

Land South of Bryn Lane, Wrexham

Landscape and Ecological Management Plan

Prepared For: Mauna Kea Limited

Document Reference: 10204.004

August 2025

Version 2.0

TEP
401 Faraday Street
Birchwood Park
Warrington
WA3 6GA
Tel: 01925 844004
Email: tep@tep.uk.com
Offices in Warrington, Market Harborough, Gateshead, London and Cornwall

Document Title	Landscape and Ecological Management Plan
Document Ref	10204.004
Version	Version 2.0
Prepared For	Mauna Kea Limited

Author	Rebecca Martin
Date	24th July 2025
Checked	Maggie Fennell Wells
Approved	Rick Tomlinson

Amendment History

Version	Date	Modified by	Check/ Approved by	Reason	Status
1.0	24.07.25	R.Martin	R.Tomlinson	Initial issue	Superseded
2.0	19.08.25	I.Graham	R.Martin	Amendments following client comment.	Issued

Contents

1.0 Introduction 3
2.0 Site Management Considerations 6
3.0 Ecological Factors 9
4.0 Management Intentions and Operations 15
5.0 Monitoring and Review 33

Tables

Table 1: Key Measures for Monitoring 33

Appendices

Appendix A: Landscape Masterplan (TEP ref: Soft Landscape Design (Nicholsons ref: 1059-01-NLD.151, V4.0)

Appendix B: Landscape Maintenance Schedules

Appendix C: Legislation Context

1.0 Introduction

Purpose of the Management Plan

1.1 This Landscape and Ecological Management Plan (LEMP) has been produced by The Environment Partnership (TEP) Limited on behalf of Mauna Kea Limited to provide a framework for long term habitat management and maintenance of the landscaping associated with the warehousing at Land South of Bryn Lane, Wrexham (hereby referred to as the 'Site').

1.2 This LEMP will inform the long term management of the Site.

Scope of the Management Plan

1.3 This LEMP covers all areas of open space within the Site. It excludes the proposed buildings which are to be maintained by the property occupiers. It describes the Site in terms of landscape elements and management operations and provides a framework for the long-term landscape management and maintenance of the habitats, open space and landscaping.

1.4 This LEMP should be read in conjunction with the Soft Landscape Design (Nicholsons ref: 1059-01-NLD.151, V4.0), the Ecological Impact Assessment (TEP ref: 10204.002 V5.0), and the Planting Schedule (Nicholson ref: 1059-01-NLD.151 V2.0).

Structure of the Management Plan

1.5 Chapter 2.0 provides a summary of the factors influencing management and a site analysis. Chapter 3.0 outlines the long-term aims and objectives for management and Chapter 4.0 sets out how the success of the plan will be monitored, reviewed and updated over time.

1.6 Appendix A is the Soft Landscape Design (Nicholsons ref: 1059-01-NLD.151, V4.0) Appendix B provides a table of maintenance operations and Appendix C summarises relevant legislation.

Site Location

1.7 The Site lies within the Wrexham Industrial Estate and is bound by Bryn Lane to the north, and commercial space to the east, south and west. Warehouses adjacent to the Site are used for leisure, recreation, distribution, manufacturing and storage alongside the Kellogg's factory.

Planning and Development Context

1.8 A Full planning application (ref: P/2025/0143) has been submitted to Wrexham County Borough Council (WCBC) for the demolition of existing structures at the Site, and the erection of employment facilities (class B2/B8) with ancillary accommodation (class B1A), landscaping, parking, access and other associated works.

1.9 This LEMP has been written to address comments from Natural Resources Wales (NRW) dated 26 June 2025 in regard to the planning application. NRW has requested further information in relation to Great Crested Newt (GCN) Conservation including:

- *The submission of a long-term site management plan (not less than 25 years) that includes:*
- *details of habitats and ecological features present or to be created, both in written form and shown on appropriate drawings, including planting plans*
- *defined aims and objectives (including defined key performance indicators for long term monitoring indicators)*
- *details of the desired condition for each habitat and criteria to determine when habitats have achieved this.*
- *details of short and long-term habitat management prescriptions to both achieve and maintain the desired condition.*
- *details of monitoring methodologies for habitat(s) and species*
- *details of scheduling and timings of activities*
- *contingency measures if fish or invasive non-native species (INNS) are detected.*
- *current and any proposed changes to the freehold tenure of the compensation area (tenure of the ecology and heritage area to be approved by the Local Planning Authority)*
- *persons or bodies responsible for undertaking management and surveillance together with required skills and competencies*
- *site liaison and wardening*
- *licensing requirements for management surveillance and other defined activities*
- *biosecurity measures which consider invasive non-native species including*

- *Crassula helmsii already confirmed on site and specific diseases (e.g., Chytrid) to prevent the introduction of and where present control, removal or for the long-term management of invasive species both during construction and operation.*
- *details of reporting, review and update of the plan (informed by monitoring) at specific intervals as agreed.*

2.0 Site Management Considerations

Responsibility for Site Management

2.1 During the defects liability period, landscape maintenance and replacement of failed planting will be completed by the landscape contractor who has implemented the scheme.

2.2 Following the defects liability period, Mauna Kea Limited will employ a managing organisation who will be responsible for operational management and maintenance of the landscape within the Site.

2.3 The managing organisation will require the necessary experience and certificates of competence to undertake landscape management operations on site. Where practical, contractors with experience in biodiversity management will be sought. The managing organisation will ensure that management complies with the guidelines set out in this Plan.

2.4 To ensure the Site is managed for the favourable condition of wildlife, including GCN which are protected under the Conservation of Habitats and Species Regulations 2017 (as amended), contractors with experience in biodiversity management will be sought.

2.5 The managing organisation will ensure that site management complies with the guidelines set out in this plan.

2.6 Mauna Kea Limited agree to enable access to the site for management as detailed within this LEMP and for the minimum period of 25 years. Should tenure change WCBC will be informed of future proposals.

2.7 In the event of corporate takeover, loss of trading and insolvency the mitigation will remain in situ and any future landowners will abide by maintenance proposals outlined in this LEMP. A scheme shall be submitted to the satisfaction of NRW that identifies measures that will enable regulatory bodies, or individuals or bodies authorised by relevant regulatory bodies, to, in the event of lack of or inappropriate surveillance and/or management, carry out any remediation management works and/ or surveillance).

Health and Safety

2.8 Mauna Kea Limited will retain ultimate responsibility for the health and safety of the Site until such time as the open space and landscaping associated is transferred to a managing organisation(s). The Site will be subject to informal inspections and a

formal annual inspection. Whenever the Site is visited, any deficiencies in safety provision will be noted and acted upon.

2.9 The appointed managing organisation is responsible for complying with the provisions of the Health and Safety at Work Act 1974. All machinery and apparatus brought onto the Site shall be safe and maintained to a standard that will not breach provisions within the Health and Safety at Work Act 1974 or any other statutory obligations.

2.10 The managing organisation shall be adequately trained and sufficiently competent to carry out maintenance operations without causing a Health and Safety risk to themselves or other uses of the Site.

2.11 All works shall be undertaken in accordance with the relevant codes of practice. Appropriate machinery shall be used inclusive of adequate personal protective equipment to avoid harm to themselves or any other persons.

Biosecurity

2.12 The management organisation should have a sufficient awareness of new and ongoing biosecurity threats, and the necessary precautions to avoid their spread should be undertaken on sites where they are known or suspected.

2.13 Crassula hemlmsii is known to be present within the site and biosecurity measures should be undertaken as detailed within Chapter 3 of this LEMP.

2.14 New findings of suspected non-indigenous plant pests and diseases should be reported to the Plant Heath and Seeds Inspectorate or Forestry Commission - Forest Research Tree Health Diagnostic and Advisory Service or both.

Management Objectives

2.15 The long-term management objectives of this plan are:

- To ensure the long-term success of the proposed development through effective management;
- To ensure the scheme is successfully maintained;
- To safeguard and enhance the biological and physical integrity of the Site;
- To ensure that retained and newly created habitats within the open spaces and wildlife corridor are managed to enhance their biodiversity and connectivity as foraging and commuting habitat for high value wildlife;
- To ensure no harm is brought to any GCN within the site during and post-development;

- To ensure new planting establishes to create a high-quality landscaping scheme to provide an attractive and desirable setting to the development; and
- To comply with legal obligations and constraints.

Social Factors

Public Amenity

2.16 There is limited public access to the Site via the access road and car parking areas.

Accessibility

2.17 The main vehicular and pedestrian access is via Bryn Lane to the north of the Site .

Legal Factors

2.18 Management of the Site must be in line with all legislation relating to health and safety and the environment. A review of the relevant legislation affecting site management is at Appendix C.

3.0 Ecological Factors

3.1 The information within this Chapter provides information on ecological factors and demonstrates how retained features of ecological/wildlife interest will be successfully managed.

Designations

3.2 The following statutory nature conservation designations are within 5km of the Site:

- Afon Dyfrdwy a Llyn Tegid (Wales) Special Area of Conservation (SAC) - 3.5km east of the Site;
- Afon Dydrdwy (River Dee) (Wales) SSSI - 3.1km east of the Site;
- Midlands Meres and Mosses Phase 2 Ramsar site - 3.5km to the north west of the Site;
- Johnstown Newt Sites (Wales) SAC - 8km southwest of the Site;
- River Dee and Bala Lake (England) SAC - 8.4km northeast of the Site;
- Vicarage Moss SSSI - 3.7km north west of the Site;
- Dee Cliffs, Farndon (England) SSSI - 4.4km northeast of the Site; and
- Sontley Marsh (Wales) SSSI - 5km southwest of the Site.

3.3 There are two non-statutory local wildlife sites (LWS) within 1km of the Site:

- Wrexham Industrial Estate LWS - 0.6km southwest of the Site; and
- Cefn Park - 1.5km southwest of the Site.

Habitats and Species of Principal Importance in England

3.4 The Environment Act (Wales) 2016 requires a list of habitats and species of principal importance in Wales to be drawn up.

3.5 Local Biodiversity Action Plans (BAP) provide an indication of the relative value given to existing habitats and species. The Wrexham Biodiversity Action Plan has been used when assessing the value of the habitats and species present within the Site.

3.6 Great crested newt (GCN) is the only priority species listed in the Wrexham Biodiversity Action Plan that will be sustained around or within the Site.

Ecological Surveys

3.7 Below is a list of the ecological surveys carried out at the Site:

- Ecology desk study (TEP ref: 10204.001, November 2023);
- Extended Phase 1 habitat survey (November 2023 and June 2024); and
- Preliminary ground-based tree assessment for bats (November 2023 and June 2024).

Habitats

3.8 The following habitats will be created or retained within the Site:

- Trees;
- Scrub and thicket;
- Hedgerow;
- Meadow grass;
- Ornamental planting;
- Ponds and water channels;
- Aquatic marginal planting; and
- Log pile and hibernacula.

3.9 There are no Habitats of Principal Importance under Section 7 of the Environment (Wales) Act 2016 within, or adjacent to the Site.

Woodland and/or Trees

3.10 Trees and scrub will be retained along the northern, eastern and southern boundaries of the Site to provide screening to the development. Retained woodland and trees provide wildlife corridors for a range of species and provide opportunity for roosting, nesting and shelter.

Hedgerows

3.11 Native and ornamental hedgerow are proposed and will provide foraging and nesting opportunities for a range of wildlife including amphibians, small mammals, and birds.

Watercourses and/or Pond(s)

3.12 There are no main rivers on the Site, however an existing water channel to the south of the Site will be retained. A wildlife pool is proposed to the south of the Site and will provide habitat for invertebrates, amphibians and waterfowl.

Invasive Non-Native Species

3.13 New Zealand pygmyweed (crassula helmsii) was recorded in the ditch to the south of the Site.

3.14 Invasive non-native species are defined as those which are either listed on Part II Schedule 9 of the Wildlife and Countryside Act (1981) as amended, Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019 and/or listed as an Invasive Alien Species of Union concern under Regulation (EU) 1143/2014. Under both the Wildlife and Countryside Act (1981) and the Invasive Alien Species (Enforcement and Permitting) Order 2019, it is an offence to allow plants referenced to grow in the wild (including via moving contaminated soil or plant cuttings). Liability may also extend in situations where a landowner has knowingly permitted the spread of invasive non-native species on to neighbouring land.

Biosecurity

3.15 Biosecurity is defined as ensuring that good practices are in place to reduce and minimise the risk of spreading INNS because of interference.

3.16 Biosecurity should be considered at the earliest stage when planning any site work, from surveying an area to treating or removing INNS, as well as any other works on site.

3.17 The following paragraphs set out Biosecurity advice for the duration of all site works.

INNS Toolbox Talk and ID Training

3.18 During the construction phase, the Site Manager will provide awareness training on INNS present on the Site to all site workers and site visitors in the form of an INNS Toolbox Talk. Site workers and visitors will be made aware of the locations of all INNS on the Site and their responsibilities in preventing its spread.

3.19 Detailed INNS identification sheet/ sheets, such as those on the Great Britain Non-Native Species Secretariat website, should be made available on the Site to enable all staff to positively identify INNS on the Site.

Designated Cleaning Area(s)

3.20 Where works are undertaken in areas affected by New Zealand pygmyweed on site, a designated cleaning area will be set out in an appropriate location in close proximity to the ditch to the south of the Site.

3.21 The designated cleaning area must be within an area of hardstanding or on a root protection membrane that can contain and collect the material washed off. The

cleaning areas must also be a reasonable distance from watercourses, ditches or drains to prevent contamination.

3.22 All equipment, machinery and PPE used within the close proximity to INNS must be cleaned within the designated cleaning area using a stiff brush, particular attention should be paid to footwear, tyre treads/tracks, wheel arches and any other areas that might retain rhizomes or seeds.

3.23 The resultant material following cleaning must be contained, collected and disposed of along with other contaminated material. Where contaminated material is not taken off site it must remain within the vicinity of the Works for ongoing monitoring along with the infestation.

3.24 Where Works are undertaken adjacent to the ditch, the site manager will nominate a site worker each day to supervise cleaning within the designated cleaning area and appropriate disposal of resultant material.

Imported Materials

3.25 Procedures should be put in place to ensure any imported landscaping materials are free from INNS.

3.26 All topsoil imported onto the Site should comply with the British Standard Specification for Topsoil (BS 3882:2015).

Chemical Use

3.27 The use of herbicide will be minimised wherever possible. Hand weeding will be utilised when feasible and the use of mulch around new planting will assist with suppressing weeds.

Species

Amphibians

3.28 No evidence of amphibians was found on Site however there are six waterbodies within 500m of the boundary.

3.29 GCN has been recorded 100m northeast of the Site, and common toad, and common frog Rana temporaria has been recorded within 2km of the Site.

3.30 There is suitable breeding habitat for amphibians within the drainage ditch, and hibernacula from scrub and brash piles.

3.31 GCN are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations 2017 (as

amended). Under this legislation it an offence to intentionally kill, injure or capture GCN. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to places used by GCN for shelter or protection or to disturb them whilst they are occupying these habitats.

3.32 Common toads are listed as a species of principal importance under Section 41 of the NERC Act (2006) alongside other native amphibian species.

Construction Period

3.33 To mitigate the risk to amphibians during the construction period, an ecological clerk of works (ECoW) will be present onsite, working under a precautionary working method statement, for the duration of construction works.

3.34 GCN are not present on the Site; therefore, a GCN Conservation Plan detailing mitigation measures for the construction phase has not been produced.

Birds

3.35 No records of birds were returned in the Site, however redwing and fieldfare were identified within the hedgerow and scrub during the Phase 1 Habitat Survey. Retained and proposed trees and scrub will provide nesting and foraging opportunities for birds.

3.36 All UK wild birds are protected while at the nest under the Wildlife and Countryside Act (1981). Effectively, this means that if removal of habitats (which can include buildings, trees, hedges, scrub and grassland) cannot be timed to avoid the bird breeding season (March to August inclusive), then a survey by a suitably experienced ecologist will be required to ensure no nesting birds will be affected. There is generally no process to gain a licence to disturb nesting birds; therefore, if active nests are present works will need to avoid the area of the nest until the young have fledged.

Bats

3.37 No bats have been recorded on, or adjacent to the Site. Trees were assessed for bat roost suitability, with no trees identified as having roost potential. Trees, hedgerow and watercourses will offer commuting and foraging opportunities for bats.

3.38 Bats and their roosts are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations 2017 (as amended).

Hedgehogs

3.39 Five records of hedgehog were recorded including one 500m north of the Site. No evidence of hedgehog was identified during the extended Phase 1 survey, however existing scrub and hedgerow presents foraging and sheltering opportunities for hedgehog.

3.40 Hedgehog are S41 species of principal importance under the NERC Act (2006).

4.0 Management Intentions and Operations

Landscape Elements

4.1 The Site will comprise the following landscape elements as shown on the Soft Landscape Design Plan (Nicholsons ref: 1059-01-NLD.151):

- Retained trees and woodland;
- Proposed trees;
- Existing and proposed native scrub/thicket;
- Proposed hedgerows;
- Retained and proposed wild/meadow grass;
- Proposed ornamental planting;
- Proposed wildlife pond including aquatic marginal planting;
- Existing watercourses;
- Proposed log piles and hibernacula;
- Proposed footpaths and cycleway; and
- Walls and fencing.

Site Wide

Management Intention

4.2 The Site will be kept free from litter through regular cleansing. Regular inspections will ensure any health and safety hazards are identified and made safe.

Chemical Use

4.3 It should be recognised that plants considered as weeds can provide suitable habitat for invertebrates.

4.4 Weed control where feasible should be undertaken by hand pulling. However in certain instances, herbicide may be the most effective measure to remove unwanted species during the planting establishment period. Where herbicide application is needed this should be in small, controlled areas and should only target the undesirable species using spray shields. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

4.5 Consideration would need to be given to the fact that chemicals can prevent growth of grasses and woody species in landscape schemes.

4.6 Where herbicides are to be used within 10m of waterbodies care must be taken to only use formulations of Glyphosate which are approved for use close to water. NRW guidance should be sought when using herbicide within 5m of a waterbody as an agreement may be needed.

4.7 Fertiliser is not to be applied to any of the meadow areas in order to conserve the development of a diverse sward.

Maintenance Operations

Site Cleansing

4.8 A litter pick of the Site will be carried out monthly and will include the ponds and SUDS). All litter will be removed and disposed of in an authorised manner.

4.9 When removing material from within or near to the ponds, care must be taken to check for amphibians, which may be hiding in or under items. Any amphibians, except GCN, found will be returned to suitable cover. It is an offence to handle GCN without a specific licence from Natural Resources Wales.

Site Inspections

4.10 Site inspections will be undertaken monthly to identify any health and safety hazards and arrange for them to be made safe as far as is practicable.

4.11 Results from the monthly site inspections will be compiled and presented within the annual report which will be used in the review of the Plan as detailed in Chapter 5.0.

Retained Trees and Woodland

Management Intentions

4.12 Retained trees and woodland to the northern, eastern and southern boundaries of the Site provide wildlife corridors important for ecological connectivity, and opportunities for foraging and refuge. Woodland will be managed for the benefit of small mammals, amphibians and invertebrates.

4.13 An arboriculturist must be consulted prior to undertaking any major tree works.

Maintenance Operations

Tree Survey

4.14 A trained arboriculturist will carry out an inspection of mature trees within or adjacent to areas of public access to check for damage and disease and to maintain appropriate height clearances for safe pedestrian access. The survey will be carried out every three years or following a storm.

Cyclical Maintenance

4.15 Maintenance to mature trees will be informed by the tree survey.

Thinning and Cutting Understorey Vegetation

4.16 Trees for thinning will be cut to a level stump length of 150 mm for treatment with stump killer. A minimum of 50% of the stump surface will be scored over and treated to stop re-growth. Future growth of stumps will be monitored and additional cuts and applications of stump killer will be made (or an appropriate herbicide application such as eco plugs) over the following two or three years as required.

4.17 Thinning and cutting understorey vegetation will be undertaken on an annual cyclical programme (5 - 10-year cycle) and will be carried outside of bird nesting season. If works are required to any trees with bat roosting potential, advice must be sought from a licensed bat ecologist prior to any works commencing.

4.18 Wood under 250 mm diameter collected from thinning, pruning, brashing and vegetation clearance will, wherever possible, be chipped and used sustainably on site for mulching.

4.19 Wood greater than 250 mm diameter will be logged and used to create deadwood piles in suitable woodland locations.

4.20 Maintenance will be undertaken on an annual cyclical programme (5 - 10-year cycle) and will be carried outside of bird nesting season. If works are required to any trees with bat roosting potential, advice must be sought from a licensed bat ecologist prior to any works commencing.

4.21 Disturbance to GCN refuge features should be avoided by cordoning off the features during works. Herbicide will not be used within 250m of GCN ponds other than via spot treatment

Conserving Deadwood

4.22 Deadwood management will be low intervention, this means that any deadwood found will be left in situ. If leaving deadwood in situ represents a health and safety

risk or hinders management access, it will be moved and stacked elsewhere in appropriate locations onsite to retain shelter and forage opportunities for wildlife.

Deadwood Removal

4.23 If deadwood is to be removed from the woodland, then this should be supervised by a suitably qualified licenced ecologist.

Proposed Trees

Management Intentions

4.24 Tree planting is proposed to the northeast, northwest and south of the Site and will provide additional screening, and connectivity to the wider environment. It will provide additional foraging and nesting opportunities.

Maintenance Operation

Weed Control

4.25 To reduce excessive competition, a weed free area will be retained around any trees less than 3m in height and will be maintained to a diameter of 0.5m around the base of the trees. Mulch will be replenished annually to a depth of 100mm.

4.26 Once trees attain a height of 3m, the maintenance of a weed free base can be discontinued.

Re-firming

4.27 Newly planted trees will require re-firming as required.

Stakes and Ties

4.28 Where trees are staked, the stakes and ties will be checked quarterly and it is anticipated that they will need adjusting at least twice annually. Any broken or damaged stakes will be replaced and ties re-fixed at a slightly lower position, allowing for growth since planting.

4.29 Remove stakes as necessary, when the tree is suitably established, approximately in Year 5.

Formative Pruning

4.30 Young trees will require formative pruning until a height of 3m is attained to maintain a desirable shape as well as to maintain health and vigour. Pruning and

thinning of trees will be in accordance with BS 7370-4:1993 Recommendations for Maintenance of Soft Landscape (Other Than Amenity Turf).

4.31 Once a height of 3m is attained, crown pruning is desirable and any dead or severely damaged trees will be felled and replaced accordingly.

Replacement of Failed Planting

4.32 Failed planting will be removed and replaced with the same specification as the approved planting plan for the Site between November and March for deciduous species and between September and April for evergreen species.

4.33 If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternate appropriate species will be planted instead.

Watering

4.34 Watering may be required during periods of drought in the first couple of years following planting. Water should be applied to the base of the tree and should not be in excess of 20 litres every other day, as required, between April and September.

Fertiliser

4.35 Apply slow-release multi-purpose plant food and soil improver in Autumn during the first 5 years after planting.

4.36 Any bark or other weed suppressant should be carefully removed/lifted and fertilizer applied direct to the top layer of soil at the manufactures recommended rate.

Post Establishment Maintenance

4.37 See Retained Trees and Woodland.

Existing Scrub

Management Intentions

4.38 Scrub will be retained within retained trees to the north, east and south of the Site. Scrub provides suitable foraging and refuge areas.

Maintenance Operations

Assessment of Scrub Encroachment

4.39 Scrub provides an array of habitat opportunities and as such it may be appropriate to allow weed species to develop within the scrub. Weeds provide a vital source of food for pollinators and intern foraging opportunities for birds and mammals.

4.40 An annual visual inspection in September will determine whether weeds are becoming too dominant or scrub is encroaching onto neighbouring grassland.

Reduction of Scrub

4.41 Where reduction of coverage is required, scrub growth will be controlled along its advancing face using brush cutters, arisings will be chipped and used sustainably on site for mulching. If required dominant weed species will be hand pulled.

4.42 Scrub cutting will be scheduled at a time when there is no risk of disturbing breeding or nesting birds or mammals and to enable berry-bearing scrub species to fruit for the benefit of foraging wildlife (e.g. between December and early February).

4.43 In the long term, consideration will be given to active management, e.g. cyclical cutting of 5% annually to create greater structural diversity.

Proposed Native Scrub/Thicket

Management Operations

4.44 Native scrub/ thicket planting serves as a dynamic interface between the woodland and grassland, providing a gradation of habitat typologies and edge zones. It will provide increased connectivity between areas of existing trees and woodland, and screen the exiting drain to the south of the Site.

4.45 Native scrub /thicket planting is to be managed to ultimately achieve a tree canopy with understorey. A gradual development of a diverse age structure should be established over a period using a regime of selective thinning, pruning and coppicing. Thicket planting will provide suitable terrestrial habitat and wildlife value and complement existing and proposed woodland planting.

Management Intentions

Weed Control

4.46 Weed control will be undertaken four times annually (years 1-4), reducing to twice annually (years 5-7) and then once annually (years 8-10). Weed control will be undertaken between April and September and where feasible should be undertaken

by hand pulling and should remove all noxious weeds such as docks, thistles, nettles, ragwort and willowherb.

4.47 In certain instances, herbicide maybe the most effective measure to remove unwanted species. Where herbicide application is needed this should be in small, controlled areas and should only target the undesirable species. Shields should be used as appropriate to prevent drift into sensitive areas. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

4.48 After the first 10 years it may be acceptable to allow 'wild areas' to establish for the purpose of increased biodiversity value to invertebrates, including weeds and other dominant species such as docks, thistles, nettles, ragwort and willowherb. However, these species should not be allowed to spread to other areas of the site or neighbouring land.

Guards and Canes

4.49 Proposed planting will be young one or two year old plants (whips). They will be planted at 1m centres to provide a dense structure. Planting will be mixed to provide a variety of species and not in homogenous groupings.

4.50 Young tree planting may be guided and protected with guards and supported by canes to prevent poaching. Where trees are protected with guards and canes, these will be checked annually and adjusted if they are restricting growth.

4.51 Remove guards as necessary, when the tree is suitably established, approximately between Years 3 and 5.

Watering

4.52 Where specified, young single stem trees (whips) planted during the dormant season will need little or no watering. This will allow the tree to naturally acclimatise to the location and will encourage roots to spread down in search of water

Replacement of Failed Planting

4.53 Failed planting will be removed and replaced with the same species between November and March for deciduous species and between September and April for evergreen species.

4.54 If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternative appropriate species will be planted instead.

Pruning

4.55 Little to no pruning will be required during the first years after planting. From year 5 onwards it may be preferable to thin the thicket to remove damaged or poor form plants and allow healthy growth to establish.

4.56 In the long term, consideration will be given to active management, e.g. cyclical thinning and coppicing to create greater structural diversity.

Reduction of Scrub

4.57 Where reduction of coverage is required, scrub growth will be controlled along its advancing face using brush cutters, arisings will be chipped and used sustainably on site for mulching. If required dominant weed species will be hand pulled.

Constraints

4.58 Any works required will be undertaken outside of the bird nesting season, between September and February. Should any works be required within the bird nesting season (March to August inclusive) an assessment will be undertaken by a suitably qualified ecologist before any works commence.

Proposed Hedgerow

Management Intentions

4.59 Euonymus hedge is proposed within the proposed car park and will be maintained for its formal appearance. Hedges will break up the urban fabric and provide areas for refuge for small mammals and birds.

Maintenance Operations

Weed Control

4.60 To reduce excessive competition, a weed free area will be retained around hedgerow plants to a diameter of 0.5m around the base. Mulch will be replenished annually to a depth of 100mm.

Formative Pruning

4.61 Formative ‘facing up’ the hedgerow will establish dense branch growth annually in September.

Guards

4.62 Where planting is protected by spiral guards these will be checked quarterly. Any broken or damaged spiral guards will be replaced.

4.63 Remove guards as necessary, when the planting is suitably established, approximately in Year 5.

Re-firming

4.64 Newly planted hedgerow plants will require re-firming as required.

Replacement of Failed Planting

4.65 Failed planting will be removed and replaced with the same species between November and March for deciduous species and between September and April for evergreen species.

4.66 If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternative appropriate species will be planted instead.

Hedgerow Cutting

4.67 The first cut to newly planted hedgerows is recommended within year 3 (dependant on growth), and will consist of 'facing up' either side of the hedge. All hedge cuts must be undertaken using appropriate hand or power tools. Mechanical methods of management, where appropriate, will be used in favour of machinery.

Wildflower Grassland/ Wildflower Meadow

Management Intentions

4.68 An area of existing wild/meadow grassland will be retained to the south of the Site adjacent to the existing drain. Additional wild/meadow grassland is proposed within landscaped areas to the north, east, south and west of the Site.

4.69 Meadow grasslands will provide ecological diversity and valuable wildlife habitats. The timing and frequency of grass cuts will be determined by management procedures required to maximise conservation benefits of desirable flora species and maintaining grassland habitats.

Maintenance Operations

Grass Cutting

4.70 For proposed wild/meadow grassland the sward will be cut to a height of no less than 150mm every 6-8 weeks between April and September in the first year.

4.71 From year one (for retained grassland) and year two onwards (for proposed wild/meadow grassland), the grass will be cut annually once seed heads have dropped in late September.

4.72 Within this area, the cut height will vary in random patches/swathes between 300mm and a minimum 150mm.

4.73 Arisings will be left in situ for 24 hours to allow flower seed to disperse. The arisings will then be raked and removed from the Site to prevent nutrient enrichment and to retain the desired species composition.

4.74 Grass cuts will be undertaken with flail cutters/mowers set to retain vegetation at a height of 150mm in order to prevent any risk to amphibians that may be present within the grasslands. Arisings will be removed from site or if appropriate used on Site to increase habitat opportunities.

4.75 Grass cutting will be avoided between mid-March and August (inclusive) to prevent risk of disturbance and destruction to nesting birds.

Cultivating and Re-seeding

4.76 Any bare ground will be cultivated and re-seeded as required to successfully establish sward. This will be carried out twice annually between August and October.

Weed Control

4.77 For proposed wild/meadow grassland in the first year, weeds will be left until mid to late summer to provide shelter for sown seedlings. Weeds should then be cut, removed and composted to reveal the young meadow.

4.78 From year one (for retained grassland) and year two onwards (for proposed wild/meadow grassland), weed control will be undertaken annually between April and September and where feasible should be undertaken by hand pulling and should remove all noxious weeds such as docks, thistles, nettles, ragwort and willowherb.

4.79 In certain instances, herbicide maybe the most effective measure to remove unwanted species. Where herbicide application is needed this should be in small,

controlled areas and should only target the undesirable species. Shields should be used as appropriate to prevent drift into sensitive areas. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

4.80 Herbicide will not be used within 250m of watercourses or waterbodies.

Fertiliser Use

4.81 Fertiliser is not to be applied to any of the wildflower areas in order to conserve the development of a diverse sward.

Ornamental Shrub Planting

Management Intentions

4.82 Management of ornamental planting will focus on maintaining a neat and tidy appearance, which will also encourage plant growth through appropriate horticultural techniques. Ornamental planting will be managed to ensure it does not encroach onto the surrounding car park.

Maintenance Operations

Mulching

4.83 A mulch composted wood chip or bark mulch will be maintained around the base of all young plants to suppress weed growth and will be maintained to a depth of 65mm.

Pruning

4.84 Pruning will be undertaken in order to clear deadwood, promote healthy growth and produce desired growth of flowers, fruit, foliage or winter colour as appropriate. Pruning will also include for clearing out crossing and damaged branches.

4.85 Branches to be removed should be taken back to an outward facing node and cut cleanly approximately one inch above on a diagonal angle. Pruning will be undertaken carefully by manual means with appropriate hand tools such as secateurs or loppers; which should be regularly sharpened and cleaned after use to prevent the potential spread of disease.

4.86 Where pruning is limited to the extent of the current year's growth, work can be carried out at any time of year. If the pruning will be extensive then the works should be undertaken outside of bird nesting season.

Weed Control

4.87 Weed control will be undertaken annually between April and September and where feasible should be undertaken by hand pulling and should remove all noxious weeds such as docks, thistles, nettles, ragwort and willowherb.

4.88 In certain instances, herbicide maybe the most effective measure to remove unwanted species. Where herbicide application is needed this should be in small, controlled areas and should only target the undesirable species. Shields should be used as appropriate to prevent drift into sensitive areas. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Replacement of Failed Planting

4.89 Failed planting will be removed and replaced with the same species in the first five years following implementation. If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternative appropriate species will be planted instead.

Proposed Wildlife Pond

Management Intention

4.90 A wildlife pond is proposed to the south of the Site and will provide suitable habitat for a range of species. Throughout the waterbody the maintenance of open water and provision of dense stands of emergents, tall herbs and wet grasslands are important to support a diverse and healthy population of small mammals, amphibians, insects and waterfowl. Management should focus primarily on maximising the nature conservation potential of component features.

4.91 The pond should be managed to retain at least 35-60% of the surface area as open water through the cutting back of marginal and emergent vegetation. Waterbodies will also be managed to minimise health and safety issues. Vegetation will be regularly managed to ensure the top and bottom of the bank and the water level of the waterbody is clearly visible.

Maintenance Operations

Inspections and Remedial Measures

4.92 A visual inspection will be carried out as part of the monthly site inspection. This will include an inspection of the water quality for any signs of pollutants (e.g. scum, excessive algal growth and discolouration), extent of vegetation zones and open

water, presence of invasive species (including fish) and presence of rubbish and debris.

4.93 If pollutants are detected, options for remedial action will be discussed with the landowner and appropriate authorities.

4.94 In the event invasive or harmful species are identified, a treatment plan will be drawn up; spot treatment or pulling by hand will be the preferred method. Any other remedial actions will be implemented accordingly.

4.95 Where fish have been identified within the attenuation ponds, the ponds should be drained during autumn and winter months so as to not impact any noted GCN. Following the draining of the pond fish should be removed using a netting process and removed off-site.

4.96 Long-term management should continue to assess and review any fish identified within the ponds should these re-establish during the long-term management of the ponds. The above method should be implemented if any fish continue to establish.

Grass Cutting

4.97 The grass around the attenuation pond will be cut to a height of 150mm (approx.) annually in September. One third of the grass should be cut annually.

4.98 Arisings will be lightly raked off and removed to prevent nutrient enrichment and retain the desired species composition.

4.99 Grass cutting will be avoided between mid-March and August (inclusive) to prevent risk of disturbance and destruction to nesting birds.

Removal of Debris and Rubbish

4.100 Any debris and rubbish identified during the monthly visual inspections will be removed.

4.101 Any soft pliable debris noted within the pond during April to, and including, August will be left in situ as they may support GCN eggs. A full cleanse after mid-September will be implemented once eggs are hatched and most larvae have developed.

Aquatic and Emergent Vegetation Removal

4.102 Maintenance of open water and provision of dense stands of emergent vegetation, tall herbs and wet grasslands are important for maximising biodiversity.

4.103 Regular and gentle removal of aquatic and emergent vegetation to maintain 35% to 60% open water. Cutting or pulling by hand is the preferred method to minimise disturbance and will be carried out annually between late October and mid-November. The works will be carried out on a three year rotation (i.e. a 1/3 each year) or as required according to pond condition.

4.104 Vegetation will be removed according to a wedge rotation and laid on terram (or similar matting) at the pond's edge for a minimum 24hrs. The vegetation and terram will then be removed from the Site.

4.105 Vegetation removal will, wherever possible, avoid the amphibian breeding and bird nesting season.

Marginal Vegetation Management

4.106 The marginal vegetation around the pond will be cut to no less than 150mm on a rotation basis. The inner fringe of vegetation immediately by the water's edge will be retained throughout the year to serve as a buffer and to maintain food and cover sources.

4.107 Arisings will be removed and disposed of appropriately.

Scrub Control

4.108 Encroachment of scrub, grassland and other vegetation will be monitored and reduced so that no more than 25% of the banks of the pond will be covered by scrub.

4.109 Scrub to be cut back on a rotational basis between October and mid-November. All arisings will be chipped and used sustainably on the Site. Larger brash will be utilised to create deadwood features within woodland.

Fertiliser and Herbicide Use

4.110 No fertilisers, pesticides or herbicides will be used on or around the pond.

De-silting

4.111 Should the water levels within the deepest area of the pond fall below half a metre in two consecutive years, de-silting will be required. De-silting will be carried out approximately every five years depending on the condition of the pond and will be undertaken between November and January.

4.112 Desilting will be undertaken by a long-armed excavator and entry and access to the pond will be limited to one point or section of bank. Ground protection will be utilised to reduce damage to marginal habitats.

4.113 The top third of a metre of silt will be temporarily placed around the margins of the excavated pond, onto protective membrane, to allow amphibians and invertebrates to return to the pond and to be used on completion of works to repopulate the invertebrate assemblage within the ponds.

4.114 All other materials generated will be placed on protective membrane around the pond for a minimum 48hrs to allow amphibians and invertebrates to return to the pond. After a period of 48hrs, the silt and the protective membrane will be removed from site.

Existing Watercourse

Management Intention

4.115 The existing watercourse will be maintained for both functionality and as a habitat in its own right. Management will ensure ditches are able to support a diverse and healthy population of small mammals, amphibians, insects and waterfowl.

Maintenance Operations

Inspections and Remedial Measures

4.116 A visual inspection will be carried out as part of the monthly site inspection. This will include an inspection of the water quality for any signs of pollutants (e.g. scum, excessive algal growth and discolouration), extent of vegetation zones and open water, presence of invasive species (including fish) and presence of rubbish and debris.

4.117 If pollutants are detected, options for remedial action will be discussed with the landowner and appropriate authorities.

4.118 In the event invasive or harmful species are identified, a treatment plan will be drawn up; spot treatment or pulling by hand will be the preferred method. Any other remedial actions will be implemented accordingly.

Removal of Debris and Rubbish

4.119 Any debris and rubbish identified during the monthly visual inspections will be removed.

4.120 Any soft pliable debris noted within the pond during April to, and including, August will be left in situ as they may support GCN eggs. A full cleanse after mid-September will be implemented once eggs are hatched and most larvae have developed.

Strimming

4.121 A third of the banks of the ditch will be strimmed annually to a height of 150mm, with a buffer of grassland mown to 150mm to indicate the edge of the ditch. Works will progress upstream in order to permit dislodged plant propagules and invertebrates to re-colonise in the disturbed substrate downstream.

Scrub Control

4.122 Encroachment of scrub, grassland and other vegetation will be monitored annually and reduced as required. Any colonising scrub within 5m of the ditch will be removed to reduce shading. This will be carried out annually between September and February to avoid bird nesting season.

Herbicide Use

4.123 Use of herbicides near the ditch will be avoided.

De-silting

4.124 De-silting the ditch will only be carried out if necessary to minimise disturbance of the microhabitat of the ditch. The requirement to dredge the ditch will be reviewed after five years; it is unlikely that there will be a need for any ditch clearance works at this point but it will indicate when the next appropriate review interval will be.

4.125 Desilting will be undertaken by a long-armed excavator and entry and access to the pond will be limited to one point or section of bank. Ground protection will be utilised to reduce damage to marginal habitats.

4.126 Spoil removed in de-silting is to be spread thinly along the top outside edge of the banks.

Proposed Hibernacula

Management Intention

4.127 Hibernacula features are to be maintained in a viable condition so as to function to provide shelter and winter refuge to amphibians. Amphibian refuge features are located within proposed wild/meadow grassland areas providing sheltered connectivity between the refuge feature and other suitable habitats.

Maintenance Operations

Inspections and Remedial Measures

4.128 Hibernacula features will be inspected during the monthly site inspections to ensure they are in a viable condition.

4.129 In the event the condition of the hibernacula deteriorates to a point that maintenance cannot ensure its viability, a new hibernacula feature will be recreated nearby. The existing hibernacula feature will be maintained in situ in its existing condition; if this is not desirable, an ecologist licensed to handle GCN will be appointed to supervise the dismantling of the non-functioning refuge feature.

4.130 Grass or shrub atop the hibernacula features and within 0.5m of the hibernacula features will be left uncut to avoid disturbance to the refuge feature.

Proposed Log Piles

Management Intention

4.131 Log piles are to be maintained in a viable condition so as to function to provide shelter and winter refuge to local wildlife.

Maintenance Operations

Replenishment

4.132 Log piles will be replenished annually in August or September using wood collected during maintenance works, this will ensure there is enough cover for the hibernation period.

Footpaths and Cycleways

Management Intention

4.133 Footpaths and cycleways will be safe and useable. Maintenance will focus on clearing any obstacles and ensuring they are free of slip and trip hazards.

Maintenance Operations

Inspections and Remedial Measures

4.134 Footpaths and cycleways will be inspected during the monthly site inspection and will be kept safe and usable and cleared of overhanging vegetation and broken branches. Any item considered unsafe must be removed or made safe and replaced as soon as possible.

4.135 Repairs will be carried out as required, the surfacing will be replaced in line with the manufacturer's recommendations. The use of materials for repairs and replacements will conform to the original design specification for external works.

Encroaching Vegetation

4.136 Footpaths will be cleaned using soapy water (acid free) and a stiff brush to remove detritus and prevent moss build-up.

Walls and Fencing

Management Intention

4.137 Walls and fencing will be maintained for their functionality and aesthetic value. Routine inspections will ensure that any damaged fencing is repaired or replaced as quickly as possible to prevent a risk to health and safety.

Maintenance Operations

Inspections and Remedial Measures

4.138 Walls and fencing will be inspected during the monthly site inspection.

4.139 Any walls or fencing considered unsafe will be removed, or made safe and/or replaced as soon as possible. The use of materials for repairs and replacements will conform to the original design specification for external works.

4.140 Graffiti removal will be carried out as required.

5.0 Monitoring and Review

Site Monitoring

5.1 The key measures described in the table below will enable the landowner and/or the managing organisation to measure the appropriateness of landscape maintenance operations and whether management of the Site is meeting the long-term management objectives.

Table 1: Key Measures for Monitoring

Feature	Key Measures
Site wide	Is the landscape establishing well and attractive to residents and wildlife overall? Is the Site in a clean and tidy condition? Is public access to the Site maintained? Are there any health and safety hazards / deficiencies which require rectification? Does the Site comply with the relevant environmental and health and safety legislation (as set out in Appendix B of this Plan)? Are there any instances where planting is repeatedly failing? If so, has an arboricultural consultant or landscape architect been consulted with to specify an alternative species?
Retained trees and woodland	Carry out an inspection to note any deficiencies. Concerns about risks to public health and safety and tree health, should be reported and specialist input sought as necessary. Review arboriculture assessment for recommendations on thinning and tree works.

Feature	Key Measures
Proposed trees	Stakes and ties to be inspected and newly planted trees re-firmed and kept weed free. Any dead or dying trees should be replaced as specified in the original planting plan. Review arboriculture assessment for recommendations on thinning and tree works.
Existing and proposed native scrub/thicket	Any dead or dying plants should be replaced as specified in the original planting plan Carry out an inspection to assess any encroachment of scrub.
Proposed hedgerows	Inspection of the general establishment of the hedges until the branches of adjacent plants fully merge together to establish dense branch growth. Any dead or dying plants should be replaced as specified in the original planting plan. Inspect planting and prune as required, or prune straight away if presents a hazard.
Ornamental shrub planting	Condition of mulch, including coverage, depth and effectiveness as a weed suppressant to be inspected. Any dead or dying specimens should be replaced as specified in the original planting plan. Inspect planting and prune as required, or prune straight away if damaged and presents a hazard.
Retained and proposed wild/meadow grass	Inspection of the grass to ensure botanical diversity, weeds kept to a minimum, and no scrub encroachment. Re-seed as required.

Feature	Key Measures
Proposed wildlife pond including aquatic marginal planting	Inspection to the banks and ensure any tree or shrub saplings within 5m are removed. Review assessments following inspections and carry out recommended works.
Existing watercourse	Inspection to the banks and ensure any tree or shrub saplings within 5m are removed. Review assessments following inspections and carry out recommended works.
Hibernacula	Carry out inspection to check condition and remove blockages from access points.
Log piles	Carry out inspection to check that materials have been replenished in time for the hibernation period in September.
Footpath and cyclepaths	Carry out an inspection to ensure weed free appearance and remove trip or slip hazards. Note any damage and carry out repairs as required.
Walls and fencing	Carry out an inspection to note any damage which poses a risk to public health and safety, and carry out repairs.

5.2 With respect to monitoring habitat creation, an annual habitat walkover survey will be carried out to ensure that habitats created are still viable for their intended purpose and to inform future management policies concerning potential matters such as protected species and invasive species control.

Review

5.3 The Management Plan will be reviewed on an annual basis by the appointed managing organisation and other key partners to ensure that the plan is meeting the original management objectives and responding to the developing needs of the Site.

5.4 The annual review will identify the need for additional maintenance operations and inform future management decisions. This can be achieved by:

- Quarterly formal site inspections by the managing organisation to assess the appointed contractor's quality standards and deliverables in line with this management plan;
- An annual site meeting with the managing organisation and stakeholders and the appointed contractor to assess quality standards and deliverables in line with this management plan; and
- Ad hoc unannounced inspections by the managing organisation to review quality of maintenance work and any potential Health and Safety issues.

5.5 The managing organisation will produce an annual report, summarising the management of the Site over the last year. The report will include the key measures achieved, actions going forward and any updates to the maintenance operations if required, and how this information will be communicated to stakeholders and resident/friends groups.

5.6 It is also recommended the managing organisation produces a cash-flow forecast for the next 3-5 years but that can be flexible enough to respond to changing circumstances. This will ensure sufficient funds are in place to deliver long term management of the Site.

5.7 An appropriately qualified landscape consultant will formally re-assess the management plan and annual review information on a five yearly basis to ensure the habitats and landscaping associated with the Site are maintained for 25 years.

Appendix A: Landscape Masterplan (TEP ref: Soft Landscape Design (Nicholsons ref: 1059-01-NLD.151, V4.0)

General Notes

1. Do not scale from drawing unless it is a specified setting out plan and you have confirmed it is printed to scale.
2. All dimensions and levels shown must be confirmed by contractors prior to the commencement of construction works.
3. All measurements must be checked on site.
4. Drawings are to be read in conjunction with all other relevant plans, design packs and schedules.
5. All work must comply with the current building regulations.
6. No materials used or methods of workmanship to be employed that do not conform to the current relevant British Standard and Code Of Practice.
7. All plants and materials are subject to aviabailty at time of ordering.
8. Topsoils to be placed to 450mm overall depth in shrub and herbaceous areas and 600mm in tree pits and hedge trenches. Soils should be placed in 150mm layers, firming as you go, over compaction free, well draining subsoil.

Bryn Lane

Bryn Lane

Access Path from Bryn Lane

Substation

Cycle Store

33.5m

60m to Driveway on plot to East of site (off Drawing)

22.8m

21m

24.6m

21.8m

14.4m

14.4m

116m to Northern End of Kelloggs car park (off drawing)

24.4m

16.7m

32.2m

20.3m

23.4m

14.9m

15.2m

190m to edge of vegetation within adjecent Kelloggs site (off drawing)

Levels consultant to provide detail of interface between new hard standing and existing river culvert

Native Thicket Mix
Area: 1528.5sqm
1 Plants/sq m
76 - Acer campestre 5%
153 - Cornus sanguinea 10%
306 - Corylus avellana 20%
153 - Crataegus monogyna 10%
153 - Euonymus europaeus 10%
76 - Hippophae rhamnoides 5%
76 - Ilex aquifolium 5%
153 - Ligustrum vulgare 10%
153 - Salix caprea 10%
76 - Rosa canina 5%
153 - Viburnum lantana 10%
Total No. of Plants: 1528

Key

- Proposed Buildings
- Existing Walls & other Structures
- Proposed Road
- Proposed Footpath/cycleway
- Proposed Retaining Wall
- Existing Palisade Fence
- Existing Chainlink Fence
- Existing Post & Rail Fence
- Existing fence inferred loaction
- Proposed Post & Rail Fence
- Existing Retained Tree
- Existing Tree Removed
- Proposed Tree
- Proposed Log Pile
- Proposed Hibernacula
- Retained Trees & Scrub
- Proposed Native Scrub / Thicket
- Proposed Native Hedgrow
- Proposed Ornamental Hedgrow
- Retained Wild/meadow Grass
- Proposed Wild/meadow Grass
- Proposed Ornamental Planting
- Aquatic Marginal Planting
- Proposed Wildlife Pool
- Existing Water Channel
- Proposed Slope / Bank / Gradient
- Redline Boundary
- Offsite Strategic Ecological Network (Approximate loacation)

21/05/2025	4	CB	Dims added to Site Overview sheet
14/02/2025	3	CB	Layout Revision
26/11/2024	2	CB	Post & Rail fence changes

Date	Original size	Scale	Drawn by	Checked by	Rev
21/05/2025	A3	1:850	CB	JK	V4

Drawing no: 1059-01-NLD.151 Bryn Lane South
Status: S4
Drawing Title: Soft Landscape Design
Sheet Name: Site Overview
Location: Bryn Lane South, Wrexham
Client name: Net Word Sport

Nicholsons is a trading name of Nicholsons Nurseries Ltd. The Park, North Aston, Bicester, Oxfordshire. OX25 6HL.
T +44 (0)1869 340342 www.nicholsonsgb.com | Company No. 04820053

NICHOLSONS

Appendix B: Landscape Maintenance Schedules

Land South of Bryn Lane, Wrexham
Landscape Maintenance Schedules

Key

✓ Works to be carried out in these months

Works not to be carried out in these months

*Bird breeding and nesting season (March to August inclusive) no works that may have an impact on nesting birds are to be undertaken

Activity	Frequency per Annum	Years	Indicative Timing of Operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspections, Surveys and Cleansing														
Health and Safety														
Undertake a formal inspection to review hazards identified by original assessment.	12	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Specialist Surveys														
Instruct a trained arboriculturist to undertake a tree hazard and condition survey of mature trees.	0.3	Every 3 years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Site Reviews														
Quarterly formal site inspections	4	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Annual site meeting	1	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Site Cleansing														
Cleanse the whole site monthly	12	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remove fly-tipping and graffiti as soon as possible.	As required	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Soft Landscape Elements														
Retained Woodland/Trees														
Undertake a cyclical programme of selective thinning, pruning and felling. Wood under 250 mm diameter collected from thinning, pruning, brashing and scrub/vegetation clearance will, wherever possible, be chipped and used on site for mulching. Wood greater than 250 mm diameter will be logged and used to create deadwood piles to increase biodiversity.	N/A	Every 5 years	✓	✓							✓	✓	✓	✓
Treat any stumps following felling works with stump killer.	N/A	Every 5 years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitor stumps and, if required, cut any re-growth and re-apply stump killer as required.	N/A	Every 2 years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Proposed Trees														
Top up mulch to maintain a depth of 100mm around the base of all young plants.	1	1 to 5									✓	✓		
Re-firm newly planted trees as required.	1	1 to 5	✓	✓							✓	✓	✓	✓
Check stakes and ties quarterly, adjust twice annually.	4	1 to 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Replace any damaged or missing stakes and ties.	1	1 to 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remove stakes and ties.	1	Year 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Formative prune to maintain health and vigour.	N/A	5 to 10	✓	✓							✓	✓	✓	✓
Replace failed or damaged deciduous species.	1	1 to 5	✓	✓	✓								✓	✓
Replace failed or damaged coniferous/evergreen species.	1	1 to 5	✓	✓	✓	✓					✓	✓	✓	✓
Water new planting.	As required	1 to 5				✓	✓	✓	✓	✓	✓			
Assessment of condition and structure of new tree planting.	1	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Apply slow release multi-purpose plant food and soil improver.	1	1 to 5								✓	✓	✓		
Existing Scrub														
Annual visual inspection to determine any dominate species or encroachment.	1	All years									✓			
Cut as required to prevent encroachment onto other landscape types.	N/A	5 to 10	✓	✓										✓
Cut 5% of the scrub back annually.	1	5 to 10	✓	✓										✓

Land South of Bryn Lane, Wrexham
Landscape Maintenance Schedules

Key

✓	Works to be carried out in these months
	Works not to be carried out in these months

*Bird breeding and nesting season (March to August inclusive) no works that may have an impact on nesting birds are to be undertaken

Activity	Frequency per Annum	Years	Indicative Timing of Operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Proposed Native Scrub/Thicket														
Annual visual inspection to determine any dominate species or encroachment.	1	1 to 5									✓			
Weed control by hand pulling	4	1 to 4				✓	✓	✓	✓	✓	✓			
Weed control by hand pulling	2	5 to 7				✓	✓	✓	✓	✓	✓			
Weed control by hand pulling	1	8 to 10				✓	✓	✓	✓	✓	✓			
Check guards and canes quarterly, adjust annually.	1	1 to 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remove canes and guards	1	Years 3-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pruning to thin thicket and remove damaged or poor form plants	As required	5 to 10	✓	✓							✓	✓	✓	✓
Replace failed or damaged deciduous species.	1	1 to 5	✓	✓	✓								✓	✓
Replace failed or damaged coniferous/evergreen species.	1	1 to 5	✓	✓	✓	✓					✓	✓	✓	✓
Water new planting.	As required	1 to 5				✓	✓	✓	✓	✓	✓			
Cut 5% of the scrub back annually.	1	5 to 10	✓	✓										✓

Land South of Bryn Lane, Wrexham
Landscape Maintenance Schedules

Key

✓ Works to be carried out in these months

Works not to be carried out in these months

*Bird breeding and nesting season (March to August inclusive) no works that may have an impact on nesting birds are to be undertaken

Activity	Frequency per Annum	Years	Indicative Timing of Operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Hedgerows (if proposed)														
Top up mulch to maintain a depth of 100mm around the base of all young plants.	1	1 to 5									✓	✓		
Replace any damaged or missing fencing or spiral guards.	1	1 to 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remove fencing or spiral guards.	1	Year 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Re-firm new planting as required.	1	1 to 5	✓	✓							✓	✓	✓	✓
Replace failed or damaged deciduous species.	1	1 to 5	✓	✓	✓								✓	✓
Replace failed or damaged coniferous/evergreen species.	1	1 to 5	✓	✓	✓	✓					✓	✓	✓	✓
Face up to both sides of hedge.	1	Year 3+	✓	✓							✓	✓	✓	✓
Wildflower Grassland/Wildflower Meadow - Existing														
Cut (150mm) once a year and remove the arisings from the Site.	1	All years									✓	✓		
Cultivate and re-seed as required.	As required	1 to 5								✓	✓	✓		
Weed control.	1	All years				✓	✓	✓	✓	✓	✓			
Wildflower Meadow (if proposed)														
Cut (150mm) 3 times in first year.	3	Year 1				✓	✓	✓	✓	✓	✓			
Cut (150mm) once a year and remove the arisings from the Site. Cut in 1/3 sections on a weekly rotation.	1	Year 2+									✓			
Cultivate and re-seed as required.	As required	1 to 5								✓	✓	✓		
Weed control.	1	Year 1				✓	✓	✓	✓	✓	✓			
Weed control.	1	Year 2+								✓				
Ornamental Shrub Planting														
Top up mulch to maintain a depth of 65mm around the base of all young plants.	1	1 to 5									✓	✓		
Formative prune to maintain health and seasonal foliage.	N/A	5 to 10	✓	✓							✓	✓	✓	✓
Hand pull weeds around base of shrubs within 0.5m diameter from the trunk.	5	1 to 10				✓	✓	✓	✓	✓	✓			
Replace failed or damaged coniferous/evergreen species.	1	1 to 5	✓	✓	✓	✓	✓				✓	✓	✓	✓
Proposed Wildlife Pond														
Inspect the pond annually to assess bank stability, water quality, coverage of aquatic/marginal vegetation, drainage and depths.	1	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1x yearly strim (150mm) to 1/3 of bankside vegetation, including grass with arisings used sustainably elsewhere on site. Strim sections on annual rotation.	1	All years									✓	✓		
Reduction of macrophytes where becoming too dominant.	As required	All years									✓	✓	✓	
Removal of marginal/emergent vegetation in autumn to maintain 35-60% of open water.	1	All years										✓	✓	
1x yearly cut to scrub encroaching so no more than 25% of bank is covered.	1	All years										✓	✓	
Removal of any dead fish.	As required	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Silt removal as necessary in November - January	1	All years	✓										✓	✓
Aquatic Planting														

Land South of Bryn Lane, Wrexham
Landscape Maintenance Schedules

Key

✓ Works to be carried out in these months

Works not to be carried out in these months

*Bird breeding and nesting season (March to August inclusive) no works that may have an impact on nesting birds are to be undertaken

Activity	Frequency per Annum	Years	Indicative Timing of Operation											
			J	F	M	A	M	J	J	A	S	O	N	D
1x yearly strim (150mm) to 1/3 of bankside vegetation with arisings removed from site. Strim sections on annual rotation.	1	All years									✓			
Replace failed or damaged planting.	1	1 to 5	✓	✓	✓	✓	✓				✓	✓	✓	✓
Weed control.	1	All years				✓	✓	✓	✓	✓	✓			
Existing Watercourse														
1x yearly strim (150mm) to 1/3 of ditch with arisings used sustainably elsewhere on site. Strim sections on annual rotation.	1	All years				✓	✓	✓	✓	✓	✓			
Cut back of any scrub within 5m of ditch.	1	All years	✓	✓							✓	✓	✓	✓
Silt removal as necessary in November to 1/3 of ditch to maintain flowing water.	1	All years											✓	
Ecological Feature														
Proposed hibernacula														
Monthly inspection to check condition and clear any blockages from access points.	1	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Repairs and/or replacement as required.	As required	All years	✓	✓	✓							✓	✓	✓
Proposed Log Piles														
Replenish with material from maintenance operations	1	All years								✓	✓			
Hard Landscape Elements														
Footpaths and Cycleways														
Inspect footpaths and cycleways monthly and clear overhanging vegetation, broken branches, leaf litter and trip hazards as required.	12	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clean with soapy water (acid free) and stiff brush.	1	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Repairs to footpath and cycleway surfacing.	As required	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Walls and Fencing														
Walls and Fencing will be inspected during site cleansing and any repairs will be carried out as required.	12	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Repairs to walls and fencing	As required	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Graffiti removal as required.	As required	All years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTE Glyphosate formulations containing the surfactant Polyethoxylated tallow amine (POEA) should not be used within close proximity to waterbodies or other wetland habitats as it can cause high amphibian larvae mortality.

Appendix C: Legislation Context

Summary of Relevant Legislation

The following legal obligations, among others must be considered in carrying out any management operations:

Legislation	Obligations
Health and Safety Legislation	
The Health and Safety at Work Act (1974)	All operations carried out on the Site must only be undertaken by trained personnel, using methods and equipment approved by the Health and Safety Executive (HSE).
Occupiers Liability Act (1984)	Management organisation must ensure that every reasonable care is taken to remove any risks to both legitimate visitors and to any trespassers. In compliance it will be necessary: ■ To make sure that all footpaths and any other structures are safe; ■ To remove any hazardous objects; and ■ To conduct an annual safety audit in order to identify any further hazards.
Environmental Legislation	
Conservation of Habitats and Species Regulations 2017 (as amended)	The Habitat Regulations for England and Wales assign a greater level of protection to a variety of native species of animals and plants listed. The 2017 Regulations have been amended by the 2019 EU Exit Regulations.
Wildlife and Countryside Act (1981)	There is an obligation to comply with legislation for UK species protected (including amphibians, reptiles and bats) under this Act.
Environmental Protection Act (1990)	There is an obligation to keep the Site free from litter and refuse.
Countryside and Rights of Way Act (2000)	Imposes a new right of access on foot to registered common land and other areas of ‘open countryside’ which under certain circumstances allows access without being confined to footpaths.

WARRINGTON

401 Faraday Street
Birchwood Park
Warrington
WA3 6GA

T: 01925 844004
E: tep@tep.uk.com

MARKET HARBOROUGH

The Reynard Suite
Bowden Business Village
Market Harborough
Leicestershire
LE16 7SA

T: 01858 383120
E: mh@tep.uk.com

GATESHEAD

Office 26 Gateshead
International Business
Centre
Mulgrave Terrace
Gateshead
NE8 1AN

T: 0191 6053340
E:gateshead@tep.uk.com

LONDON

8 Trinity Street
London
SE1 1DB

T: 020 3096 6050
E: london@tep.uk.com

CORNWALL

Nr Falmouth
Cornwall

T: 01326 240081
E: cornwall@tep.uk.com