

Hypochaeris radicata, dock *Rumex sp.* and grasses found within the adjacent improved grassland field.

Fence

- 2.15 A low post and wire fence (c.1.2m in height) forms boundaries of the two fields and mark a bare-ground footpath between the two fields. In addition to the north of the eastern field is a mixed fence/wall line separating the field from residential gardens.

Bare Ground

- 2.16 There is a strip of bare ground forming a footpath between the two improved grassland fields. There were sparse ruderal herbs encroaching this area, however these were individual plants that did not constitute a true habitat area.
- 2.17 In addition, there is a small patch of bare ground in the western corner of site, likely used for parking. There were sparse ruderal herbs encroaching this area, however these were individual plants that did not constitute a true habitat area.

Hardstanding

- 2.18 There is a small area of hardstanding pavement in the western corner of site which were devoid of vegetation.

Invasive Plant Species

- 2.19 There are several stands of Himalayan balsam found within the site, which were largely confound to north/north-western areas of the site, in areas of scrub or tall ruderal herbs, particular within the basin mentioned in paragraph 2.11.
- 2.20 There remain no changes to the overall extent and distribution of the habitats within the site based on the most recent June 2023 survey, albeit the grassland is no longer grazed by horses.

Fauna

- 2.21 The following key faunal groups have been assessed as likely to use the site:
- Badger – no setts identified, but several mammal paths are present within the wooded embankment to the east of site and suitable habitat is present for sett excavation (sub-optimal), foraging and commuting;
 - Bats – Suitable commuting habitat formed by scattered trees, hedgerows and woodland edges and foraging habitat formed by tall ruderals and scrub.
 - Birds – suitable habitat for nesting and foraging birds formed by scattered trees, scrub (both dense and scattered), tall ruderals and hedgerow;
 - Common amphibians (including toads) – Suitable terrestrial habitat including tall ruderals and scrub, particularly in damp basin (remnant pond) area.
 - Hedgehog – Suitable foraging and refuge habitats including dense scrub, tall ruderals and hedgerow.



Description of Ecological Resources to be Created

2.22 The following habitats are to be established and managed (as shown on plans **13503_P07** and **13503_P08**) and consist of the following:

- Management of the green corridor in the east to form a mosaic of rough grassland and scrub which will provide resource for invertebrates and therefore birds and bats;
- Planting of marginal / marsh species around the SUDs basin which has been designed to retain at least some standing water year-round, which will provide suitable terrestrial amphibian habitat;
- Creation of new hedgerows along the eastern and partial north boundary to provide habitat corridors across the site;
- Planting of clusters of trees along edge of existing woodland to the east of site to form a scalloped woodland edge, of benefit for commuting bat species;
- Provision of flowering and berry producing tree and shrub species, to provide resource for invertebrates, foraging and nesting birds, and foraging bats;
- Provision of additional nesting opportunities for birds (bird boxes), roosting opportunities for bats (bat boxes) and hibernaculum that may be used by amphibians and hedgehogs; and,
- Incorporation of toad friendly (see **Appendix 2**) kerbing and 'Hedgehog Highways' through fencing across site.



Section 3: Management Objectives

- 3.1. Considering the habitats and species present, the following objectives for nature conservation management have been set:
- Objective 1: - To provide a range of habitats that are of benefit to the key faunal groups identified on site;
 - Objective 2: - To establish habitats and provide a regime of annual nature conservation management works that will maintain the quality of habitats, particularly for the key faunal groups identified;
 - Objective 3: - To incorporate additional enhancements for key faunal groups on site, including bats, birds and common toads.
 - Objective 4: - Monitor efficacy of nature conservation management through making regular assessments of habitat quality and monitoring of populations of key faunal groups.
 - Objective 5: To ensure the continuance and expansion of opportunities for key faunal species identified on site

Key Faunal Groups and Management Requirements

- 3.2. The following key faunal groups for the site have been identified from ecological surveys undertaken to inform various planning applications:
- Badger – Maintain suitable foraging habitat and linkages through the site;
 - Bats – Maintain suitable foraging and commuting habitat for bats and provide additional opportunities for roosting bats. Enhance the foraging opportunities for bats on site;
 - Birds – Provide a range of resources that may be used by birds for nesting, roosting, and foraging across the site;
 - Common amphibians (including toads)– maintain suitable terrestrial habitat for amphibians on site, including marshy species around SUDs basin, which has been designed to hold at least some standing water at all times and incorporation of toad crossings on roads and habitat piles that may be used at various times of year;
 - Hedgehog – Maintenance of suitable habitat on site, incorporation of shrubs, hedge planting and habitat piles to improve sheltering opportunities and provision of fence gaps to allow free movement of hedgehog across the site.



Section 4: Management Constraints:

- 4.1. Management cannot be undertaken which compromises the survival or success of the fauna described in Section 3:
- Management / ground works should only take place when it is confirmed by a Suitably Qualified Contractor that Himalayan balsam has been successfully eradicated from site.
 - All management works should take place within daylight hours to avoid the disturbance of foraging and commuting bats, or if unavoidable maintain dark corridors through the site;
 - All tree, scrub and hedgerow cutting works should occur outside of the 'core' nesting bird period (September – March inclusive). Due diligence is also required by maintenance staff to avoid the disturbance of nesting birds, which can also nest outside the core period;
 - Ground vegetation clearance and ground preparation works associated with management should avoid GCN hibernation period (November – Mid February) where practicable. A toolbox talk should be given to contractors to ensure they are able to recognise common amphibian species and the need to implement RAMS^{1,2} as outlined in the ecological assessments. These measures would also apply to Hedgehog.



Section 5: Establishment / Management Prescriptions

- 5.1. The landscaping schedule of maintenance is presented in **Table 5.1** on the next page, in accordance with the soft landscaping proposals (as shown in **Appendix 3**).
- 5.2. Management prescriptions for the establishing habitats will be implemented in stages as indicated in the timings column of **Table 5.2**. A condensed calendar for habitat management actions is given in **Table 5.3**. These prescriptions are cross referenced with the soft landscaping proposals and aim to ensure new habitats are managed to provide opportunities to key fauna on site.
- 5.3. The prescriptions seek to cover a period equating to 30-years post development as per *Condition 28, part g* and comprises both the start-up works, primary measures to establish habitats and subsequent management regimes. These actions are set out under objectives headings as in **section 3**.
- 5.4. It will be the responsibility of the controlling body (be that the existing landowners, or any subsequent owners or associated nominated body) to employ an SQE to undertake all monitoring for the duration of the LEMP.

Landscaping Schedule of Maintenance

- 5.5. As a minimum, monthly maintenance visits should be undertaken to inspect, monitor as well as to carry out routine operations, including weeding and litter picking, with other specific operations being undertaken as scheduled below.
- 5.6. During the growing season (generally late April until the end of October – but depending on climatic conditions) further visits will need to be undertaken to ensure that amenity grass areas are kept in a tidy and well-kept condition. This is likely to be on a fortnightly basis.
- 5.7. Existing hedges and trees are to be maintained by:
 - Occasional thinning of understorey scrub planting;
 - Pruning of trees and hedges to maintain correct shape and prevent plants encroaching on paths or roads; and
 - Weed control.
- 5.8. Proposed trees, shrubs and hedges are to be maintained by:
 - Fertilising for continued healthy growth;
 - Pruning to maintain correct shape of plant and prevent plants encroaching on paths or roads;
 - Flail cutting of existing hedges on a rotational basis;
 - Weed control;



- Watering;
- Check and adjust ties; and
- Firming up of stakes.

5.9. Tree whips and scrub planting are to be:

- Thinned, as necessary.

5.10. Amenity grass is to be maintained by:

- Regular cutting; and
- Weed control through mowing or spot spraying where necessary.

5.11. Wildflower and meadow grass is to be maintained by:

- Periodic cutting; and
- Weed control through mowing or spot spraying where necessary.

5.12. Aquatic and marginal planting is to be maintained by:

- Periodic cutting;
- Pond desilting; and
- Removal of debris.

5.13. The first 12 months management is to be included within the landscape contract and be undertaken by the landscape contractor (appointed by Halton Housing / OSUK Ltd.) to their own specification with the sole purpose of ensuring that the softworks are planted (in accordance with the detailed planting proposals) and successfully established. All plant failures within the first year will be replaced by the contractor on a like for like basis.

5.14. Maintenance and management activities for subsequent years (following end of defects period) are set out below (which covers a minimum period of 30 years) to ensure the soft landscaping is managed effectively beyond the time limits of the implementation and establishment works. The responsibility for this management and maintenance will be with the management company which will be appointed by Seddon Homes.

5.15. Management and maintenance operations will be monitored and reviewed annually on an on-going basis and where required modified if the operations and frequencies set out do not deliver the required results or meet the specific aims and objectives.



Table 5.1 Landscaping Schedule of Maintenance

<u>Objective 1:</u> To protect and enhance existing retained habitats on site; <u>Objective 2:</u> To create a diverse range of new habitats on site; <u>Objective 5:</u> To ensure the continuance and expansion of opportunities for key faunal species identified on site				
Management Item	Rationale for Management	Management Tasks	Timings	Species List (if applicable)
Turf / A22 Grass Seed	To create suitable habitats for small mammals, particularly hedgehog. Providing areas for public recreation and landscape features within residential gardens and some sections of site boundary	Turfed Areas From an approved source. When topsoil is reasonably dry and workable, grade to smooth, flowing contours removing all minor hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary fertilizer. Reduce top 25mm topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Lay turf with broken joints, well butted up, working from planks laid on previously laid turfs, during appropriate season and weather conditions. Adjust levels by raking out or filling with fine soil under turfs. Consolidate by lightly and evenly firming with wooden beaters as laying proceeds. Do not use rollers. Dress turf with fine topsoil and brush in to fill joints. Thoroughly water completed turf within 24 hours of laying. Establishment Cut Water all grass areas to maintain healthy growth. When grass is 50mm high remove debris, litter and any stones later in dry conditions cut grass to between 25-30mm. Remove and dispose of all arisings. Grass Seeded Areas Grass seeding generally to BS 4428 (1998) 'Code of practice for general landscape operations'. When topsoil is reasonably dry and workable grade to smooth flowing contours removing all hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary pre-seeding fertilizer. Reduce top 25mm of topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Sow approved grass seed mixture in accordance with suppliers recommendations during appropriate season and weather conditions, e.g. Germinal (www.germinal.com) Mix A2 (Quality Lawn) (or equal approved) at 50gms/m². Lightly harrow or rake then roll and cross-roll with lightweight roller. Establishment Cut When grass is between 40-75mm high remove stones and debris exceeding 50mm in any dimension and roll with a lightweight roller. About 48 hours later cut grass to approximately 35mm high. Remove and dispose of all arisings.	Cutting completed as required	Turf or A22 Grass Seed
Hedgerow Planting	To create 'wildlife corridors' and provide opportunities for small mammals, birds, bats and invertebrates in terms of commuting, foraging and dispersal around both developments and open spaces.	Native Hedgerow Mix <u>Planting (year 1)</u> Hedgerow shrubs to be planted on a double-staggered row, 250mm apart with no less than 4 per linear metre within a 50cm wide bed and mulched with geotextile. Shrubs to be attached to a double line support (one for feathered hawthorn at 1m high, one for other shrubs at 60cm high) fence using an approved clip tie and cut back to 1m at time of planting. Hedgerow to be protected by timber post and wire fence and rabbit-proof fencing of whole lengths of hedgerow. Rabbit fencing to be made good, during monthly site maintenance visits where any breaches occur. <u>Initial aftercare (year 1-5)</u> Annual check to remove failed stock and replace in next planting season.	Maintenance works to hedge to be completed within September – February (outside breeding bird season). Contractors undertaking any hedgerow management	Native hedgerow mix species: Field rose <i>Rosa arvensis</i> Dog rose <i>Rosa canina</i> Holly <i>Ilex aquifolium</i> Hazel <i>Corylus avellana</i> Blackthorn <i>Prunus spinosa</i> Hawthorn <i>Crataegus monogyna</i> Ornamental hedgerow mix species: Hornbeam <i>Carpinus betulus</i> Beech <i>Fagus sylvatica</i> Heeb <i>albicans</i>

