THE ENVIRONMENT PARTNERSHIP

LEE HALL

WESTHOUGHTON

LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

TEP
401 Faraday Street
Birchwood Park
Risley
Warrington
WA3 6GA

Tel: 01925 844004
Email: tep@tep.uk.com
www.tep.uk.com

Offices in Warrington, Market Harborough, Gateshead, London and Cornwall

Document Title	Landscape and Ecological Management Plan
Prepared for	Persimmon Homes Ltd
Prepared by	TEP - Warrington
Document Ref	10397.001

Author	Amy Lee
Date	July 2020
Checked	James Cooper/ John Crowder
Approved	Liz Plumpton

Amendment History					
Version	Date	Modified by	Check / Approved by	Reason(s) issue	Status
1.0	10/07/19	AL	JMC/JC/LP	Original issue	Superseded
2.0	23/03/20	AL	RT	Amendments following comments from Greater Manchester Ecology Unit (GMEU)	Superseded
3.0	26/06/20	AL	RT	Amended Planting Plans (Rev E)	Superseded
4.0	27/02/24	SB	RT/GD	DOCUMENT SUPERSEDES 7527.001 - Amended to include new document reference, new planning layout (Charles church ref: WLH-REP01CC), new planning reference and condition wording and a new appendix which include for protection measures surrounding the pond as a CEMP.	Issued

CONTENTS PAGE

TABLES PAGE

APPENDICES

1.0 Introduction

Purpose of the Management Plan

1.1 This Landscape and Ecological Management Plan has been produced by The Environment Partnership (TEP) Limited on behalf of Persimmon Homes Ltd to provide a framework for long term landscape management and maintenance of the open space and landscaping associated with the residential development at Land at Lee Hall, Westhoughton (hereby referred to as the 'Site').

Scope of the Management Plan

1.2 The Management Plan 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 associated with the Site.

1.3 This Management Plan covers public open space and landscaping within the Site and excludes the residential gardens which are to be maintained by the individual properties.

1.4 The Management Plan should be read in conjunction with the following:

- Landscape Masterplan (Cass Associates ref: 1244/100 rev L);
- Planting Plan - Sheet 2 of 10 (Cass Associates ref: 1244/201 rev J);
- Planting Plan - Sheet 3 of 10 (Cass Associates ref: 1244/202 rev H);
- Hard Landscape Plan - Sheet 2 of 4 (Cass Associates ref: 1244/301 rev G);
- Planning Layout (Charles Church ref: WLH-REP01CC rev I);
- Proposed Play Areas (Cass Associates ref: 1244/400 - 401 rev C);
- Environmental Statement - Update Addendum (ref: RSK/M/P660510-03-Rev01); and
- Arboricultural Impact Assessment (TEP ref: 6277.001).

Structure of the Management Plan

1.5 Chapter 2.0 provides a summary of the factors influencing management. 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 Landscape Masterplan (Cass Associates ref: 1244/100 rev L) and Appendix B is the Planting Plans Sheet 2 of 10 & Sheet 3 of 10 (Cass Associates ref: 1244/201 rev J and 1244/202 rev H) which provides the planting schedules and planting specifications. Appendix C is the Planning Layout (Charles church ref: WLH-REP01CC rev I), Appendix D includes a details Construction Environmental Method Statement, Appendix E provides a table of maintenance operations, Appendix F summarises relevant legislation and Appendix G includes Exclusion Fencing and Signage.

Site Location

1.7 The Site is on the north-west outskirts of Westhoughton between the towns of Wigan and Bolton, Greater Manchester. It is situated to the south of the A58 Manchester Road and Chequerbent Roundabout and east of Platt Lane. It comprises a series of adjoining fields divided by semi-continuous and dilapidated hedgerows and fencing.

1.8 The boundaries of the Site are defined by residential properties of Manchester Road to the north; a woodland plantation and associated dry ditch to the east associated with a railway embankment; Platt Lane to the south; and residential properties of Park Road to the west.

1.9 A Public Right of Way (PRoW) runs north - south through the centre of the Site and then a north-west to south-east axis to Park Road, linking it with Platt Lane.

Planning and Development Context

Planning Application - (appeal ref: APP/N4205/W/15/3139219 for application ref: 94696/15)

1.10 Planning permission was granted on appeal and subject to conditions in December 2017 (appeal ref: APP/N4205/W/15/3139219 for application ref: 94696/15) for the development of:

"300 dwellings with public open spaces, landscaping and play areas, together with creation of new internal access road which connects into the existing road network at Chequerbent Roundabout in the north and Platt Lane in the south, at Land North of Platt Lane, East of Park Road and South of Chequerbent Roundabout, Westhoughton, Bolton."

Planning Condition - (appeal ref: APP/N4205/W/15/3139219 for application ref: 94696/15)

1.11 Planning permission was granted subject to conditions, including Condition 14 which states:

"Within 3 months from the commencement of development a Landscape and Ecological Management Plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority. The LEMP will provide the following details:

- A layout and species list for newly created hedgerows, tree planting, grassland and ponds;

- A list of ecological factors that are likely to influence the delivery of target habitat types that require management and monitoring;

- Details of management prescriptions to enhance retained ecological features such as ponds and hedgerows (including Pond 2 as referenced on plan reference: G4398.01.003b);

- A works schedule;

- Details of the body or organisation responsible for implementation of the plan;

- A monitoring and remediation strategy; and

- A scheme for the management of the approved details throughout the lifetime of the development.

- The LEMP shall also include details of the mechanisms by which the long-term implementation of the plan will be secured, how contingencies and or remedial action will be identified, agreed and implemented.

The approved plan will be implemented in full, subject to any approved phasing scheme."

Section 106 Agreement - (appeal ref: APP/N4205/W/15/3139219 for application ref: 94696/15)

1.12 A Section 106 Agreement (S106) exists between Peel Investments (North) Limited and The Borough Council of Bolton, dated 29th June 2017. Schedule 3 Open Space states:

"1. On or before first Occupation of the Development the Owners will submit an Open Space Management Plan to the Council for approval in writing.

2. The Owners will implement the Open Space in accordance with the Open Space Management Plan as approved by the Council pursuant to paragraph 1 of this Schedule.

3. The Open Space will be managed and maintained in accordance with the Open Space Management Plan as approved by the Council pursuant to paragraph 1 of this Schedule by the Management Company."

Non-material Amendment - (application ref: 17176/23)

1.13 A 'non-material amendment' application was submitted to and approved by Bolton Council in February 2024, subject to conditions for:

"Non-material amendment to application 94696/15 (re-configuration of the development parcel compromising 21 dwellings and alterations to house types)".

Planning Condition - (application ref: 17176/23)

1.14 Planning permission was granted subject to conditions including Condition 3 which states:

"No development shall commence within the area subject of this application unless and until an updated Landscape and Ecological Management Plan (LEMP) has been submitted to and approved in writing by the local planning authority. The updated LEMP shall provide details of measures to protect the pond (pond 2) during the construction process.

The agreed protective measures shall remain in place until the development is completed or unless otherwise agreed in writing by the local planning authority."

1.15 The management and maintenance information included in this LEMP has been prepared to part satisfy the above Section 106 agreement and discharge the referenced planning conditions.

2.0 Site Management Considerations

Responsibility for Site Management

2.1 Persimmon Homes Ltd will employ a Management Company who will be responsible for operational management and maintenance of the landscape within the site boundary.

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

2.3 The implementation of this plan will be secured, and contingencies and remedial actions identified, agreed and implemented through the Management Company in accordance with the S106 agreement.

Health and Safety

2.4 Persimmon Homes Ltd will retain ultimate responsibility for the health and safety of the Site and will review health and safety as part of its regular inspections of the Site. 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 through appropriate risk management procedures.

2.5 The Site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP's) and Health and Safety Executive (HSE) guidance. The landowner will be responsible for ensuring that risk assessments are undertaken for the Site as required under the Management of Health and Safety at Work Regulations 1999, and for monitoring and reviewing the effectiveness of control measures implemented as a result of the risk assessment to ensure their effectiveness.

2.6 They will also be responsible for ensuring that accidents and incidents which occur on the Site are reported to the relevant enforcing authority as required by the Reporting of Injuries, Disease and Dangerous Occurrences Regulations (RIDDOR) 2013.

2.7 The health and safety regime for any work undertaken on the Site will follow the guidelines as laid down in the HSE publications, including HSGs 'Managing for Health and Safety and HSG268 'How to Control Risks at Work'. As the Management Company will be the instigator and controller of works on the Site, the Management Company will fulfil the landowner's role and the work manager's role. This also places an obligation on the Management Company to ensure that any contractor understands and fulfils their role.

Legal Factors

2.8 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 F.

Management Objectives

2.9 The long term management objectives of this Management Plan are:

- To ensure new planting establishes to create a high quality landscaping scheme to provide an attractive setting to the development;
- To ensure the scheme is successfully maintained;
- To enhance existing habitats such as ponds and hedgerows, and increase biodiversity net gain on site as well as meeting amenity needs;
- To maintain existing public access to the site and ensure the safety of residents and visitors;
- To enhance public awareness and appreciation of the habitats and associated flora and fauna of the Site; and
- To comply with legal obligations and constraints.

Ecological Factors

Designations

2.10 There are no nationally designated wildlife sites or non-statutory sites within or immediately adjacent to the site boundary.

2.11 Seven local designated sites were identified within 1km of the Site. These include:

- Hall Lee Bank Park Local Nature Reserve (LNR) and Site of Biological Importance (SBI) - approximately 180m south;
- Hulton Park SBI - approximately 0.25km west;
- New Park Wood SBI - approximately 0.74km south-east;
- Gorse Wood SBI - approximately 0.79km north-east;
- Mill Dam Wood SBI - approximately 0.92km south-east; and
- Gibfield Park (North) - approximately 1km south; and
- Gibfield Park (South) - approximately 1km south.

Habitats and Species of Principal Importance in England

2.12 Section 41 (S41) of Natural Environment and Rural Communities (NERC) Act 2006 requires a list of habitats and species of principal importance in England to be drawn up.

2.13 Local Biodiversity Action Plans (LBAPs) provide an indication of the relative value given to existing habitats and species. The Greater Manchester BAP have been used when assessing the value of the habitats and species present within the Site.

2.14 The following S41 and LBAP priority species and habitats will be sustained within the Site:

- Hedgerows;
- Ponds;
- Native bluebells;
- Song thrush;
- House sparrow;
- Starling;
- Bullfinch; and

- Common toad.

Ecological Surveys

2.15 Below is a list of the ecological surveys carried out by TEP at the Site:

- Desktop study (2014);
- Phase 1 habitat survey (2014);
- Arboricultural surveys (2014);
- [redacted]
- Great crested newt (GCN) surveys (2014);
- Bat surveys (2014-2015);
- Breeding bird surveys (2014-2015);
- Updated Phase 1 habitat survey (2017);
- Updated arboricultural survey (2017);
- [redacted]
- Updated bat surveys (2017);
- Updated GCN survey (2017);
- Invasive species survey (2019); and
- [redacted]

Watercourses/Waterbodies

2.16 Surface water drains from the higher land to the north of the wider landscape through ditches and watercourses to the Marsh Book valley further south. There are many ponds in the surrounding fields and a number of reservoirs in the higher land to the north.

2.17 A short section of dry ditch was noted along the south boundary of the Site. A dry ditch runs outside the site boundary to the east and is associated with broad-leaved plantation woodland.

2.18 There are two ponds within the site boundary. Central Pond 1 is dominated by rush dominated marsh with only a small area of shallow standing water noted. This is likely to dry out completely in summer months.

2.19 Pond 2 to the south-east corner represents the main area of standing water onsite. It is a relatively large field pond bordered by a band of rush dominated marsh. Both on site ponds will be retained and enhanced with a native seed mix (for full species mix refer to Planting Plan (Sheet 2 of 10 & Sheet 3 of 10 (Cass Associates ref: 1244/201 rev J and 1244/202 rev H) included in Appendix B).

2.20 An attenuation pond is proposed to the south-west corner of the Site as part of the site wide drainage strategy, as detailed within the Flood Risk Assessment and Surface Water Drainage Strategy (RSK ref: 880503-R1(02)-FRA) and will be managed in line with the SuDS Management and Maintenance Plan written to discharge Condition 15.

Flora

Woodland/Trees

2.21 There are scattered trees on site that are located mainly within the existing northern public open space and/or associated with former field boundaries.

2.22 The Site has links to the off-site broad-leaved plantation woodland along a railway embankment to the east, which provides strong links to the wider landscape to the north, south and east. This connection will be enhanced through on-site native woodland and tree planting.

2.23 Bolton Metropolitan Borough Council have confirmed that no trees are subject to a Tree Preservation Order (TPO). The Site does not lie within a Conservation Area. No trees are classified as veteran trees and there is no Ancient Woodland on or adjacent to the Site.

Dense and Scattered Scrub

2.24 Dense and scattered scrub have established in areas away from grazing or mowing, and/or have established extending out from boundary vegetation. The majority of dense scrub is found in the northern public open space and its northern boundary where it will be retained and planted with additional native tree and shrub planting, to continue to provide valuable foraging habitat for local wildlife.

Hedgerows

2.25 The hedgerows on site are former inner field and perimeter boundaries and are generally in good condition. A double hedgerow lines the existing PRoW.

2.26 The species-poor hedgerows within the site qualify as S41 and local BAP priority habitats, and those which contain native bluebell amongst the ground flora also qualify as Important under the Hedgerow Regulations 1997.

2.27 Retained hedgerows will be enhanced through gap planting of suitable native species to continue to provide valuable foraging and commuting habitat for local wildlife.

Native Bluebells

2.28 Eight stands of native bluebells are found associated with former field boundary hedgerows within and on the boundaries of the Site as illustrated on the Bluebell Location Plan (TEP ref: G4398.01.012b) as part of the Bluebell Method Statement (TEP ref: 4298.01.010).

2.29 Native bluebell are protected under Schedule 8 of the Wildlife and Countryside Act (1981) which restricts picking or digging of bulbs for commercial purposes.

2.30 If any works are to disturb an area populated by bluebell a translocation exercise is recommended in line with the Bluebell Method Statement (TEP ref: 4298.01.010).

Invasive Non-Native Species

2.31 The invasive species Himalayan balsam and Japanese knotweed were found along the northern boundary of the existing northern public open space. Himalayan balsam, Japanese knotweed, rhododendron and cotoneaster were also identified outside of the site boundary associated with dense and scattered scrub in this location.

2.32 An invasive species survey was carried out by TEP in 2019 and an Invasive Non-Native Species Method Statement (TEP ref: 7527.002) produced detailing treatment methods for the management of these species within the Site which must be adhered to.

2.33 These species are listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended. Under this legislation it is an offence to plant or otherwise allow them to grow in the wild.

Fauna

Amphibians

2.34 The GCN surveys carried out in 2014 and 2017 both concluded that no GCN are present on site or on intervening land.

2.35 Common toad is historically known to occur on site; however no instances of this species were identified during the ecological surveys. Common toad are listed as a species of principle importance under S41 alongside other native amphibian species, common toad are also protected from sale under the Wildlife and Countryside Act (1981).

2.36 Smooth and palmate newts were incidentally recorded in low numbers at Pond 2. These native amphibians are protected from sale under the Wildlife and Countryside Act (1981).

2.37 Habitat piles are proposed across the development to offer frost and flood-free habitat to invertebrates, amphibians, reptiles and small mammals. These will be appropriately positioned close to other retained or proposed habitat features (such as the pond or hedgerows), partially buried and sited to ensure at least part receives direct sunlight during the day.

Breeding Birds

2.38 The existing habitats across the site provide nesting and foraging potential for local bird populations which will be further enhanced through native woodland, tree and hedgerow planting and wildflower meadow seeding.

2.39 Three BOCC Red list species (song thrush, house sparrow and starling) and seven S41 species (bullfinch, dunnock, house sparrow, mistle thrush, starling, song thrush and willow warbler) were considered to probably be breeding on site.

2.40 One BOCC Amber list species (willow warbler) was confirmed as breeding and four other species (bullfinch, dunnock, whitethroat and mistle thrush) were considered to be showing breeding behaviour at Lee Hall.

2.41 All UK wild birds are protected while at the nest. 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.

2.42 Opportunities for nesting birds will be included within the new design incorporating bird boxes on suitable trees.

Bats

2.43 Four species which are common and widespread in the UK: common pipistrelle (which accounted for the vast majority of bat activity), noctule, brown long-eared bat and a Myotis species were identified during surveys. Bat activity was generally associated with the network of hedgerows and mature scattered trees on site.

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

2.45 Bat boxes will be installed on suitable retained trees located throughout the site. Bat boxes will include a range of models such as the Schwegler 2FDF, 1FD and 2FN. Three bat boxes will be installed per tree selected, at least 3m above ground level. A minimum three trees will be selected for bat box installation. Additionally, at least one Schwegler 1FS and one Schwegler 1FW will also be installed in a suitable location, each to a single tree.

[redacted]

2.46 [redacted]

2.47 [redacted]

2.48 [redacted]

Reptiles

2.49 Existing habitat on site such the two areas of modified and semi-improved grassland, hedgerows and scrub may provide limited foraging and refuge opportunities for grass snake. Grass snake are protected under the Wildlife & Countryside Act as amended (1981) from killing or injury.

2.50 A Reptile Mitigation Plan (TEP ref: G4398.01.012a) has been produced showing areas with potential for reptiles and a Reptile Method Statement (TEP ref: 4398.01.013) produced for the protection of reptiles on site during construction.

Brown Hare

2.51 Brown hare are a S41 priority species and it is anticipated that they may use the Site in low numbers as part of the wider habitat mosaic, however none have been recorded within the Site during surveys. Any brown hare present would be displaced from site to the remaining open farmland habitats in the local landscape.

Invertebrates

2.52 The existing habitat on site offer some suitability for invertebrates to forage, shelter and disperse, although the floral diversity is not exceptional. Opportunities for invertebrates, including pollinators, will be enhanced throughout the Site to benefit local wildlife such as bats, birds and mammals through the planting scheme.

2.53 Deadwood will be used to create hibernacula for amphibians and reptiles where positioned close to the ponds and hedgerows and will additionally benefit invertebrates.

Social Factors

Public Amenity and Accessibility

2.54 The public open space will be managed for both amenity and biodiversity. Both formal and informal recreation will be encouraged in the long term, thereby alleviating recreational pressure on the off-site SBIs and broad-leaved woodland.

2.55 The existing PRoW will be retained and enhanced as a footpath/cycleway through linkages with proposed routes through the network of public open spaces on site, as detailed on drawing G4398.01.010a.

2.56 Appropriate signage will aim to guide local residents using local footpaths and cycleways, provide information about existing wildlife assets and encourage good custodianship. Signage can support landscape objectives through 'place-setting' and will complement any existing local information (e.g. within Hall Lee Bank Park LNR & SBI).

2.57 Two adventure play areas are proposed to the northern and central public open spaces. The northern play area is a Neighbourhood Equipped Area for Play (NEAP) and provides play opportunities for older children. The central play area is a Local Equipped Area for Play (LEAP) and provides opportunities for younger children. The surrounding landscape will provide further opportunities for natural play.

3.0 Management Intentions and Operations

Landscape Elements

3.1 The Site will comprise the following landscape elements as shown on the Landscape Masterplan (Cass Associates ref: 1244/100 rev L) included as Appendix A. For full species mix refer to Planting Plans (Sheet 2 of 10 & Sheet 3 of 10 (Cass Associates ref: 1244/201 rev J and 1244/202 rev H) included as Appendix B:

- Retained trees;
- Native woodland mix;
- Tree planting;
- Retained hedges;
- Hedge planting;
- Ornamental shrub and perennial mix;
- Wildflower grassland;
- Amenity grass;
- Retained ponds;
- SuDS pond;
- Bat boxes;
- Bird boxes;
- Habitat piles;
- Play areas (NEAP and LEAP);
- Footpath (PRoW);
- Railings;
- Gates;
- Bollards;
- Litter bins; and
- Benches.

3.2 The landscape maintenance schedules are included as Appendix E.

<u>All Areas: Health and Safety</u>

Management Intentions

3.3 The Site will be maintained so that is safe for site users. Any remedial actions required to address health and safety issues will be implemented as soon as possible.

Management Operations

3.4 A health and safety inspection will be undertaken annually to identify any health and safety hazards. Any hazards will be made safe as far as is practicable.

3.5 Results from the health and safety inspection, as well as any remedial measures, will be compiled and presented within the annual report which will be used in the review of the management plan as detailed in Chapter 4.0.

All Areas: Cleansing

Management Intentions

3.6 Cleansing will be carried out across the Site to retain high amenity value. Cleansing refers to the removal of general litter, debris, detritus, broken glass, building rubble, animal fouling, and timber.

Management Operations

3.7 Cleansing of the Site will be carried out on a fortnightly basis and all arisings from cleansing operations shall be removed from Site and disposed of in an authorised manner.

3.8 Fly-tipping and graffiti may occur from time to time and this will be removed as soon as possible in order to discourage reoccurrences.

3.9 Litter bins will be emptied completely and the bag inside replaced on a twice weekly basis.

3.10 The play areas will be cleansed on a twice weekly basis.

3.11 The waterbodies and watercourses are to be included as part of this routine cleanse and includes all floating and submerged debris.

3.12 Watering will be carried out as required to ensure establishment of the landscape scheme. Additional watering may be required during periods of prolonged drought. Particular care will be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth.

Constraints

3.13 Care must be taken during cleansing to check for wildlife, which may be hiding in or under items. Any wildlife found will be returned to suitable cover.

3.14 When removing material from within or near to waterbodies and watercourses, care must be taken to check for amphibians, which may be hiding in or under items. Any amphibians found will be returned to suitable cover.

All Areas: Chemical Use

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

3.16 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. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

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

3.18 Where herbicides are to be used in proximity to waterbodies care must be taken to only use formulations of Glyphosate which are approved for use close to water. It is essential that Environment Agency are notified and an authorisation letter obtained (Form AqHerb01: Agreement to use herbicides in or near water).

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

Soft Landscape Element: Retained Trees

Management Intentions

3.20 The retained trees will be managed to continue to provide a mature setting to the development and for their habitat value.

Management Operations

3.21 Management of existing trees may include thinning and improvement through coppicing and pruning to be undertaken where recommended under the discretion of a suitably qualified arboriculturist following tree inspections:

3.22 Trees to be removed will be cut to a level stump length of 150mm for treatment by removal with a stump grinder where required or an appropriate herbicide application such as eco plugs.

3.23 Any deadwood found on site will be stacked and kept onsite where possible as it is of value to invertebrates. Wood under 250mm diameter collected from thinning, pruning, brashing and scrub/vegetation clearance will, wherever possible, be chipped and used on site for mulching, either by blowing directly back into planting areas (avoiding waterbodies and watercourses) or by storing on site for future use.

3.24 Wood greater than 250mm diameter will be logged and used to create deadwood piles to increase biodiversity. This will include standing dead timber and hollow trunks as well as allowing dead wood to remain on the ground. Deadwood provides habitats for fungi, lichen and invertebrates which in turn provide a source of food for amphibians and birds. Amphibians and small mammals also favour dead wood as a place to seek refuge. Standing deadwood is also an important ecological habitat; however consideration of the proximity to the footpaths and other public access areas will be required. Brushwood, if collected elsewhere on site, will also be stacked within these areas as small habitat piles.

3.25 Deadwood and other natural materials arising on site may also be used to demark informal pathways, distinguish/retain areas for wildlife or form part of the natural play features on site (Play England, 2006 & Forestry Commission England, 2006). These features can be used to create a sense of place and can be incorporated into local signage.

Constraints

3.26 An Arboriculturist must be consulted prior to undertaking any major tree works within the Site. Any works with the potential to disturb bats will be subject to a bat survey prior to the works being undertaken. Tree works will be carried out outside of the bird nesting season (between March and August inclusive). Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologist before any works commence.

Inspections

3.27 Tree hazard inspections will be undertaken by suitably qualified arboriculturists of trees within or adjacent to areas of public access. The inspection will include checking for damage and disease, and to maintain appropriate height clearances for safe pedestrian access.

3.28 Tree hazard inspections will be undertaken at least annually during construction and any defects period. Subsequent tree hazard inspections will be undertaken as recommended at a scope and frequency advised by a suitably qualified arboriculturist.

Constraints

3.29 An Arboriculturist must be consulted prior to undertaking any major tree works within the Site. Any works with the potential to disturb bats will be subject to a bat survey prior to the works being undertaken. Tree works will be carried out outside of the bird nesting season (between March and August inclusive). Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologist before any works commence.

<u>Soft Landscape Element: Woodland and Tree Planting</u>

Management Intentions

3.30 Woodland and tree planting within open spaces will complement retained trees and scrub and will provide foraging and nesting opportunities in time.

Management Operations

Establishment

3.31 Within the first five years of establishment, a mulch will be laid around the base of all young plants to suppress weed growth and will be maintained to a depth of 75mm.

3.32 Once trees attain a height of 3m, the maintenance of a weed free base and formative pruning can be discontinued. However, crown pruning is desirable and any dead or severely damaged trees will be felled and replaced accordingly.

3.33 Where trees are staked, the stakes and ties will be checked monthly 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.

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

3.35 Newly planted trees will require re-firming as required during the first five years.

3.36 Young trees will require formative pruning to maintain a desirable shape as well as to maintain health and vigour.

3.37 Once trees attain a height of 3m, the maintenance of a weed free base and formative pruning can be discontinued. However, crown pruning is desirable and any dead or severely damaged trees will be felled and replaced accordingly.

3.38 Any dead or severely damaged trees will be felled and replaced accordingly in the first five years. Deciduous species will be replaced when dormant in early November to late March. Conifers and evergreen species will be replaced in September/ October or April/ May.

General

3.39 Any deadwood found on site will be stacked and kept onsite where possible as it is of value to invertebrates. Wood under 250mm diameter collected from thinning, pruning, brashing and scrub/vegetation clearance will, wherever possible, be chipped and used on site for mulching, either by blowing directly back into planting areas (avoiding waterbodies and watercourses) or by storing on site for future use.

3.40 Wood greater than 250mm diameter will be logged and used to create deadwood piles to increase biodiversity. This will include standing dead timber and hollow trunks as well as allowing dead wood to remain on the ground. Deadwood provides habitats for fungi, lichen and invertebrates which in turn provide a source of food for amphibians and birds. Amphibians and small mammals also favour dead wood as a place to seek refuge. Standing deadwood is also an important ecological habitat; however consideration of the proximity to the footpaths and other public access areas will be required. Brushwood, if collected elsewhere on site, will also be stacked within these areas as small habitat piles.

3.41 Deadwood and other natural materials arising on site may also be used to demark informal pathways, distinguish/retain areas for wildlife or form part of the natural play features on site (Play England, 2006 & Forestry Commission England, 2006). These features can be used to create a sense of place and can be incorporated into local signage.

Watering

3.42 Young single stem trees 'whips' planted during the trees 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.

3.43 Larger trees with established branch structure will require regular watering, once per week during the first and second summers after planting. Additional watering may be required during periods of prolonged drought. Particular care will be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth.

Inspections

3.44 An assessment of the condition and structure of trees will be carried out annually to determine the requirements for thinning, beating up, hazard tree works, formative pruning and addressing branch/stem breakages.

Soft Landscape Element: Hedgerows

Management Intentions

3.45 Retained hedgerows are to be gap filled with native species and will be managed to provide foraging and commuting corridors and screening to the development.

Management Operations

Establishment of Proposed Hedgerows

3.46 Management operations during the establishment phase (until branches of adjacent plants fully merge together) will comprise of weed control, watering (if required) and formative 'facing up' of the hedgerow to establish dense branch growth. New planting will be re-firmed as required.

3.47 Watering will be carried out as required to ensure establishment of the landscape scheme. Additional watering may be required during periods of prolonged drought. Particular care will be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth.

3.48 During the first five years of establishment, between April and October monthly inspections of hedgerow will be undertaken and weeds will be removed by hand weeding and if necessary herbicide (glyphosate) spot application.

3.49 Deciduous species will be replaced when dormant in early November to late March. Conifers and evergreen species will be replaced in September/ October or April/ May.

General

3.50 The first cut to newly planted hedgerows is recommended within years 2 to 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. Hand held methods of management, where appropriate, will be used in favour of tractor-mounted machinery.

3.51 Retained and established hedges will be cut in an 'A' shape to maintain a wide base for bird nesting and roosting. The 'A' shape profile of the hedge should be maintained annually by cutting the current season's growth.

3.52 If possible only one side will be cut annually. Cutting every 2 years rather than annually will create a bushier hedge for wildlife nesting/refuge and allows for berry production in the alternate years.

3.53 If possible a 1m grass strip will be left at the base of naturalistic hedgerows to allow species rich tussocky grass growth to establish enhancing habitat potential and increasing connectivity. The 1m grass strip is to be cut simultaneously with the hedge cutting regime.

3.54 Hedgerows and grass strips can be cut between September to February to avoid bird nesting season. The later hedges are cut the bigger the advantage they provide to foraging wildlife from providing berries and fruits.

3.55 Additional hedgerow cutting may be required from a health and safety perspective should there be a good growing season (although this is unlikely within the first few years of establishment of new hedgerows, but this will be monitored).

Constraints

3.56 Any hedgerow management will be carried out outside of the bird nesting season (between March and August inclusive). Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologist before any works commence.

Soft Landscape Element: Ornamental Shrub and Perennial Mix

Management Intentions

3.57 Ornamental shrub and perennial planting is proposed to add to the amenity value of the development, and provide foraging opportunities across the Site. The ornamental planting will be kept neat and tidy whilst encouraging plant growth.

Management Operations

3.58 Within the first five years of establishment, a bark mulch will be laid around the base of all young plants to suppress weed growth and will be maintained to a depth of 75mm. Between April and September frequent inspections of these areas will be undertaken, removing weeds wherever necessary by hand pulling to assist the successful establishment of plants.

3.59 Pruning will be undertaken to clear deadwood, promote healthy growth and produce desired growth of flowers, fruit, foliage or winter colour as appropriate. Dead, broken, damaged, diseased branches will be removed. Pruning will also include for clearing out crossing branches and branches growing toward the middle of the plant. 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 must 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.

3.60 Any plants subject to vandalism or storm damage should be pruned straight away.

3.61 Any damaged, failing or dead shrubs will be replaced within the first five years. Deciduous species will be replaced when dormant in early November to late March. Conifers, evergreen and herbaceous species will be replaced in September/ October or April/ May.

3.62 Watering will be carried out as required to ensure establishment of the landscape scheme. Additional watering may be required during periods of prolonged drought. Particular care will be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth.

3.63 Weed control where feasible should be undertaken by hand pulling and should remove all dominant weeds such as docks, thistles, nettles, ragwort and willowherb. However 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. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Constraints

3.64 If heavy cutting back of plants is required (i.e. more than a single year's growth) work should not be undertaken within bird nesting season (March to August inclusive). Where the pruning is limited to the extent of the current year's growth, work can be carried out at any time of year as detailed above.

Soft Landscape Element: Wildflower Grassland

Management Intentions

3.65 Areas of wildflower meadow are proposed to introduce ecological diversity and valuable wildlife habitats.

3.66 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.

Management Operations

3.67 In the first growing season the grass will be cut every 6-8 weeks to 150mm with arisings raked off. During the first five years some areas of grassland may require cultivating and re-seeding.

3.68 Routine management will include cutting the wildflower sward annually to a height of 150mm (approx.) in late September once seed heads have dropped. In order to avoid disturbance to terrestrial habitat it is recommended that wildflower grassland areas are cut in sections (e.g. one third of the grassland area) on a weekly rotation to ensure areas of uncut vegetation are retained as refuge for amphibians and small mammals]. Arisings should be left in situ for 24 hours to allow flower seed to disperse and then raked off.

3.69 The cutting of all grass areas is to be carried out with particular care, using 'strimmers' fitted with guards so as to protect obstacles from damage. The necessary health and safety precautions must be undertaken when cutting grass on steep slopes (e.g. steep banks on the grass swale). All cuttings must be removed from these areas in order to prevent nutrient enrichment and retain the desired species composition, but can be stacked within suitable woodland areas to provide additional habitat. Arisings will be lightly raked off, with great care being taken to avoid disturbance to amphibians or damaging refugia hidden in the grass and removed from site.

3.70 Grass cutting will be avoided between March and August to prevent risk of disturbance to nesting birds. Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologist before any works commence.

3.71 Weed control where feasible should be undertaken by hand pulling and should remove all dominant weeds such as docks, thistles, nettles, ragwort and willowherb. However 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. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Constraints

3.72 Fertiliser is not to be applied to any of the meadow areas in order to conserve the development of a diverse sward. The species mix may need review after the first complete flowering season to ensure no one species is becoming dominant.

Soft Landscape Element: Amenity Grass

Management Intentions

3.73 Amenity grass are proposed to the public open spaces for amenity value and to provide opportunities for informal recreation.

3.74 Open areas of grassland will be managed as required to maintain a tidy appearance as well as facilitating safe public usage.

Management Operations

3.75 During the first five years some areas of amenity grassland may require cultivating and re-seeding.

3.76 Grass cutting will be undertaken fortnightly (16 cuts a year), during the growing season. The grass will be kept as medium 'walk on' length of 35-50 mm. This length is suitable for most recreational grassland.

3.77 Weed control where feasible should be undertaken by hand pulling and should remove all dominant weeds such as docks, thistles, nettles, ragwort and willowherb. However 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. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Soft Landscape Element: Retained Ponds and SuDS

3.78 A Construction Environmental Method Statement (CEMS) (included in Appendix D) provides practical guidance to those involved in the construction works associated with the residential development at Land at Lee Hall, Westhoughton specifically Pond 2 as shown on Planning Layout (WLH-REP01CC rev I, included in Appendix C).

Management Intentions

3.79 A wet seed mix which includes marginal species is proposed to the peripheries of the retained ponds and SuDS.

3.80 Throughout the waterbodies 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.

3.81 Ponds should be managed to retain at least 30-60% of the surface area as open water through the cutting back of marginal and emergent vegetation.

3.82 Waterbodies will also be managed to avoid health and safety issues.

3.83 Vegetation will be regularly managed to ensure the top and bottom of the bank and the water level of the waterbody is clearly visible.

Management Operations

3.84 Rotational strimming will be undertaken to one third of the bank annually in late September or early October after seed heads have dropped, and cut to no less than a height of 150mm in order to prevent any risk to amphibians that may be present. All cuttings must be removed to prevent a build-up of nutrients.

3.85 To ensure a diversity of aquatic flora species, macrophytes (e.g. reeds) will be cut back or pulled out if they are starting to become particularly dominant, to allow space for other species to grow and avoid the pond silting up.

3.86 Marginal and emergent vegetation control will be implemented during the autumn. Cutting or pulling will be implemented by hand. Arisings will be placed onto protective membrane around the pond edge for 48 hours. The arisings will then be removed to a designated compost heap within the open space and the membrane will be removed from site.

3.87 Should water levels within the deepest area of the pond fall below half a metre in two consecutive years, de-silting will be required. These works will be undertaken within the period November to January inclusive. De-silting 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. De-silting will be restricted to the central section of the pond with marginal vegetation retained. The top third of a metre of silt will be temporarily placed around the margins of the excavated pond, onto protective membrane, to allow the invertebrate assemblage to repopulate the pond. After a period of 48hrs, the silt and the protective membrane will be removed from site.

3.88 Ponds will be regularly inspected. Ponds will be kept free from litter and debris which may have a detrimental effect on biodiversity and affect public health and safety.

3.89 No fertilisers or pesticides will be used within the wet grassland or within such proximity to that drift will affect the wet grassland or pond.

3.90 The waterbodies will be visually inspected on a monthly basis and any debris or rubbish will be removed. However, in the event that soft pliable debris is noted within the water during the period April to August inclusive, these items will be left in situ as they may potentially support amphibian eggs. A full cleanse after mid-September will be implemented once eggs are hatched and most larvae are developed. Water quality will be visually monitored during these inspections for any signs of pollutants (e.g. scum, excessive algal growth and discolouration) and dominant species. Remedial actions will be implemented accordingly. The advice of an ecologist will be sought if required, if remedial actions may significantly affect the ecology of the pond.

3.91 In the event dominant or harmful species are identified, a treatment plan will be drawn up; spot treatment or pulling by hand will be the preferred method.

3.92 In the event significant works are required to a pond more than one year after their completion (such as draining to fix levels or de-silting), a licensed newt ecologist will be appointed to carry out an amphibian survey prior to the works.

Inspection

3.93 An annual inspection of waterbodies will be undertaken to assess bank stability, presence of fish, water quality, coverage of aquatic/marginal vegetation, drainage and depths.

Ecological Feature: Bat Boxes

Management Intentions

3.94 Bat boxes will be installed in suitable locations around the Site to enhance its ecological value.

3.95 Bat boxes will be maintained in a viable condition to provide roost habitat throughout the year.

Management Operations

3.96 Where any box is found to be misplaced, it will be re-sited or resituated as appropriate by a licensed bat ecologist. Where any box is found to be damaged, it will be replaced a similar model prior to the next March.

3.97 Bat boxes will be visually inspected annually from the ground to ensure their correct placement and viable condition. The bat boxes will be inspected internally every two years by a licensed bat ecologist. This will be done in situ without adjustment to position or orientation of the box by removal of the inspection panels. In the event that the box is occupied by wasp or hornets, the box will either be relocated to a safe place away from regularly accessed public places or be removed from site, as desired, and a replacement box will be installed.

Ecological Feature: Bird Boxes

Management Intentions

3.98 Bird nest boxes will be maintained in a viable condition to provide nest and roost habitat throughout the year.

Management Operations

3.99 Bird nest boxes will be inspected annually in November to ensure they remain in viable condition. Where any box is found to be damaged, it will be replaced by a similar model prior to the next March.

3.100 Bird boxes will cleaned of any residual nest material and debris following the annual inspection. This will be done in situ without adjustment to position or orientation of the box by removal of the inspection panels. In the event the nest box is occupied (by bird, bat or other animal), the box will be closed without cleaning and cleaning will be delayed until the following year. In the event that a bat is occupying the nest box, the advice of a licensed bat ecologist will be sought. In the event that the box is occupied by wasp or hornets, the box will be removed to a safe place away from regularly accessed public places and a replacement box will be installed.

Ecological Feature: Habitat Piles

Management Intentions

3.101 Brash/habitat piles are to be maintained in a viable condition so as to function to provide shelter and winter refuge to local wildlife such as amphibians, reptiles and invertebrates.

Management Operations

3.102 Brash/habitat piles may need to be topped up annually, around August/September in order to ensure there is enough cover for the hibernation period.

Hard Landscape Element: Play Areas

Management Intentions

3.103 The Site incorporates a Neighbourhood Equipped Area for Play (NEAP) and Local Equipped Area for Play (LEAP). The play areas are to be kept clean and safe for their intended use.

Management Operations

3.104 A routine inspection of the play equipment will be carried out twice weekly to identify any signs of vandalism and general damage/ wear of equipment and minor repairs carried out promptly. Any item considered unsafe must be removed or made safe and replaced as soon as possible.

3.105 A detailed operational inspection will be undertaken every two months to check the operation and stability of the equipment, and any signs of wear.

3.106 An annual RoSPA inspection of the play areas will be undertaken by a suitably qualified inspector.

3.107 The play areas' surfacing will be repaired/replaced as required depending on its condition.

Hard Landscape Element: Footpaths

Management Intentions

3.108 Footpaths will be safe and useable. Maintenance will focus on clearing any obstacles to the use of footpaths and ensure they are free of slip and trip hazards.

Management Operations

3.109 All new footpaths will be inspected on a monthly basis 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.

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

3.111 Both sides of the footpath will be managed by manual means using an appropriate edging tool to prevent encroachment of vegetation.

3.112 Repairs/replacement of the surfacing and edging will be carried out as required depending on the condition, and the use of materials will conform to the original design specification of the works.

Hard Landscape Element: Railings

Management Intentions

3.113 The railings will be maintained for their functionality and aesthetic value. Routine inspections will ensure that any damaged railings are repaired or replaced as quickly as possible to prevent a risk to health and safety.

Management Operations

3.114 Railings will be inspected during the monthly site inspection and any repairs required will be carried out promptly.

3.115 The railings will be re-painted as required to retain their aesthetic qualities and will be replaced as required depending on its condition.

Hard Landscape Element: Gates

Management Intentions

3.116 Gates will be maintained to retain their functionality.

Management Operations

3.117 Gates will be inspected during site cleansing to ensure they are functioning correctly and that the gate is not closing too quickly/slowly. Any repairs required to ensure the gates function safely must be implemented immediately.

3.118 Gates will be re-painted as required to retain their aesthetic qualities and will be replaced as required depending on their condition.

Site Furniture: Bollards

Management Intentions

3.119 Bollards will be maintained for their functionality. Routine inspections will ensure that any damaged features are repaired or replaced as quickly as possible to prevent a risk to health and safety.

Management Operations

3.120 These features will be inspected during the monthly site inspection.

3.121 Any features 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.

Site Furniture: Litter Bins

Management Intentions

3.122 Bins on the Site will be emptied routinely to prevent any litter overflowing. Bins will be cleaned regularly to ensure they appear clean and are safe.

Management Operations

3.123 Bin collections will be carried out twice weekly and the bins will be cleaned bi-monthly.

3.124 All bins will be inspected during the monthly site inspections.

3.125 Any bins 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 of the works.

3.126 Graffiti removal will be carried out as required.

3.127 Bins will be replaced as required depending on their condition.

Site Furniture: Benches

Management Intentions

3.128 Benches on the Site will be maintained to a safe, clean and functional condition.

Management Operations

3.129 Benches will be inspected during the monthly site inspection.

3.130 Any benches 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 of the works.

3.131 Graffiti removal will be carried out as required.

3.132 Benches will be replaced as required depending on their condition.

4.0 Monitoring and Review

Monitoring

4.1 Simple monitoring reports against key measures will be submitted by the Persimmon Homes Ltd or the appointed Management Company and will include contract administrative duties such as formal site inspections and financial information.

4.2 The key measures for each element will enable the schemes success to be measured and managed appropriately to meet the long term management objectives. These key measures and remedial actions are detailed in the table below:

Table 1: Key measures for landscape elements monitoring and remediation

Feature Type	Key Measure
All Areas	
Landscape Scheme Establishment	Ensure that the scheme is establishing well and attractive to residents and wildlife overall.
Cleansing	Ensure that the site is in a clean and tidy condition, removing any fly tipping promptly if / when required.
Public Access	Ensure that public access to the site is maintained and any areas with limited access or not open to the public remain secure.
Health and Safety	Ensure that any health and safety hazards / deficiencies which require rectification are carried out promptly.
Legal Obligations and Constraints	Ensure that the scheme complies with the relevant environmental and health and safety legislation (as set out in Appendix F of this Plan).
Landscape Features	
Retained trees	Ensure inspections are carried out to note any deficiencies and that specialist input is sought for concerns about risks to public health and safety and tree health. Ensure inspections are carried out to log piles to check they are in-situ and topped up as required. Review arboriculture assessment for recommendations and instruct works where required.

Feature Type	Key Measure
Native woodland mix	Ensure inspections are carried out to check condition of mulch, including coverage and effectiveness as a weed suppressant and depth of mulch is maintained. Ensure any dead or dying trees and shrubs are replaced to original planting specification. Ensure planting is inspected and pruned as required to ensure a diverse habitat, or pruned straight away if damaged and presents a hazard. Management prescriptions and methodologies are detailed within this management plan. Review arboriculture assessment for recommendations on thinning and tree works and complete works as required.
Tree planting	Ensure inspections are carried out to check condition of stakes and ties and newly planted trees are re-firmed and base kept weed free. Ensure any dead or dying trees are replaced to original planting specification. Review arboriculture assessment for recommendations on thinning and instruct works. Ensure inspections address any additional watering requirements, and if replacement trees are required consult with a landscape architect or arboriculturist whether an alternative species choice is necessary.
Retained hedges	Ensure inspections are carried out to identify gaps and re-plant with suitable native species if required. Ensure inspections are carried out to identify any planting failures and any re-placed with suitable species in accordance with the original planting plan if required.
Hedgerow planting	Ensure inspections are carried out of the general establishment until the branches of adjacent plants fully merge together to establish dense branch growth. Ensure any dead or dying shrubs are replaced as per original planting specification. Ensure planting is inspected and pruned as required to maintain a bushy appearance, or pruned straight away if presents a hazard.

Feature Type	Key Measure
Ornamental shrub and perennial mix	Ensure inspections are carried out to check condition of mulch, including coverage and effectiveness as a weed suppressant and depth of mulch is maintained. Ensure any dead or dying trees and shrubs are replaced to specification. Ensure planting is inspected and pruned as required to maintain aesthetic appearance, and that plants are allowed to fully merge together without large gaps in planting due to over pruning.
Wildflower meadow	Inspection to ensure botanical diversity of the grassland is establishing and that no one species is becoming too dominant. Ensure weeds are kept to a minimum, no scrub is encroaching upon the grassland from the surrounding landscape and any worn down areas are re-seeded as required.
Amenity grassland	Inspection of the amenity grass areas to ensure a well maintained grassland with weed free appearance is establishing and any worn down areas are re-seeded as required.
Retained ponds and SuDS	Ensure inspections are carried out to identify any scrub encroachment within 5m and remove if required. Carry out an inspection to identify any planting failures and re-plant with suitable native species. Review assessments following hydrologist inspections and carry out recommended remedial works.
Bat boxes	Ensure inspections are carried out to identify if bat boxes are in situ and consult a suitably qualified ecologist if replacements boxes are required.
Bird boxes	Ensure inspections are carried out to identify if bird boxes are in situ and consult a suitably qualified ecologist if replacement boxes are required.
Habitat piles	Ensure inspections are carried out to brash/habitat piles and if required top up annually during August/September.

Feature Type	Key Measure
Play areas	Ensure inspections are carried out for vandalism, and signs of general damage and wear and tear of play surfacing and equipment. Instruct minor repairs promptly and ensure any unsafe items are removed and/or replaced as soon as possible. Review assessments following operational inspections and RoSPA inspection and instruct recommended works.
Footpaths	Ensure inspections are carried out to maintain a weed free appearance and trip or slip hazards are removed. Ensure inspections are carried out to identify any damage and instruct repairs as required.
Railings and gates	Ensure inspections are carried out to identify any damage and any repairs or replacement is carried out if required as per the original design specification.
Bollards	Carry out regular inspections to identify any damage which poses a risk to public health and safety.
Litter bins	Ensure inspections are carried out to identify any damage and any repair or replacement is carried out if required. Ensure bins are regularly emptied and review the proposed frequency is adequate for usage.
Benches	Ensure street furniture is fit for purpose and remove any graffiti as soon as possible, if required. Ensure regular inspections have been carried out to identify any damage which poses a risk to public health and safety and repair or replace as required.

Ecological Monitoring

Bats

4.3 Uptake of bat roost features by target species will be monitored in years 1, 3 and 5 post-construction by a licensed bat ecologist. The findings will be fed back to the Council as well as to Persimmon, to inform future mitigation design in the region. Any roost features found to be accidentally damaged or dysfunctional will be repaired or replaced as appropriate at this time.

Birds

4.4 Uptake of bird boxes by target species will be monitored in years 1, 3 and 5 post-construction. The findings will be fed back to the Council as well as to Persimmon, to inform future mitigation design in the region. Any boxes found to be accidentally damaged or dysfunctional will be repaired or replaced as appropriate at this time.

Native Bluebells

4.5 Monitoring to ensure protected or translocated plants succeed as intended (for at least three years post-works).

Invasive Species

4.6 Monitoring for re-growth (to continue for at least three years post-works), with appropriate remedial measures prescribed.

Review

4.7 The Management Plan will be reviewed on a five yearly basis by Persimmon Homes Ltd during the duration of the rectification period. Thereafter future management responsibilities for the site's landscape and habitat features will be passed on to a Management Company for the duration specified within this management plan.

4.8 The annual review will ensure that the plan is meeting the original management aims and objectives and responding to the developing needs of the Site as described in *Table 1: Key measures for landscape elements monitoring and remediation.*

4.9 These annual reviews will identify the need for additional operations and inform future management decisions in relation to continual improvement of biodiversity and the amenity and social value of the landscape as a whole. This can be achieved by:

- Quarterly formal site inspections. To be completed by the managing organisation to assess the appointed contractor's quality standards and deliverables in line with this management plan;
- An annual site meeting and review: To be completed as a joint inspection with the managing organisation/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 be made as frequently as possible to review quality of maintenance work, condition of entrances, the boundaries of the Site and any potential Health and Safety issues.

4.10 The Management Plan will be re-assessed and updated by an appropriately qualified landscape consultant on a five yearly basis to ensure the habitats and landscaping associated with the Site are maintained in perpetuity.

APPENDIX A: Landscape Masterplan (Cass Associates ref: 1244/100 rev L)

GENERAL NOTE

DO NOT SCALE FROM THIS DRAWING

St Thomas C of E Primary School

BEEHIVE GREEN

PARK ROAD

SINGLETON GROVE

ALEXANDRIA DRIVE

Owler Hall Farm

Beech Hall Farm

Play area

Drain

Bailey Fold Farm

PLATT LANE

Path (um)

LANDSCAPE MASTERPLAN

KEY

- Red line boundary
- Existing trees to be retained
- Existing hedge to be retained
- Existing vegetation to be removed
- Existing Public Right of Way
- Proposed Footpath Diversion
- Proposed tree planting
- Proposed hedge planting
- Proposed native woodland mix
- Proposed ornamental shrub and perennial mix
- Proposed Pond and Wet Area Seed mix
- Proposed wildflower grassland
- Proposed amenity grass
- Proposed block paved surface
- Proposed 1.2m high hoop top railings
- Proposed 1.2m high gate
- Proposed bollards

NORTH

SCALE BAR 1:1000

0 5 10 15 30 35m

- Development Boundary
- 1.8m Close Boarded Screen Fence
- 2.7m Timber Acoustic Fence
- 1.8m Half Wall / Half Fence

Rev.	Description	Date	By	Chk'd
L	POND AREA UPDATED	20/10/23	HC	KDC
K	HOUSING LAYOUT UPDATED	20/10/23	HC	GT
J	UPDATED KEY	04/03/20	PS	PS
H	ADDITIONAL PLANTING	08/10/15	RK	SR
G	MINOR AMENDMENTS	07/10/15	RK	SR
F	UPDATED LAYOUT	02/10/15	RK	SR
E	UPDATED SCALE	13/08/15	RK	SR
D	UPDATED RED LINE	28/07/15	RK	SR
C	UPDATED RED LINE	28/06/15	RK	SR
B	COLOURED VERSION	20/05/15	CO	SR
A	GENERAL AMENDMENTS	15/05/15	BK	SR
/	DRAFT FOR COMMENT	12/05/15	CO	SR

REVISIONS

purpose

PLANNING

Cass associates
architecture
masterplanning
planning
landscape
conservation
Studio 204B The Tea Factory, 82 Wood Street, Liverpool, L1 4DQ
T +44 (0)151 707 0110 E all@cassassociates.co.uk W www.cassassociates.co.uk

client
PERSIMMON HOMES

project
LEE HALL, WESTHOUGHTON

drawing title
LANDSCAPE MASTERPLAN

scale @ A1 1:1000

date 15/05/2015

drn CO chk'd SR

1244/100
L

Original paper size (A1) 841x 594mm

J:\1244 lee hall\2 0 Landscape\Cass Associates\Westhoughton Charles Church\Cad\100 LANDSCAPE MASTERPLAN 1244 100 LANDSCAPE MASTERPLAN - 20151014.dwg

APPENDIX B: Planting Plans (Cass Associates ref: Sheet 2 of 10 - 1244/201 rev J and Sheet 3 of 10 - 1244/202 rev H)

FOR CONTINUATION PLEASE REFER TO HARD LANDSCAPE PLAN SHEET 5 OF 10 - 1244/204

FOR CONTINUATION PLEASE REFER TO HARD LANDSCAPE PLAN SHEET 1 OF 10 - 1244/200

FOR CONTINUATION PLEASE REFER TO HARD LANDSCAPE PLAN SHEET 3 OF 10 - 1244/202

REVISIONS				
Rev.	Description	Date	By	Chk'd
A	DRAFT FOR COMMENT	16/06/15	RK	CO
B	UPDATED PLANTING TO NEW RED LINE	26/06/15	RK	CO
C	UPDATED PLANTING TO NEW RED LINE	28/08/15	RK	CO
D	REVISED TO NEW LAYOUT	06/10/15	RK	SR
E	MINOR AMENDMENTS	07/10/15	RK	SR
F	ADDITIONAL PLANTING	08/10/15	RK	SR
G	CHANGE TO PLANTING MIXES	04/03/20	PS	PS
H	HOUSING LAYOUT UPDATED	20/10/2023	HC	GT
J	PROPOSED LANDSCAPING UPDATED	31/01/2024	JT	RR

KEY

- Red line boundary
- Existing trees to be retained
- Existing hedge to be retained
- Existing vegetation to be removed
- Proposed tree planting
- Proposed hedge planting
- Proposed native woodland mix
- Proposed ornamental shrub and perennial mix
- Proposed Pond and Wet Area Seed mix
- Proposed wildflower grassland
- Proposed amenity grass

NORTH

Reproduced from Ordnance Survey material with the permission of the controller of Her Majesty's Stationary Office under the Licence No 186287

GENERAL NOTE

DO NOT SCALE FROM THIS DRAWING

cass
architecture masterplanning landscape conservation sustainability
Studio 204B The Tea Factory
82 Wood Street
Liverpool L1 4DQ
T +44 (0)151 707 0110
E cass-liverpool@cass-design.co.uk
W www.cass-design.co.uk

purpose
DRAFT FOR COMMENT

drawing title
PLANTING PLAN
SHEET 2 OF 10

client
PERSIMMON HOMES

project
LEE HALL, WESTHOUGHTON

scale @ A0 1:200
date 22/05/2015
drn CO chk'd SR

1244/201
J

Original paper size (A0) 841x1189mm

APPENDIX C: Planning Layout (Charles Church ref: WLH-REP01CC rev I)

FOR CONTINUATION PLEASE REFER TO HARD LANDSCAPE PLAN SHEET 6 OF 10 - 1244/205

FOR CONTINUATION PLEASE REFER TO HARD LANDSCAPE PLAN SHEET 2 OF 10 - 1244/201

Play area

Stock Proof Fencing

Stock Proof Fencing

Stock Proof Fencing

Stock Proof Fencing

A

B

E

F

G

H

REVISIONS

Rev	Description	Date	By	Chk'd
A	DRAFT FOR COMMENT	16/06/15	RK	CO
B	UPDATED PLANTING TO NEW RED LINE	26/06/15	RK	CO
C	UPDATED PLANTING TO NEW RED LINE	28/07/15	RK	CO
D	REVISED PLANTING TO NEW LAYOUT	06/10/15	RK	SR
E	ADDITIONAL PLANTING	08/10/15	RK	SR
F	CHANGE TO PLANTING MIXES	04/03/20	PS	PS
G	HOUSING LAYOUT UPDATED	20/10/2023	HC	GT
H	PROPOSED LANDSCAPING UPDATED	11/01/2024	JT	RR

KEY

- Red line boundary
- Existing trees to be retained
- Existing hedge to be retained
- Existing vegetation to be removed
- Proposed tree planting
- Proposed hedge planting
- Proposed native woodland mix
- Proposed ornamental shrub and perennial mix
- Proposed Pond and Wet Area Seed mix
- Proposed wildflower grassland
- Proposed amenity grass

NORTH

GENERAL NOTE

DO NOT SCALE FROM THIS DRAWING

cass
architecture masterplanning landscape conservation sustainability
Studio 204B| The Tea Factory
82 Wood Street
Liverpool L1 4DQ
T +44 (0)151 707 0110
E cass-liverpool@cass-design.co.uk
W www.cass-design.co.uk

purpose **DRAFT FOR COMMENT**

drawing title
PLANTING PLAN
SHEET 3 OF 10

client
PERSIMMON HOMES

project
LEE HALL, WESTHOUGHTON

scale @ A0 1:200

date 22/05/2015

drn CO chk'd SR

1244/202
H

Original paper size (A0) 841x1189mm

APPENDIX D: Construction Environmental Method Statement

Purpose of the Construction Environmental Method Statement

The Construction Environmental Method Statement (CEMS) has been prepared by The Environment Partnership (TEP) Limited on behalf of Persimmon Homes Ltd for residential development at Land at Lee Hall, Westhoughton (hereby referred to as the 'Site').

This CEMS provides practical guidance to those involved in the construction works associated with the residential development at Land at Lee Hall, Westhoughton specifically Pond 2 as shown on Planning Layout (Charles Church ref: WLH-REP01CC rev I, included in Appendix C of the LEMP), including Persimmon Homes Ltd construction personnel, construction contractors and any Ecological Clerk of Works (ECoWs), on management of the potential environmental risks and impacts associated with the construction.

The methods set out in this CEMS will be implemented prior to and throughout the construction phase of the development, safeguarding the ecologically sensitive areas of the Site during construction, specifically Pond 2.

To mitigate negative impacts on the Site's ecological features, post construction monitoring and reporting measures detailed within LEMP should be used to inform post development management.

Planning and Development Context

Planning Application - (appeal ref: APP/N4205/W/15/3139219 for application ref: 94696/15)

Planning permission was granted on appeal and subject to conditions in December 2017 (appeal ref: APP/N4205/W/15/3139219 for application ref: 94696/15) for the development of:

"300 dwellings with public open spaces, landscaping and play areas, together with creation of new internal access road which connects into the existing road network at Chequerbent Roundabout in the north and Platt Lane in the south, at Land North of Platt Lane, East of Park Road and South of Chequerbent Roundabout, Westhoughton, Bolton."

Non-material Amendment - (application ref: 17176/23)

A 'non-material amendment' application was submitted to and approved by Bolton Council in February 2024, subject to conditions for:

"Non-material amendment to application 94696/15 (re-configuration of the development parcel compromising 21 dwellings and alterations to house types)".

Planning Condition - (application ref: 17176/23)

Planning permission was granted subject to conditions including Condition 3 which states:

"No development shall commence within the area subject of this application unless and until an updated Landscape and Ecological Management Plan (LEMP) has been submitted to and approved in writing by the local planning authority. The updated LEMP shall provide details of measures to protect the pond (pond 2) during the construction process.

The agreed protective measures shall remain in place until the development is completed or unless otherwise agreed in writing by the local planning authority."

This CEMS appendix has been written to discharge Condition 3 as stated above.

Construction Environment Method Statement Structure

This CEMS is structured to convey information relating to the proposed construction methods and associated mitigation. To ensure the CEMS is maintained in a concise and useable format, the document is focused on construction management. This CEMS, together with any related documentation and reports should be kept in the site office(s) of the Principal Contractor during construction for the duration of the site works and would be made available for review at any time.

Legal Considerations

There is a broad range of legislation covering the different aspects of environmental protection. These are supported by additional statutory guidance; 'standards', such as British Standards (BS) or International Standards (ISO); and other 'best practice' guidance, including industry codes of practice. Where applicable, references to specific legislation, standards and guidance are included within each section of this CEMS.

Biosecurity

Biosecurity is defined as ensuring that good practices are in place to reduce and minimise the risk of spreading Invasive Non-Native Species (INNS) as a result of interference. Good biosecurity practices are always essential, even if INNS are not always apparent.

Scope of the Construction Environmental Method Statement

This CEMS applies to the residential development, including construction of the residential development at Land at Lee Hall, Westhoughton, specifically Pond 2 as shown on Planning Layout (WLH-REP01CC rev I, included in Appendix C).

This CEMS has been produced with particular regard to mitigate the environmental impacts on Pond 2 which is located to the east of the site as shown in the Landscape Masterplan (Cass Associates ref: 1244/100 rev L, appendix A).

This Construction Environmental Method Statement should be read in conjunction with:

- Landscape Masterplan (Cass Associates ref: 1244/100 rev L);
- Planting Plan - Sheet 2 of 10 (Cass Associates ref: 1244/201 rev J);
- Planting Plan - Sheet 3 of 10 (Cass Associates ref: 1244/202 rev H);
- Hard Landscape Plan - Sheet 2 of 4 (Cass Associates ref: 1244/301 rev G);
- Planning Layout (Charles Church ref: WLH-REP01CC rev I);

Table 2 below provides the environmental protections measures to be implemented prior to, and during the construction process.

Table 2 - Environmental Protections Measures for Pond 2

Works	Methods	Timing	Responsible
Appointment of an Ecological Clerk of Works or Environmental Champion	An Ecological Clerk of Works (ECoW) or Environmental Champion (EC) will be responsible for daily monitoring and conformance to this CEMS and any other environmental documents. The role of the EC can be fulfilled by an experienced contractor with a daily site presence.	Appointment prior to any works	Developer/ Lead Contractor
Toolbox Talks	Toolbox talks will be provided to all contractors to explain the locations of any retained habitats onsite, including Pond 2 and will include appropriate working methods when in proximity to them. Toolbox talks will be updated as required where any new ecological issues arise (including seasonal variations/restrictions), at the start of construction or if changes to working methods are required. Toolbox talks regarding ecological constraints will be provided to all new contractors by the ECoW or EC.	Prior to any work commencing and throughout construction	ECoW or EC
Contractor Risk Assessment and Method Statements	This document should be provided to all contractors prior to accessing site in order to inform their Risk Assessment and Method Statements (RAMS) for all items of work. Any works carried out by contractors should be accompanied by a RAMS. All RAMS should take into consideration and include awareness of the measures set out in this document where appropriate and shall include biosecurity measures to be observed for the duration of the works. All RAMS should be signed off by the Site Manager, with support from the ECoW or EC where required, prior to commencement of works.	Prior to any work commencing and throughout construction	Site Manager/ ECoW or EC/ Contractors

Works	Methods	Timing	Responsible
Silt Management Exclusion Zones	Exclusion fencing should be erected adjacent to Pond 2. The exclusion fencing will be erected prior to the commencement of development work within that area of the site. exclusion fencing around the pond will physically prevent incursion or debris entering the pond. The fencing will be Heras fencing or similar and will be constructed as shown in Appendix G of the LEMP. The exclusion fencing will be erected at an appropriate distance around the perimeter of the Pond 2 and will consider all retained and enhanced habitats associated with the pond; including open water, marginal planting and retained grassland buffering the pond. Fencing will only be removed to facilitate landscaping and on completion of the wider development works. The ECoW or EC shall be notified in advance and be provided with RAMS of any works needed to be undertaken within the exclusion zones. Signage will be installed in appropriate locations along the exclusion zone fencing to inform all onsite operatives and contractors of the ecological sensitivity. The fencing and accompanying signage will be checked at the end of each working week. The appointed ECoW or EC will carry out the visual inspection from outside of the exclusion zone and report any damage, if present, to the Site Manager. Any fencing repairs will be carried out to the approved specification as soon as possible to prevent unauthorised access. The exclusion fencing should not be moved. However, if required under special circumstances, this will need to be agreed in advance with the ECoW or EC.	Prior to any work commencing and as required	Site Manager/ ECoW or EC

Works	Methods	Timing	Responsible
Pollution Incidents	Preventative measures will be implemented throughout the works to avoid pollution incidents which may indirectly affect terrestrial and aquatic habitats within the exclusion zone around Pond 2. Refuelling of machinery will take place in appropriate designated areas away from Pond 2 by a minimum distance of 15m. All powered equipment operated within 15m of water will use biodegradable oil. Should any incidents of pollution occur the Site Manager will be informed with appropriate rectification measures implemented as soon as practicably possible. All hazardous materials will be stored away from Pond 2 and other ecologically sensitive areas and stored off the ground in fenced off and secure areas. For further information please see the Pollution Prevention Guidelines (PPGs).	Throughout construction	Site Manager/ ECoW or EC

Works	Methods	Timing	Responsible
Surface Water Runoff and Silt Pollution Prevention - SUDS	Construction site runoff (silt and sediment) requires mitigating to alleviate impact on Pond 2. Construction runoff can be heavily laden with silt, which can clog infiltration systems, build up in storage systems and pollute receiving waters. Surface water runoff from construction should not drain into Pond 2. Sediment barriers or silt fences made from a geotextile will be installed around the perimeter of the pond and any associated vegetation, where construction work is within 10 metres as a silt prevention measure and if required will remain in situ throughout the development. Weekly visual inspections shall be carried out by Site Management and/or the ECoW/ EC throughout the development to monitor the effectiveness and the efficiency of the prevention measures in place. If evidence of silt or sediment discharge is discovered, then the Site Manager should be informed immediately, and remediation measures established as soon as practically possible. For further information please see the Pollution Prevention Guidelines (PPGs).	Throughout construction	Site Manager/ ECoW or EC
Dust Control	Misting or watering areas will dampen down dust created by both dry weather conditions and construction processes, to reduce dust creation. Any watering should be carefully managed and maintained, so that the volume and timing of water used is correct and water run-off does not make its way into pond 2, which would impact the habitat within the exclusion zone.	Throughout construction	Site Manager/ ECoW or EC

Works	Methods	Timing	Responsible
Foul Water Pollution Prevention	If signs of foul water pollution is identified in Pond 2, usually consisting of the presence of sewage solids in the water, and other items such as toilet waste, soap suds or a milky-looking discharge, a grey colour and noticeable sewage smell, the Site Manager and ECoW/ EC must be notified immediately and reported following Persimmon's internal policies. The Environment Agency must be notified of any pollution incidents. The Site Manager will ensure remediation measures are established as soon as practically possible. Weekly visual inspections of the pond shall be carried out by Site Management during construction to monitor for signs of pollution. For further information please see the Pollution Prevention Guidelines (PPGs).	Throughout construction	Site Manager/ ECoW or EC

Best Practice and Guidance

Pollution Prevention Guidelines

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/485199/pmho1107bnkg-e-e.pdf

APPENDIX E: Landscape Maintenance Schedules

Lee Hall, Westhoughton
Landscape Maintenance Schedules

Key

Works not to be carried out in these months

Bird breeding and nesting season

Works to be carried out in these months

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.	1	All years												
Site Cleansing														
Cleanse the whole site fortnightly.	26	All years												
Remove fly-tipping and graffiti as soon as possible.	As required	All years												
Soft Landscape Elements														
Retained Trees														
Instruct a trained arboriculturist to undertake a tree hazard and condition survey of mature trees.	N/A	As recommended												
Undertake recommended works detailed in tree hazard and condition survey report.	N/A	As recommended												
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	As recommended												
Treat any stumps following felling works by stump grinding or eco plugs.	N/A	As recommended												
Woodland and Tree Planting														
Check stakes and ties monthly, adjust twice annually.	12	1 to 5												
Replace any damaged or missing stakes and ties.	1	1 to 5												
Remove stakes and ties.	1	Year 5												
Top up mulch to maintain a depth of 75mm around the base of all young plants.	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												
Re-firm newly planted trees as required.	1	1 to 5												
Water new planting.	As required	1 to 5												
Formative prune to maintain health and vigour.	As required	Years 5+												
Assessment of condition and structure of new tree planting.	1	All years												
Retained Hedgerows														
Cut one side and top.	1	All years												
Hedgerow Planting														
Check protective fencing or spiral guards monthly and repair/replace as required.	12	1 to 5												
Replace any damaged or missing fencing or spiral guards.	1	1 to 5												
Remove fencing or spiral guards.	1	Year 5												
Top up mulch to maintain a depth of 75mm around the base of all young plants.	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												
Re-firm new planting as required.	1	1 to 5												
Strim vegetation between trees and remove arisings from the Site until the canopy layer closes over.	1	1 to 5												
First cut - face up both sides of hedge.	1	Year 2 or 3												
Face up to one side of hedge.	1	Years 5+												
Ornamental/ Shrub and Perennial Mix														
Formative prune to maintain health and seasonal foliage.	N/A	Years 5+												
Top up mulch to maintain a depth of 75mm around the base of all young plants.	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												

Lee Hall, Westhoughton
Landscape Maintenance Schedules

Key

Works not to be carried out in these months

Bird breeding and nesting season

Works to be carried out in these months

Activity	Frequency per Annum	Years	Indicative Timing of Operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Amenity Grass														
Cut (35mm) fortnightly during the growing season and remove arisings from the Site.	16	All years												
Cultivate and re-seed as required.	As required	1 to 5												
Weed control.	1	All years												
Wildflower Grassland														
Cut (60mm) 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	All years												
Marginal Mix														
Cut (150mm) 3 times in first year.	3	Year 1												
Cut (150mm) once a year and remove arisings from the Site.	1	All years												
Cultivate and re-seed as required.	As required	1 to 5												
Weed control.	1	All years												
Retained Dry Ditches														
Remove leaf litter and other debris from dry ditch monthly.	12	All years												
Strim (150mm) 1/3 of ditch and buffer grassland once a year. Strim sections on annual rotation.	1	All years												
Retained Ponds														
1x yearly strim (150mm) to 1/3 of bankside vegetation with arisings removed from site. Strim sections on annual rotation.	1	All years												
Reduction of macrophytes where becoming too dominant.	As required	All years												
Removal of any dead fish.	As required	All years												
Removal of marginal/emergent vegetation in autumn to maintain 30-60% of open water.	1	All years												
Inspect the pond monthly basis and remove debris and rubbish (soft pliable debris within the water during the period April to August inclusive will be left to support amphibians).	12	All years												
Inspect the pond annually to assess bank stability, water quality, coverage of aquatic/marginal vegetation, drainage and depths.	1	All years												
Ecological Feature														
Bat Boxes														
Annual visual inspection from the ground to check condition.	1	All years												
Internal inspection of bat boxes every two years by a licensed ecologist.	0.5	Every 2 years												
Replacement, as required, before March.	As required	All years												
Bird Nesting Boxes														
Annual inspection to check condition.	1	All years												
Removal of nesting debris by hand and disposal.	1	All years												
Replacement, as required, before March.	As required	All years												
Habitat Piles														
Top up using deadwood from maintenance operations as required.	As required	All years												

Lee Hall, Westhoughton
Landscape Maintenance Schedules

Key

Works not to be carried out in these months

Bird breeding and nesting season

Works to be carried out in these months

Activity	Frequency per Annum	Years	Indicative Timing of Operation											
			J	F	M	A	M	J	J	A	S	O	N	D
Hard Landscape Elements														
Play Areas														
Twice weekly inspection to identify any vandalism or signs of general damage / wear and tear. Minor repairs to be carried out promptly with any unsafe items removed and replaced as soon as possible.	104	All years												
Twice weekly cleanse.	104	All years												
A detailed operational inspection will be carried out every two months to check the operation and stability of the equipment, and any signs of wear.	6	All years												
Annual ROSPA inspections of the play areas will be undertaken by a suitably qualified inspector.	1	All years												
Repairs to surfacing.	As required	All years												
Replacement of play equipment and surfacing as required, frequency to be provided by the provider.	As required	All years												
Footpaths														
Inspect footpaths monthly and clear overhanging vegetation, broken branches, leaf litter and trip hazards as required.	12	All years												
Annual removal of weeds to both sides of footpaths using edging tool.	1	All years												
Clean with soapy water (acid free) and stiff brush.	1	All years												
Repairs to footpath surfacing.	As required	All years												
Estate Railings														
Railings will be inspected during monthly site inspections and any repairs will be carried out as required.	12	All years												
Re-painting estate railings.	As required	All years												
Graffiti removal as required.	As required	All years												
Gates														
Gate will be inspected during site cleansing and any repairs will be carried out as required.	1	All years												
Re-painting gates.	As required	All years												
Site Furniture														
Bollards														
Bollards will be inspected during site cleansing and any repairs will be carried out as required.	1	All years												
Litter Bins														
Twice weekly bin collections.	104	All years												
Bi-monthly bin cleaning.	24	All years												
Graffiti removal as required.	As required	All years												
Benches														
Inspect during monthly site inspections.	12	All years												
Repairs to benches as required.	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 F: Relevant Legislation

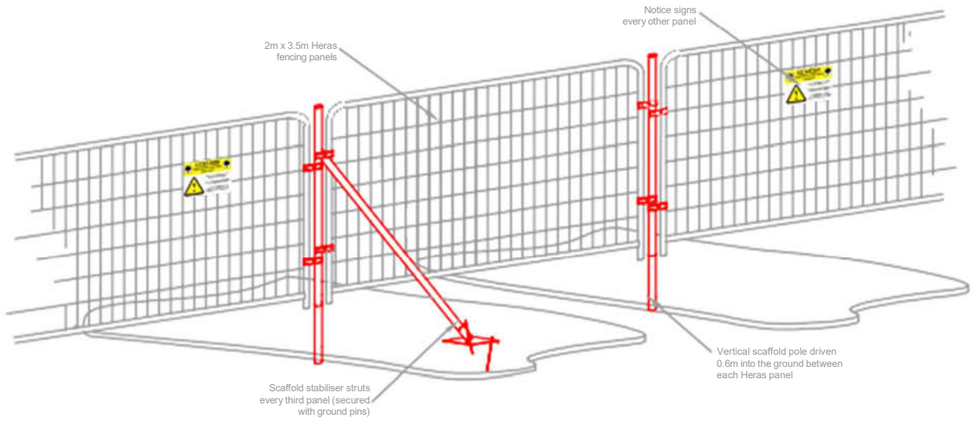
Summary of Relevant Legislation

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 (as amended) (2017)	The Habitat Regulations assign a greater level of protection to a variety of native species of animals and plants listed, which are known as European Protected Species (EPS).
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.

APPENDIX G: Exclusion Fencing & Signage

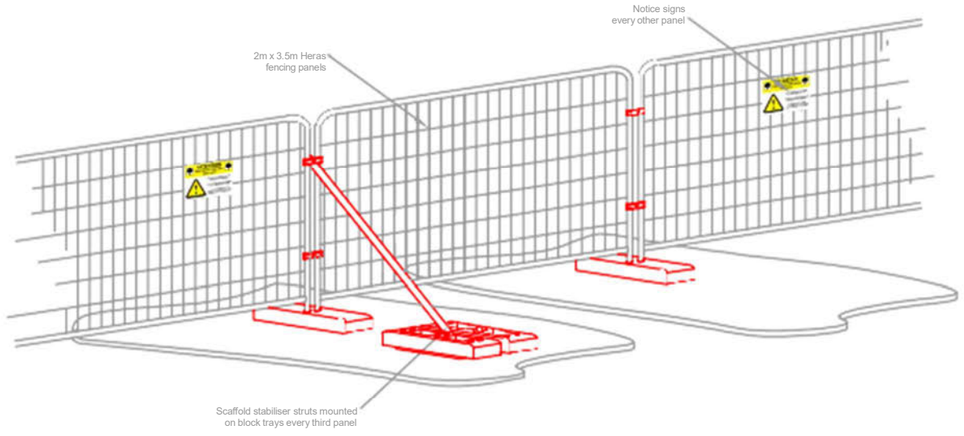
Protection Fencing for use on soft surfaces



Per 3No. Heras panels (10.5m)	
Component	Quantity
2m x 3.5m Standard Heras panels	3
3m Galvenised steel scaffold pole	3
Heras fecurity fence clip	12
Heras stabilising support bar	1
Stabilising pin	2
Pond Protection notice	2

Notes:

Protection Fencing for use on hard surfaces



Per 3No. Heras panels (10.5m)	
Component	Quantity
2m x 3.5m Standard Heras panels	3
Rubber fencing block tray (footing)	5
Scaffold clamp double coupler	6
Heras stabilising strut support bar	3
Pond protection notice	2

Notes:

Rev	Description	Drawn	Approved	Date

THE ENVIRONMENT PARTNERSHIP
401 Faraday Street, Birchwood Park, Warrington WA3 6GA
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project

Title
Temporary protection fencing specifications

Drawing Number
TEP.ARB.FEN.003

Drawn	Checked	Approved	Scale	Date
TDP	RMG	JGS	(not to scale) @ A3	27/02/2024

ATTENTION

POND PROTECTION AREA KEEP OUT!

YOU MAY <u>NOT ENTER</u> THIS AREA OR USE IT FOR STORAGE.

YOU MUST <u>NOT MOVE OR DAMAGE</u> THIS PROTECTION FENCING.

IF YOU REQUIRE ACCESS TO THE PROTECTION AREA, PLEASE CONTACT THE SITE MANAGER.

THE ENVIRONMENT PARTNERSHIP

HEAD OFFICE

401 Faraday Street,
Birchwood Park,
Warrington
WA3 6GA

Tel: 01925 844004
E-mail: tep@tep.uk.com

MARKET HARBOROUGH

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

Tel: 01858 383120
E-mail: mh@tep.uk.com

GATESHEAD

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

Tel: 0191 605 3340
E-mail: gateshead@tep.uk.com

LONDON

8 Trinity Street,
London,
SE1 1DB

Tel: 020 3096 6050
E-mail: london@tep.uk.com

CORNWALL

4 Park Noweth,
Churchtown,
Cury,
Helston
Cornwall
TR12 7BW

Tel: 01326 240081
E-mail: cornwall@tep.uk.com