element of the plan to ensure that the results of any management work are measured and evaluated. Monitoring reports will be provided to the Local Planning Authority (LPA). Any lessons learnt from this monitoring can then be reflected in a review of the management plan (to be agreed with the LPA), which should normally be made every five years.

4.0 Site description

4.1 Appraisal

4.1.1 An extended Phase 1 habitat survey of the site was undertaken on 12th November 2024 by Principal Ecologist Becca Grainger-Wood of Tetra Tech Ltd. The survey was completed in accordance with the JNCC Handbook for Phase 1 habitat surveys¹, with the methods being extended to include a general evaluation of potential habitats for any protected or valued species.

4.2 Habitats

4.2.1 Habitats present on site include the following and further details of these are provided below:

- Ephemeral/short perennial on disturbed land;

¹ <https://data.jncc.gov.uk/data/9578d07b-e018-4c66-9c1b-47110f14df2a/Handbook-Phase1-HabitatSurvey-Revised-2016.pdf>

- Semi-improved neutral grassland
- Tall ruderal
- Dense scrub
- Scattered scrub
- Standing Water (ponds)
- Wet ditch
- Broadleaved individual tree

Ephemeral/short perennial

- 4.2.2 Ephemeral short perennial growing between areas of scrub, along the rail tracks, and within the ash storage structure. Species and habitat of limited ecological importance but may support some invertebrate species.

Semi-improved Neutral Grassland

- 4.2.3 Common grassland species growing in eastern extent of site adjacent to rail tracks. Limited ecological importance.

Tall Ruderal

- 4.2.4 Tall ruderal/early colonising species providing some structure to overgrown vehicle tracks. Limited ecological importance.

Dense Scrub

- 4.2.5 Impenetrable areas of scrub around ponds in the south-west of the site comprised predominately of buddleia, bramble, willow, and dogwood. Common in local area but provides cover for reptiles and small mammals, and nesting habitat for birds.

Scattered Scrub

- 4.2.6 Less dense stands of non-native buddleia and sea buckthorn present along the rail track on the northern boundary of the site. Scrub is of low ecological value but provides some value to invertebrates and foraging birds.

Standing Water

- 4.2.7 Two ponds in south-western extent of the site, connected by a large pipe. Ponds are well-established with emergent vegetation, grasses and rushes and well-vegetated banks (dense scrub). Ponds have some algae blooms which may indicate high level of nutrients. Ponds are

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generally shallow and appear to always hold water with a permitted discharge into a ditch with connectivity to the wetlands to the south.

Wet ditch

- 4.2.8 A concrete lined ditch is present along the western and southern boundary of the ash storage area. Holds water along most of its length but likely to dry up during periods of low rainfall. Bullrush, common reeds, and algae are growing in some stretches of the ditch.

Broadleaved individual tree

- 4.2.9 Five trees are present along the overgrown track in the south-western extent of the site. They provide suitable nest building habitat for birds. The trees and root zone and should be retained and protected where possible.

4.4 Protected species

Great Crested Newts

- 4.4.1 To be confirmed once the GCN surveys are complete.

Badger

- 4.4.2 Badger are known to use the wider site for foraging, and a badger sett has been recorded within the woodland to the east of the wider site. The site provides suitable foraging and sett building habitat predominantly in the scrub habitats in the west of the site, however, no setts or badger signs (e.g. snuffle marks, latrines, runs) have been observed on site.

Bats

- 4.4.3 Common and widespread bat species are likely to use the site for commuting and foraging, particularly around the ponds and scrub in the south-west of the site. However, more suitable habitat e.g. woodland, is available offsite.

Birds

- 4.4.4 The scrub provides suitable opportunities for foraging and nesting birds, with the ponds providing potential for overwintering bird species associated with the nearby Severn Estuary Special Protection Area.

Otter

- 4.4.5 Otter have been recorded using the ditches in the wider site and the wetlands to the south of the site. The ponds offer suitable habitat for foraging otter, with the scrub providing opportunities for resting or breeding otter.

Reptiles

- 4.4.6 To be confirmed once the reptile surveys are complete. Grass snake has been recorded within the wider site and the wetlands to the south. The site itself provides suitable habitat for foraging and basking reptiles.

Invertebrates

- 4.4.7 Terrestrial habitats provide suitable habitat for common insects and other invertebrates. There is a beehive present within the scrub in the south-west which is currently active. The ponds are also likely to support aquatic invertebrates.

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Invasive Species

- 4.4.8 Stands of giant hogweed were observed in the scrub in the south-west of the site.

5.0 Proposed Habitat Enhancement / Creation

- 5.1.1 A number of habitats will be enhanced or created on site as a result of the proposals. Their extent is detailed below, and their location is illustrated in the Landscape Masterplan **Figure L.100** and **Habitat Creation Map** (ecology) (refer to **Appendix 4**).

Native tree and shrub planting

- 5.1.2 There are limited opportunities for some new species rich grassland and scrub planting along the southern site boundary. The new planting will help to screen views into the site from the surrounding landscape and to improve habitat connectivity. This will be undertaken outside the breeding bird season to avoid disturbance (March to September (inclusive)).
- 5.1.3 Scrub will comprise of a mixture of locally sourced native species such as the following species:

Trees/shrubs

- Hawthorn *Crataegus monogyna*
- Blackthorn *Prunus spinosa*
- Elderberry *Sambucus nigra*
- White willow *Salix alba*
- Osier willow *Salix viminalis*
- Goat willow *Salix caprea*
- Dogrose *Rosa canina*
- Guelder rose *Viburnum opulus*

Species Rich Grassland

- 5.1.4 Species-rich grassland will be sown along the margins of the BESS development. Emorsgate's 'Meadow Mixture for Chalk and Limestone Soils EM6' seed mix (or similar in terms of species mix) will be used.
- 5.1.5 The creation of a more flower-rich sward in the above areas will result in a locally-significant positive impact in terms of habitat quality, which is likely to be reflected in more abundant and varied invertebrate fauna, which in turn will provide better-quality foraging resources for

bats and birds. Better commuting / foraging opportunities will also be created for mammals such as badger, hedgehog *Erinaceus europaeus* and brown hare *Lepus europaeus*.

Scrub

- 5.1.6 Native scrub will provide nesting and foraging opportunities for a variety of vertebrates and invertebrates.

6.0 Habitat Protection Measures, Management Objectives and Prescriptions

- 6.1.1 The following details the protection measures for the existing retained habitats and prescriptions for the enhancement and creation of the new habitats, in addition to the ongoing management of the site during the operational phase.

Existing boundary trees and tree groups

Objectives

- 6.1.2 Retained trees will be protected during construction operations following the BS5837:2012 "Trees in Relation to Design, Demolition and Construction – Recommendations".
- 6.1.3 Ongoing management of trees will aim to promote mature trees, including dead-wood habitat.

Management Prescriptions

- 6.1.4 Tree management will be avoided unless there are overriding safety concerns. Where tree works are necessary, an assessment of the tree's features to support protected species will be carried out by a suitably qualified ecologist in advance. Where tree features capable of supporting protected species are to be removed, further surveys and subsequent mitigation will be necessary beforehand. These surveys and mitigation measures will follow recommended standard published guidelines.
- 6.1.5 Dead wood habitat will be maintained in situ where possible. In the event that it cannot, the wood will be placed in a specific habitat pile(s) and left to degrade naturally close to the site of felling.

Ditches/Ponds

Objectives

- 6.1.6 All retained ditches and standing water will be protected with a 10m buffer.

Protection and Enhancement Measures

- 6.1.7 All buffers will be marked out with Heras fencing (or similar) and Pollution Prevention for Businesses (2024)² will be followed to avoid run-off entering the ditches and ponds during construction. Ponds will have Heras fencing placed around them to minimise risk of impacts from construction and further details on construction exclusion zones on site to avoid impacts to ditches will be outlined within a Construction Environment Management Plan (CEMP).

Native scrub planting

Objectives

- 6.1.8 The new native tree and shrub planting along site boundaries will provide screening and also enhance vegetative connectivity along the boundaries.
- 6.1.9 Ongoing management of the native planting habitats will aim to promote structural and botanical diversity.

Creation Prescriptions

- 6.1.10 The following measures will be carried out to prepare planting areas:
- The soil will be stripped to a depth of 500mm where possible and stones of greater than 75mm will be removed;
 - Native species will be planted between mid-October and April at a depth of at least 500mm into free-draining and friable rootable soil. Soil importation may be necessary to achieve this;
 - Individual plants will be at 1m centres in single species blocks of three to ten plants. Larger specimen trees will be planted in locations as shown on the drawings.

Management Prescriptions

- 6.1.11 Management of ground vegetation should be kept to a minimum and only where vigorous growth of coarse grasses threatens to smother the transplants in the first three to four years following planting. A weed free area of at least 1 m in diameter will be maintained around trees and shrubs for the first five years. Where necessary, ground vegetation should be restricted, either through the cutting of annuals in late summer or the spot application of glyphosate to undesirable perennials.

² <https://www.gov.uk/guidance/pollution-prevention-for-businesses>

- 6.1.12 The proposed shrub species are all native and will be managed to a height of 5m to avoid overhead lines. To protect the planting, rabbit guards will be installed around the individual plants.
- 6.1.13 It will be necessary to undertake occasional formative pruning of certain shrubs; this should be done with respect to the overall form and shape of the shrub. Species selection and the location of planting should ensure that shrubs will not require severe pruning. It is not intended that the shrub planting will be cut back on a frequent basis. Where pruning occurs in the bird breeding season (March – September), works will avoid impacting active nests. If an active nest is found during pruning operations, an appropriate buffer (usually considered to be a minimum of 5m) will be established around the nest in which no works will occur until any young have fledged. The period that nests are active for varies between species of birds but can be several months.
- 6.1.14 Favoured trees should normally have full rounded crowns and any competitors should be thinned out before the favoured trees become over topped. Thinning will help trees grow faster once they have clear space around the canopy into which they can grow and will also allow for more light to filter through the trees. Thinning should be avoided during the bird nesting season, which is usually between March to September.
- 6.1.15 No fertilisers will be used as this will promote the proliferation of competitive species at the expenses of botanical diversity.
- 6.1.16 Once the area becomes established, ongoing management will follow that detailed above.

New grassland

Objectives

- 6.1.17 The new grassland habitat will be planted with Emorsgate's 'Meadow Mixture for Chalk and Limestone Soils EM6'), or similar and approved, which enhances the floral species diversity in fields previously occupied by arable habitat. It is likely soil nutrient levels will need to be reduced to allow establishment, a baseline and then further soil testing is likely to be required.
- 6.1.18 Ongoing management of the grassland will aim to maintain and promote the establishment of wildflowers associated with less intensively managed neutral grassland habitats and the wildlife these support.

Creation Prescriptions

- 6.1.19 The following measures will be carried out to prepare and sow/establish the grass and wildflower seed:
- Where competitive perennials such as couch grass are present, glyphosate will be applied as a spot application to reduce the proliferation of these species;

- A fine seed-bed with a good tilth will be created through repeated harrowing and rolling;
- Emorsgate's 'Meadow Mixture for Chalk and Limestone Soils EM6' or another neutral lowland grassland mixture with a range of grasses and forbs will be sown in spring/autumn by tractor-mounted seed broadcasters at a rate of 5g/m;
- Following sowing, the soil will be rolled to ensure good contact between the soil and the seed and to help promote rapid germination.

Management Prescriptions

- 6.1.20 Management in the first growing season will be necessary to control competitive/undesirable species. Annual species will be cut to approximately 8cm, eight weeks after sowing and perennial species will be treated by spot spraying or weed-wiping with glyphosate.
- 6.1.21 Any scrub or trees invading the grassland or encroaching towards the solar farm perimeter fence will be removed by pulling-up or cutting at the base so as to leave the soil and surrounding flora undisturbed. This will be undertaken annually.
- 6.1.22 All tree and shrub removal should be undertaken outside of the bird nesting season (March-September). If unavoidable, a thorough check of the site for nesting birds should be undertaken prior to any works affecting vegetation. Any active nests found must be retained in situ with a suitable vegetative buffer, until the ecologist confirms that the nest(s) are no longer active. Only then can vegetation clearance within this area resume.
- 6.1.23 No fertilisers will be used as this will promote the proliferation of competitive species at the expense of botanical diversity.

7.0 Species Protection Measures

- 7.1.1 Vegetation clearance is recommended to be completed outside of bird nesting season (March to October inclusive). If clearance during this time is not possible, it is recommended that a check for nesting birds is undertaken 48 hours prior to clearance. If an active bird's nest is found, a buffer will be applied to the nest until the young have fledged.
- 7.1.2 Protection measures to be confirmed following reptile surveys.
- 7.1.3 Protection measures to be confirmed following GCN surveys. If GCN are found to be on site, a license will be required from Natural Resources Wales (NRW) to mitigate for impacts to GCN.
- 7.1.4 If an active badger sett is found to be on site during vegetation clearance, all works must cease and a licence from NRW will be required to continue.

8.0 Monitoring

- 8.1.1 The monitoring commitment for proposed scheme is five years post construction of the solar farm then once every five years.
- 8.1.2 An annual assessment of the habitats will be carried out by suitably qualified ecologist and landscape architect in June to establish the extent of the habitats, their species composition and their general condition.
- 8.1.3 A monitoring report will be compiled which reviews the aims and the management prescriptions against the site conditions. Monitoring reports will be provided to the LPA. The management prescriptions may therefore change where necessary to ensure that habitats and protected species are favourably conserved on site.

9.0 Annual maintenance

9.1 Maintenance programme

- 9.1.1 The annual maintenance programme for the site will be carried out in line with the following programme to ensure that the maintenance works is carried out at the most beneficial time. For all seasons, the following will need to be undertaken:
- Inspections;
 - Watering – may be necessary during the establishment period or through periods of drought to ensure the planting/grass areas continue to thrive; and
 - Pest and disease control.

Table 8-1 Timetable for Implementation and Habitat Management

Action	January	February	March	April	May	June	July	August	September	October	November	December	Notes
Pre-construction													
Toolbox talk													To all construction staff prior to any works commencing
Erection of tree protective fencing													Prior to any works commencing
Construction and Operation													
Prune native shrub planting													

Action	January	February	March	April	May	June	July	August	September	October	November	December	Notes
Clearance of scrub encroachment into grassland													
Creation of reptile hibernacula													Any time of year
Installation of bat / bird boxes													Ahead of the breeding season
Bat / bird box and reptile habitat condition checks													Visual check only. Habitat must not be disturbed.

9.2 Annual maintenance schedules

Table 8-2 Annual Maintenance: Native shrub and tree planting

Action	Details	Timing	Standard
Weed control	Apply a herbicide to kill re-growth when required.	February; April; May; July; September	Refer to Appendix 1 : Q35/ 645; 650; 657; 670
Pest and disease control	To be carried out if necessary and in accordance with best practice.	When required	To eradicate all pests and disease to a high standard
Pruning	At the appropriate season for the species, pruning to be carried out to remove all damaged diseased or dead wood. To be commenced from year 5.	February – October Where pruning occurs in bird breeding season (Mar – Sept), works must avoid impacting nests	Shrubs : Prune to ensure the plant is kept well balanced and in good shape. Refer to Appendix 1 : Q35/ 170; 540; 545; 550; 575; 580

Tree thinning	Once every five years, to stop favoured trees becoming suppressed and weakened by other vegetation.	Avoid nesting season between March-Sept	Refer to Appendix 1: Q35/715
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Table 8-3 Annual maintenance: Improved/species rich grassland

Action	Details	Timing	Standard
Pest and disease control	To be carried out if necessary and in accordance with best practice	When required	To eradicate all pests and disease to a high standard
Scrub removal	Remove by pulling or cutting at the base so as to leave the soil and surrounding flora undisturbed	Annually	

10.0 Restoration

- 10.1.1 After 40/50 years of operation the BESS will be restored to its original condition, with the exception of new areas of wildlife habitat which have been created, which will be retained.
- 10.1.2 It is recommended that prior to the restoration the ecological and landscape value of the pre-restored site is appraised by a suitably qualified ecologist and landscape architect.
- 10.1.3 Habitats created/maintained in the 50 year period have the potential to be ecologically valuable and support protected species and as such the restoration impacts should be assessed in advance of works commencing as mitigation may be required.

Appendices

Appendix 1: Maintenance Specification Q35

Generally

- 110 NOTICE: Give notice before:
- Application of herbicide.
 - Application of fertilizer.
 - Watering.
 - Each site maintenance visit.
 - Period of notice: 1 week before site visit.
- 130 REINSTATEMENT: Damage or disturbance to soil structure, planting, grass: Reinstate to original condition and within a reasonable period of time (according to season).
- 140 CONTROL OF MAMMALIAN PESTS: Employ only approved firms and methods.
- 155 WATERING
- Supply: Potable mains water.
 - Quantity: Ensure the full depth of topsoil is thoroughly wetted.
 - Application: Do not damage or loosen plants. Use a fine rose or low-pressure hose where appropriate to avoid damaging or loosening plants.
 - Compacted soil: Where necessary, loosen soil or form depressions around the stem base of plants to ensure that water reaches the root zone instead of dispersing on the surface.
 - Frequency: As necessary for the continued thriving of all planting/grass areas.
- 160 WATER RESTRICTIONS: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.
- 170 DISPOSAL OF ARISING GENERALLY: unless specified otherwise, dispose of arisings from all specified operations by removing from site.
- 180 CHIPPING OR SHREDDING: Not permitted on site.
- 197 CLEANLINESS: Leave the works in a clean, tidy condition at completion and after any maintenance operations.

Existing grassland Areas

- 210 MAINTENANCE OF GRASS AREAS: Maintain grass in a manner appropriate to the intended use. Carry out the following as necessary:

- Grass height: to be maintained with Low-intensity sheep grazing on rotation, leaving some grassland within field units free to flower and set seed throughout spring – summer.
- Condition: Maintain grass in a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
- Water logging and compaction: ensure that soil and grass does not become compacted or waterlogged.

New grassland areas

222 MAINTENANCE OF IMPROVED/ SPECIES RICH GRASS AREAS:

- Grass height: to be maintained with Low-intensity sheep grazing on rotation, leaving some grassland within field units free to flower and set seed throughout spring – summer.
- Condition: Maintain grass in a healthy sward, free from disease, fungal growth, discolouration, scorch or wilt.
- Water logging and compaction: ensure that soil and grass does not become compacted or waterlogged.

273 MAINTENANCE OF RHYNE/HEDGEROW BUFFERS: Carry out the following:

- Times of year/frequency of cutting: October to March
- Height of cut: 80mm eight weeks after sowing in first year; subsequent years 150mm, with exception of vegetation 2m radius around refugia, which will not be cut.
- Arisings: Cuttings will be left to dry and shed seed for approximately one to seven days and the resulting cuttings removed from the site and composted.

275 MAINTENANCE OF TUSSOCKY/NECTAR RICH PLANTING: Carry out the following:

- Times of year/frequency of cutting: October to March
- Height of cut: 80mm eight weeks after sowing in first year; subsequent years 150mm, with exception of vegetation 2m radius around refugia, which will not be cut.
- Arisings: Cuttings will be left to dry and shed seed for approximately one to seven days and the resulting cuttings removed from the site and composted.

Native Shrubs / Trees

500 ESTABLISHMENT OF NEW PLANTING

- Duration: 0-5 years.
- Weed control: refer to Q35/645; 650; 657; 670.

- Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
- 510 TREE STAKES AND TIES (IF REQUIRED): Inspect as scheduled and additionally immediately after strong winds, and carry out the following:
- Check stakes for looseness, breaks and decay and replace as necessary to original specification. If a tree with a defective stake has grown sufficiently to become self supporting, remove stake(s) and fill the hole(s) with lightly compacted soil.
 - Adjust, refix or replace loose or defective ties as necessary, allowing for growth since planting and to prevent chafing. Where chafing has occurred, reposition or replace ties to prevent further chafing.
 - Where stakes are longer than half the height of the clear stem of the tree, cut the stake to this height in spring and retie to tree firmly but not tightly with a single tie.
 - Remove redundant tapes, tags, ties, labels and other encumbrances.
 - Remove stakes and ties during spring when no longer required to support tree.
- 520 REFIRMING: Ensure that trees and shrubs remain firmly bedded after strong winds, frost heave and other disturbances. Refirm by treading around the base. 'Collars' at the base of tree stems created by tree movement to be broken up by fork, avoiding damage to roots, backfilled with topsoil as necessary, and refirmed.
- 530 TREE SHELTERS: Adjust, refix or replace any loose or defective guards to original specification and to prevent chafing. Remove tree shelters and dispose off site once trees / shrubs are fully established.
- 540 PRUNING GENERALLY:
- Prune in accordance with good horticultural practice. Prune larger branches and woody stems in accordance with good arboricultural practice.
 - Thin, trim and shape appropriately to each species, location, season, and stage of growth, leaving a well balanced natural appearance.
 - Use clean sharp secateurs, hand saws or other tools to carry out works. Trim off ragged edges of bark or wood with a sharp knife.
 - Remove branches without damaging or tearing the stem.
 - Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
 - Prune larger branches neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

545 PRUNING OF EXCESSIVE OVERHANG: Remove annually any growth encroaching onto grassed areas.

550 PRUNING OF EXCESSIVE HEIGHT: Remove excessive height of more than five metres within the edge mix, and eight metres within woodland mix and dispose off site.

570 FORMATIVE PRUNING OF YOUNG TREES:

- Do not prune whips or feathered trees.
- Type and timing of pruning operations to be carried out to suit the plant species.
- Do not prune during the late winter/early spring sap flow period, unless specified otherwise.
- Crown prune young trees up to 4 m high by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head, ensuring the development of a single strong leader and the removal of duplicated branches and potentially weak or tight forks. In each case cut back to live wood.

580 PRUNING FLOWERING SPECIES: Unless otherwise specified or instructed, prune:

- Winter flowering shrubs in spring.
- Shrubs flowering between March and July immediately after the flowering period.
- Shrubs flowering between July and October back to old wood in winter.

611 TRIMMING ESTABLISHED HEDGES:

- Time of year: January/February.
- Operations:
- Form: Trim carefully and neatly to regular line and shape with vertical sides.
- Trim: Remove current growth rather than old wood.
- Tools/ Cutting: suitable mechanical cutters.

620 REMOVAL OF DEAD PLANT MATERIAL: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

635 REINSTATEMENT OF PLANTING AREAS:

- Remove dead and damaged plants
- Carefully move any mulch materials to one side and dig over the soil, leaving it fit for replanting. Take care not to disturb roots of adjacent plants.
- Replace plants, using pits and plants to the original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.
- Dress with Enmag slow release fertilizer at 70g/sq m.

645 WEED CONTROL GENERALLY:

- Remove and/or prevent plant growth that is not required in the landscape to achieve the following level(s) of weed control: 90% control; no weed species in excess of 150mm high.
- Ensure that the methods used cause the minimum of damage to adjacent plants, trees or grass.
- All tree and shrub planting to be maintained weed free throughout planting area.

650 HAND WEEDING: Remove all weeds, including roots, by hand using hoes, trowels or forks, taking care to remove not more than a minimum quantity of soil, causing minimum disturbance to trees, plants, mulched surfaces and leaving the area in a neat, raked, clean condition.

657 HERBICIDE TO KILL REGROWTH:

- Apply a suitable foliar acting herbicide to kill regrowth.
- Allow the recommended period before clearing arisings.

670 WEED CONTROL WITH SUMMER HERBICIDE:

- Apply a suitable foliar acting herbicide.
- Re-apply as necessary to maintain required level of weed control.
- Allow the recommended period before clearing arisings.

680 SOIL AERATION: Prick up trodden or otherwise compacted soil surfaces using a border fork as specified in BS 7370: Part 4, to aerate the soil of root areas. Do not damage plants and their roots.

690 MAINTENANCE OF MULCH:

- Top up with Melcourt Forest Biomulch to thickness of 50mm.
- Sweep up and replace mulch spilling onto adjacent areas and, if not contaminated with weeds or rubbish, return to planted area.
- Remove weeds growing on or in mulch by hand weeding or herbicide.

710 NATIVE TREE AND SHRUB PLANTING MAINTENANCE

- Watering: In exceptional circumstances to prevent plants dying.
- Loose plants: Refirm surrounding soil, without compacting.
- Vegetation: Except trees and coppice shoots to be retained, cut down to 5m in edge mix area and 8m in woodland mix area.
- Arisings: Leave between rows.
- Ditches and drains: Keep clear.

715 NATIVE TREE AND SHRUB THINNING: Thin out the northern edge of the existing woodland, every five years, by removing dead/dying trees and favouring straight, upright trees. Prune low branches along the northern edge. Allow the removal of branches to be left on woodland floor to decay and return nutrients into the soil. Avoid thinning during the bird nesting season (generally March-September).

Tree work

810 TREE WORK GENERALLY

- Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
- Standards: To BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- Removing branches: Cut as shown in Arboricultural Association Leaflet No 8 'Mature tree maintenance'. Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
- Appearance: Leave trees with a well balanced natural appearance.
- Chain saw work: Operatives must hold a Certificate of Competence.
- Tree work: To be carried out by an approved member of the Arboricultural Association.

815 ADDITIONAL WORK

- Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.

820 PREVENTION OF WOUND BLEEDING

- Standard: To BS 3998, clause 8.

825 PREVENTION OF DISEASE TRANSMISSION

- Standard: To BS 3998, clause 9 and Appendix B.

830 CLEANING OUT AND DEADWOODING

Remove:

- Rubbish, wind blown or accumulated in branch forks.
- Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- Other unwanted objects, e.g. tree houses, swings.

835 CUTTING AND PRUNING GENERALLY

- Tools: Appropriate, well maintained and sharp.

Final pruning cuts:

- Chainsaws: Do not use on branches of less than 50 mm diameter.
- Hand saws: Cut in one continuous operation to form a smooth cut surface.
- Anvil type secateurs: Do not use.

Removing branches: Do not damage or tear the stem.

- Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
- Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.

Large branches: Remove in small sections and lower to ground with ropes and slings.

- Dead branches and stubs: When removing, do not cut into live wood.
- Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
- Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

840 CROWN REDUCTION/ SHAPING

- General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.

845 CROWN LIFTING

- Clearances: Remove branch systems to give clearance.
- Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

850 CROWN THINNING

- Removing branches: Remove inward growing, crossing, rubbing, dead and damaged branches.
- Thinning: Selectively remove approximately 2.0 metres of secondary and small live branch growth evenly throughout the crown.
- Branches: Cut back to lateral or sublateral buds or branches without leaving stumps.
- Appearance: Leave a uniform and well balanced structure of branches and foliage

855 CUTTING TREE ROOTS

- Excavating: Use hand tools only.
- Protected area: Do not cut roots within an area which is the larger of:

- The branch spread of the tree.
- An area with a radius of half the tree's height, measured from the trunk.
- Outside protected area: Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.

Cutting:

- Make clean smooth cuts with a hand saw.
- Wounds: Minimize. Avoid ragged edges.
- Finishing: Pare cut surfaces smooth with a sharp knife.

Backfilling:

- Protection: Cover cut roots with clean sharp sand.
- Material: Backfill with original topsoil.

860 REMOVING TREES

- Standards: To BS 3998, Appendix A and Health & Safety Executive (HSE)/ Arboricultural and Forestry Advisory Group Safety Leaflets.
- Existing services: Check for below and above ground services. Give notice if they may be affected.
- Shrubs and smaller trees: Cut down and grub up roots.

Tree stumps:

- Removal by winching: Give notice. Do not use other trees as supports or anchors.
- Work near retained trees: Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.

Filling holes:

- Material: Use as-dug material and/ or imported soil as required.
- Finishing: Grade to marry in with surrounding ground level

865 BARK DAMAGE

Wounds:

- Bark: Gently remove ragged edges using a sharp knife.
- Wood: Remove splintered wood from deep wounds.
- Size: Keep wounds as small as possible.

870 CAVITIES IN TREES

- Investigation: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
- Water filled cavities: Do not drain.
- Sound wood inside cavities: Do not remove.



Appendix 2: Drawings

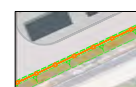
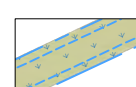
- L.100: Landscape Masterplan

Uskmouth BESS

Landscape masterplan

LA.100

Key

-  Site boundary
-  Proposed BESS Units
-  Proposed BESS security fence
-  Proposed substation
-  Proposed substation security fence
-  Proposed access track
-  Existing Ponds
-  Existing pylons with overhead cables through site shown as white lines
-  Existing trees to be retained, Root Protection Areas shown as orange line
-  Proposed swale seed mix: EM8 Meadow Mixture for Wetlands or similar and approved
-  Proposed meadow grass mix: EM1 Basic General Purpose Meadow Mixture or similar and approved
-  Proposed native scrub planting mix
-  Proposed native shrub planting

- A minimum of 150mm to 300mm of suitable low-fertility topsoil will be provided on proposed slopes to support species rich grass / meadow establishment.
- A minimum of 300mm to 600mm of suitable topsoil will be provided for proposed native shrub planting to support healthy establishment and growth.
- A minimum of 300mm to 500mm of suitable moisture-retentive topsoil will be provided in the swale to support the establishment of the proposed wetland meadow mix.

0 10 20 30 40 50m

Scale 1:750

TC24293_LA100v1.dwg



April 2025

