

NICHOLSONS

Landscape and Ecological Management Plan

Croudace Homes

Bridge Farm, Twyford

Version: 3

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REVISION HISTORY

Rev	Description of change	Date	Initials
1	Original draft	07/11/2024	RJ
	Quality review	12/11/2024	NHL
	Finalised report	12/11/2024	RJ
2	Amended report following client review	25/11/2024	RJ
3	Amended to reflect latest landscape masterplan	11/12/2024	EW

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DISCLAIMER

It should be noted that the information above provides details of the Site's current ecological situation. In the event that the proposed development does not commence within 12 months of the date of this report, further advice should be sought from a suitably qualified ecologist as to whether the information provided requires updating in light of changing ecological conditions.

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1. INTRODUCTION

Terms of Instruction

- 1.1 Nicholsons was commissioned by Croudace Homes to produce a Landscape and Ecological Management Plan (LEMP) for land at Bridge Farm, Twyford (hereafter referred to as “the Site”) in respect of its proposed development of the Site.

Purpose

- 1.2 Outline planning consent (Ref: 212720, Wokingham Borough Council) was received July 2023.
- 1.3 The planning consent is subject to a series of pre-commencement Conditions, including Condition 17 which states:

The reserved matters application shall include a detailed landscape and ecological management plan, including long-term design objectives, management responsibilities and maintenance schedules for all landscaped areas (except privately owned domestic gardens). The plan shall be approved in writing by the local planning authority and carried out as approved. Approved mitigation shall be fully implemented prior to occupation and subsequently retained thereafter throughout the lifetime of the development. Any subsequent variations shall be agreed in writing by the local planning authority. The scheme shall include the following elements:

- 1. Description and evaluation of features to be managed.*
- 2. Ecological trends and constraints on site that might influence management to include an ecological buffer zone of no less than 10 metres adjacent to the River Loddon. This zone shall be free of all built development including lighting, footpaths, and formal landscaping. A detailed planting scheme for this zone shall be submitted which includes native species of local provenance which enhance the value of the watercourse.*
- 3. Aims and objectives of management.*
- 4. Appropriate management options for achieving aims and objectives.*
- 5. Details of all new habitat created on site, including enhancements to the River Loddon and its riparian corridor.*
- 6. Details of maintenance regimes and a long-term management plan for the site.*
- 7. Delivery and maintenance of the biodiversity net gain measures outlined in the submitted Technical Briefing Note: Biodiversity Net Gain Assessment (Aspect Ecology, re: 1005672, March 2022).*
- 8. Prescriptions for management actions.*
- 9. Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).*
- 10. Ongoing monitoring and remedial measures.*

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

- 1.4 This document will provide the requested detail and set out how contingencies and/or remedial action will be identified, agreed and implemented.

Proposed Development

- 1.5 The proposed development features the delivery of 200 dwellings, including 40% affordable housing and associated infrastructure, open space, biodiversity enhancements, landscaping and green infrastructure, following demolition of existing agricultural buildings, with associated works pursuant to Outline planning permission ref: 212720 (Wokingham Borough Council) hereafter referred to as the “Proposed Development”.

Documents Provided

- 1.6 As background information, the following documentation was provided:
- Ecological Impact Assessment (EclA) – Aspect Ecology, March 2022
 - Biodiversity Net Gain Assessment (BNGA) – Nicholsons, December 2024
 - Landscape Masterplan – CH038-002H-MW-10/09/24; Ilex Landscape Architects, September 2024
 - Landscape Design Statement – CH038-001G; Ilex Landscape Architects, September 2024

Report Limitations

- 1.7 This is an ecological report and as such no reliance should be given to comments relating to buildings, engineering soils or other unrelated matters.

2. THE SITE AND BACKGROUND INFORMATION

Site Description

- 2.1 The site is located at grid reference SU 78338 76613 (hereafter referred to as “the Site”) which is approximately 13.31ha in area.
- 2.2 Based on the original assessment undertaken by Aspect Ecology (March, 2022) and supported by the updated assessment in April 2024, the Site comprised four large fields previously managed for arable and pastoral land, but now consisting of modified grassland (g4). The fields were bordered by native hedgerows (h2a and h2a5) and thin strips of broadleaved woodland (w1g), with a series of derelict farm buildings in the centre of the Site (u1b5). The Site was bordered by the River Loddon (r1a) to the west, with a narrow strip of wet woodland (w1d) forming part of the riparian corridor adjacent to the river.
- 2.3 The Site is bound by the River Loddon and associated Local Wildlife Site and riparian habitat to the west. New Bath Road borders the Site to the north and a railway line borders the Site to the east. Muddlers Lane bisects the Site into two north to south.
- 2.4 The site plocation plan is provided at **Figure 1** and a post-intervention plan is provided at **Figure 2** (and in **Appendix 2**).



Figure 1: Site location plan

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Figure 2: Post-intervention Plan (Nicholsons, December 2024)

Ref: 991-1-NE.101-BNG Post-Intervention v3 SF 131224



3. BASELINE INFORMATION

3.1 This section confirms the ecological habitats which occur within the Site and the impacts of the Proposed Development upon them.

Habitats

3.2 An updated baseline botanical assessment was undertaken in April 2024 to inform the updated BNGA (Nicholsons, 2024). This assessment was aimed to confirm the types and condition of the habitats recorded in the original ecological assessment (Aspect Ecology, 2022). A plan confirming the habitats present within the Site prior to construction is presented in **Appendix 1**.

3.3 The Site largely comprised four parcels of modified grassland (g4), with fields F1 and F4 found to be in poor condition and fields F2 and F3 in good condition. Other habitats recorded included other broadleaved woodland (w1g) in poor condition, wet woodland (w1d) in moderate condition, three hedgerows (h2a) in varied condition, a tree line separating F3 and F4 in moderate condition (w1 33), an individual London plane tree in good condition (g 32), buildings (u1b5) and hardstanding (u1b).

3.4 The River Loddon (r1a) and associated riparian habitat is located along the western Site boundary. The river forms part of The River Loddon Local Wildlife Site (LWS), designated for its diversity of river features (including adjacent marsh, islands, inlets riffles, river cliffs, and extensive and varied channel vegetation), rare plant species, Water Vole, and a variety of dragonflies and damselflies.

3.5 No other priority habitats were recorded within the Site. A single hybrid black poplar *Populus x Canadensis* previously recorded within hedgerow H3 on the southern Site boundary (Aspect Ecology, 2022) had since failed and was no longer recorded in the hedgerow.

3.6 The majority of habitats to be affected by the Proposed Development are the modified grassland parcels and species-rich native hedgerow H1 (h2a5).

3.7 Descriptions of habitats to be impacted are detailed in **Table 1** and paragraphs 3.8-3.16.

Hedgerows

Table 1: Descriptions of hedgerows Surveyed within the Site

Hedgerow No. (Map Reference)	Description	Overall Ecological Value
H1	Species-rich defunct hedgerow with emergent trees on the north Site boundary of field F4. Species included elder <i>Sambucus nigra</i> , oak <i>Quercus robur</i> , sycamore <i>Acer pseudoplatanus</i> , hawthorn <i>Crataegus monogyna</i> , dog rose <i>Rosa canina</i> and blackthorn <i>Prunus spinosa</i> . Ground flora consisted of bramble <i>Rubus fruticosus</i> agg., garlic mustard <i>Alliaria petiolata</i> , white deadnettle <i>Lamium album</i> , cow parsley <i>Anthriscus sylvestris</i> . This hedgerow averages 3m in width and 2m in height. Emergent trees ranged up to 6m in height.	Moderate – This habitat will be partially retained, with sections removed to facilitate road access.
H2	An intact native hedgerow with trees on the west boundary of field F4. Species included hawthorn, holly <i>Ilex aquifolium</i> , oak, lime <i>Tilia spp.</i> , sycamore, and	Low – This habitat will be fully retained as part of the

Hedgerow No. (Map Reference)	Description	Overall Ecological Value
	beech <i>Fagus spp.</i> Ground flora consisted of common nettle <i>Urtica dioica</i> , ivy <i>Hedera helix</i> and bramble. This hedgerow averages 4m in width, and 4m in height. Emergent trees ranged up to 6m.	Proposed Development.
H3	A defunct native hedgerow with trees, gappy around the base, on the south boundary of field F2. Species included hawthorn, scots pine <i>Pinus sylvestris</i>, horse chestnut <i>Aesculus hippocastanum</i> and crack willow <i>Salix fragilis</i>. Ground flora consisted predominantly of common nettle, garlic mustard and pendulous sedge <i>Carex pendula</i>. Average width was 1.5m, average height was 3m, with emergent trees up to 8m. A veteran hybrid black poplar <i>Populus x canadensis</i> was previously recorded within this hedgerow in the EclA (Aspect Ecology, 2022). However, this tree has since failed as per the updated baseline assessment in April 2024 and is no longer recorded on Site.	Low – This habitat will be fully retained as part of the Proposed Development.

Modified Grassland (g4)

- 3.8 The modified grassland was the dominant habitat within the Site totalling approximately 10.75ha. This habitat was historically managed as agricultural crop and pasture until 4-5 years ago. The majority of this habitat showed signs of nutrient input or was used semi-regularly for grass silage or pasture. The fields were split into F1-F4 for the purposes of the updated baseline assessment as part of the BNGA (Nicholsons 2024).
- 3.9 F1 was the largest field located to the east of the Site. This field comprised barren brome *Bromus sterilis*, meadow brome *Bromus commutatus*, tufted hair grass *Deschampsia cespitosa*, sweet vernal grass *Anthoxanthum odoratum*, cleavers *Galium aparine*, common nettle *Urtica dioica*, rough meadowgrass *Poa trivialis*, Yorkshire fog *Holcus lanatus*, creeping bent *Agrostis stolonifer*, spear thistle *Cirsium vulgare*, vetch *Vicia spp.*, ragwort *Senecio jacobaea*, and field horsetail *Equisetum arvense*. A small area of bramble *Rubus fruticosus agg.* scrub and green alkanet *Pentaglottis sempervirens* was recorded along the west boundary of F1.
- 3.10 F2 was located to the south-west of the Site, bordering the River Loddon and associated riparian habitat. This field comprised largely of common nettle, meadow brome, cock's-foot *Dactylis glomerata*, cleavers, gypsywort *Lycopus europaeus*, creeping thistle *Cirsium arvense*, spear thistle, greater willowherb *Epilobium hirsutum*, white deadnettle *Lamium album* and red deadnettle *Lamium purpureum*. Other species were recorded at smaller abundances.
- 3.11 F3 was the smallest field located in the centre of the Site, adjacent to the River Loddon riparian buffer. This field comprised of barren brome, meadow brome, common nettle, spear thistle, cock's-foot, creeping thistle, cleavers, white deadnettle, lesser burdock *Arctium minus*, broadleaved dock *Rumex obtusifolius*, creeping bent, red fescue *Festuca rubra* and meadow foxtail *Alopecurus pratensis*.

- 3.12 F4 was located to the north-west of the Site. This field comprised of meadow brome, barren brome, meadow foxtail, sweet vernal, with herbaceous species including meadow buttercup *Ranunculus acris*, bulbous buttercup *Ranunculus bulbosus*, slender speedwell *Veronica filiformis*, thyme-leaved speedwell *Veronica serpyllifolia*, common nettle, and white deadnettle, with other species recorded at smaller abundances. Other species were recorded at smaller abundances.
- 3.13 The majority of this habitat is to be removed as part of the Proposed Development, to be replaced primarily with newly constructed houses with associated garden spaces and hardstanding access. Approximately 2.725ha of this habitat will be enhanced through seeding of wildflower seed mixes and improved management strategy (as detailed in **Section 4** and **5**).

Other Broadleaved Woodland

- 3.14 The existing woodland strip in the centre of the Site adjacent to Muddlers Lane and field F2 is to be enhanced through the proposals from poor to moderate condition. Species consisted of oak, sycamore, horse chestnut, London plane *Platanus × acerifolia*, elder, beech *Fagus sylvatica*, holly and elm *Ulmus spp.* Ground flora consisted of garlic mustard, lords and ladies *Arum maculatum*, common nettle, bramble and common dandelion *Taraxacum officinale agg.*, with a rare abundance of hybrid bluebells *Hyacinthoides × massartiana*. The enhancement will be achieved through targeted management to improve criteria in relation to the woodland structure, desirable ecological features (including deadwood) and removing undesirable species (hybrid bluebells).

River Loddon

- 3.15 The River Loddon and associated riparian habitat is located on the west boundary of the Site. Approximately 380m of the river is adjacent to the Site. The associated riparian habitat includes fields F2 and F3, and a strip of wet woodland, with species recorded including crack willow, hawthorn, goat willow *Salix caprea*, alder *Alnus glutinosa* and elder. Bank side flora consisted of garlic mustard, meadowsweet *Filipendula ulmaria*, lesser burdock *Arctium minus*, mint *Mentha spp.* and hemlock water dropwort *Oenanthe crocata*.
- 3.16 This habitat will be enhanced through the Proposed Development through improvement to the grassland habitat and bank sides.

4. HABITAT CREATION, ENHANCEMENT AND MANAGEMENT

- 4.1 The following section of the LEMP details the specification for the establishment, aftercare and long-term management of the new habitats, including management prescriptions to benefit wildlife.
- 4.2 Habitat creation, enhancements, maintenance and monitoring will be funded by the Client during construction.
- 4.3 Habitats to be enhanced and/or created as part of the Proposed Development are as follows (and displayed in **Appendix 2**):
- Tree planting
 - Shrub planting
 - Instant hedging
 - Native hedgerow
 - Amenity grassland
 - Flowering lawn mix
 - Wildflower meadow mix
 - Riverine feature planting (SuDS and Swales)
 - Aquatic marginal planting
 - Native woodland mix
 - Scrub planting
 - Wet meadow planting
 - Aquatic marginal shrub
 - River Loddon corridor

Native Woodland Mix & Tree Planting

- 4.4 Small, new native woodland blocks, individually native tree specimens, street trees, feature tree, orchard tree specimens, multi-stem trees/shrubs are to be planted as part of the Proposed Development.
- 4.5 There are no specific requirements, beyond installation of tree protection measures to existing, retained scattered trees prior to development work commencing. The proposed management below will cover all new tree planting including new woodland habitat and individual trees.

Establishment

- 4.6 Full planting details can be found in the specification notes of the Landscape Design Statement but are briefly detailed below:
- Planting to be undertaken between December and March when ground conditions are suitable and ideally in the planting season following completion of the project construction.

- Pits to be excavated to twice the diameter of the root system supported with a stake to the prevailing wind side.

Aftercare

- 4.7 All planted trees will be thoroughly watered especially during periods of drought; particular care should be taken during such periods to ensure sufficient watering is carried out to facilitate healthy growth. Within the first year newly planted trees should be watered following a drought for a period of 10 days maximum to ensure successful establishment. Treegator's or slow-release watering bags should be used where appropriate to ensure adequate watering.
- 4.8 All planted trees will be checked annually, and any failed stock will be replaced during November and December for five years after planting. Replacement of stock will be carried out up to 100% of the initial stocking rate. Any missing or damaged guards will be replaced, and trees re-staked where necessary. Any encroaching weeds at the base of the trees are to be removed by hand to help tree establishment.

Long-term Management

- 4.9 Stakes are to be checked for stability monthly with any loose stakes straightened and driven further into the ground and tree ties adjusted as appropriate.
- 4.10 Tree ties are to be checked monthly with missing/ broken ties replaced and restrictive ties loosened.
- 4.11 Formative pruning of standard trees and the removal of any deadwood are to be undertaken outside the nesting bird season (March – August inclusive) and at an appropriate time for the species.
- 4.12 Subsequent stakes are to be completed within five to ten years of planting once specimens have become self-supporting. All tree shelters and other non-biodegradable rubbish materials must be disposed of at a licensed landfill site.

Shrub Planting

- 4.13 A mix of new native and non-native shrub planting will be incorporated into the Proposed Development. The aim is to provide amenity landscaping for the new residential units as well as to provide new foraging opportunities for birds and insects.

Establishment

- 4.14 A detailed specification for the establishment of the shrub species is included in the Landscape Masterplan. A mixture of native and non-native tree and shrub species appropriate to the local area will be planted.
- 4.15 Areas of heavily compacted ground must be deep ripped prior to planting to relieve compaction. All beds must be cut with even curves and straight lines as appropriate in accordance with the Landscape Layout. Biodegradable mulch mats will be used to allow better establishment of the shrubs and aid weed suppression.
- 4.16 Delivery and handling of all plant material should be in accordance with CPSE 'Handling and Establishment of Landscape Plants 1996'.

Aftercare

- 4.17 The main objective of the management of shrub beds and individual specimens is the establishment and future sustained growth of plants to create an attractive feature. Pruning should keep the plant healthy and vigorous and prevent shrubs becoming 'leggy'.
- 4.18 Keep all areas of planting free from weed growth at all times. After planting, hoe over all cultivated areas and remove all weeds to tip.
- 4.19 Remove any litter or debris found over the Site in planted areas that are included within the maintenance responsibilities.
- 4.20 At the end of each growing season, remove from the planting areas all plants which have died or are failing to thrive or are likely to die or fail to thrive. These specimens should be removed off Site. Failed plants should be replaced to maintain the habitat and landscape features.
- 4.21 All plants shall be re-firmed after frost to ensure that they are not leaning, and that the soil level around the plants remains at the level the plants grew in the nursery.
- 4.22 Any dead twigs or watersprouts occurring on shrubs shall be removed if required and disposed of.
- 4.23 All pruning and management should be carried out by competent persons who are fully acquainted with the correct techniques to apply to the plants specified.
- 4.24 Remove all dead wood, diseased tissue, suckers and epicormic growth from all planted material at the end of each growing season. Shape appropriately to each species, location, season, and stage of growth, leaving a well-balanced natural appearance.
- 4.25 When pruning stems, use clean sharp secateurs, and cut immediately above a bud and as close to it as possible without damaging the bud or the portion of twig which is feeding it, therefore leaving the smallest possible wound.
- 4.26 Where shrubs are becoming leggy, coppice and thin out shrubs to encourage regeneration and healthy, bushy growth. These operations shall not compromise the visual screening of the planting.
- 4.27 Within visibility splays maintain shrubs to a maximum height of 600mm.
- 4.28 No works to shrubs are to be carried out during the general bird breeding season between March and August.

Pruning of Flowering Species

- 4.29 Prune as follows:
 - Winter flowering shrubs in spring.
 - Shrubs flowering between March and July immediately after the flowering period.
 - Shrubs flowering between July and October back to old wood in winter.
 - Rose bushes in early spring to encourage basal growths.

Long-term Management

- 4.30 The Maintenance Contractor shall keep all planted areas free from weeds by either hoeing over, hand weeding or by chemical means during the growing season.

- 4.31 The Maintenance Contractor shall suppress weed growth to planted areas at all times by mechanical removal and ensuring that planted beds are suitably covered with bark mulch or other weed suppressant material (as required).
- 4.32 The Maintenance Contractor must not carry out spraying operations during unsuitable conditions which may cause spray to drift on to adjoining land or where overspray may damage plant stock.
- 4.33 The Maintenance Contractor must check with the employer to ensure that access can be suitably restricted to ensure no harm to health of people using the Site.
- 4.34 When considered necessary, the Maintenance Contractor shall, during his routine maintenance visits, water trees, shrubs and other planted areas in order that the entire tree pit or planted area is watered to field capacity.
- 4.35 All rubbish, cuttings, surplus excavated material etc. shall be removed offsite. Dead plants shall be removed and replaced on a like-for-like basis.
- 4.36 The Maintenance Contractor shall remove any litter found over the Site, including all planted areas and areas around trees which are included within their maintenance responsibilities.
- 4.37 Plants shall be checked regularly for rodent damage and the employer or employer's agent kept informed.
- 4.38 Any gullies, indentations or pockets caused by running water shall be made good and brought to the correct level.
- 4.39 The Maintenance Contractor shall reinstate mulch where disturbed due to the maintenance or other causes and allow for returning mulch material to planting areas from adjacent grass and hard surfaces.
- 4.40 The Contractor shall make himself aware of the requirements of Statutory Undertakers with respect to the planting of shrubs and trees and shall ensure that these requirements are complied with.
- 4.41 The Contractor shall carry out works outside the general bird breeding season.

Hedgerow Planting

- 4.42 New hedgerow planting will be incorporated into the development throughout the Site. The aim is to provide hedgerow continuity around the Site for species such as bats, as well as providing an enhanced landscape buffer to the adjacent roads and neighbouring properties.

Establishment

- 4.43 A mixture of standard native tree and shrub species appropriate to the local area will be planted.
- 4.44 Biodegradable mulch mats will be used to allow better establishment of the hedgerow planting trees and weed suppression.

Aftercare

- 4.45 All sections of new hedgerow planting and standard trees will be checked each year prior to autumn; any failed stock will be replaced during November and December in the first and second winters after planting. Replacement will be carried out up to 100% of the initial stocking

rate. Any missing or damaged tree guards will be replaced with bamboo canes and re-staked where necessary.

- 4.46 Any encroaching weeds within tree spirals are to be removed by hand. Biodegradable spirals will be used wherever practicable to do so.

Long-term Management

- 4.47 The existing boundary hedgerows (H2 and H3) will be managed in the long term to achieve a minimum of 2m high and approximately 1.5m in width, in order to retain their current condition. The side facing away from the development will be encouraged to develop a spreading structure through lower intensity rotational management. This will enable the enhanced hedge to develop structural complexity and to permit tree species to flower, thus providing a nectar resource for invertebrates as well as nesting sites for birds.
- 4.48 Cutting is to be completed in January or February outside the bird nesting season (which runs through March to August inclusive). Any remaining spiral guards will be monitored after planting and removed, adjusted or replaced as required.

Flowering Lawn and Amenity Grassland

- 4.49 The amenity grassland and lawn areas within the Site are to be enhanced to improve the value of the habitat for invertebrates, including pollinators. However, they will be managed as required to facilitate safe public access and maintain a tidy appearance.

Pre-commencement Measures

- 4.50 Mowing and scarification (with a chain harrow) of the wider retained grassland will be required in preparation for amenity grassland turf or sowing of Emorsgate EL1 and Amenity Grassland seed mixes as appropriate; to be undertaken in late summer.

Establishment

- 4.51 Following scarification, turf or seed sowing can be applied in the autumn or spring (optimal time of year). Seed can be applied by machine or broadcast by hand and should be lightly compacted to ensure good seed to soil contact.

Aftercare

- 4.52 Regular mowing to maintain grassland as an amenity and accessible space. Arisings can be used to create grass/habitat pile(s) adjacent to hedgerows and amongst tree cover.
- 4.53 Additional sowing may be required where growth is sparse after two years growth.
- 4.54 Weed control to all grassland areas will be limited to spot application of translocated herbicide to control undesirable plants such as docks, thistles, nettles, ragwort and willowherb. Long-term management strategies for weed control should reduce or eliminate the use of chemical inputs and use alternative methods where possible, such as spot-pulling, mowing and reseeding.

Wildflower Meadow

- 4.55 Fields F2 and F3 are to be enhanced to wildflower meadows through seeding of a mix of EM8 Wet Wildflower Meadow and EM2 General Purpose Meadow Mix.

Pre-commencement Measures

- 4.56 Mowing and scarification (with a chain harrow) of the modified grassland to be removed will be required in preparation for wildflower meadow mix seed sowing.

Establishment

- 4.57 Areas to receive wildflower seed mix should be appropriately prepared as per best practice using low fertility soils. Areas of existing grass habitat must be scarified before seeding. This must occur in August or September.
- 4.58 Seed can be applied by machine or broadcast by hand and should be lightly compacted to ensure good seed to soil contact. Recommended sowing rate of 4g per m².
- 4.59 Mowing is to take place on a phased basis to minimise risk to any animal species that may be using the habitat. The initial cut taking the sward to 100-150mm in height. A second strim/clearance taking sward down to 0-50mm can be undertaken later that day or within the following day.
- 4.60 Weed growth should be controlled through light mowing or topping during establishment to allow grass take-up. This can be done occasionally during the establishment stage if weeds become frequent within the meadow mix and cut to a height of 40-60mm if required.

Long-term Management

- 4.61 Once established, the grassland must be cut twice a year to a height no lower than 50mm, to ensure the species diversity of the habitat is consistent with its habitat type and contains more than 10 vascular plants per m². The grassland must be left to grow tall and allowed to flower from May through to August. Arisings must be removed off site to ensure that levels of soil fertility remain low.
- 4.62 Mown paths into the meadow must be consistently cut at a height of 50mm on a fortnightly basis from April to September. The pathways must be kept under 70mm throughout the year. This cutting is best done on a rotational basis area by area, year on year to enable different microclimates to develop over time. This will ensure that at least 20% of the sward is less than 70mm in height throughout the summer months.
- 4.63 The meadow grassland and pathways should be given a spring cut in late March/early April to discourage competitive grasses, and should be cut again in September following completion of flowering. The taller meadow grassland areas should remain uncut over the winter months.
- 4.64 Additional sowing may be required where growth is sparse after two years growth.

SuDS, Swales and Aquatic and Marginal Planting

- 4.65 The new SuDS pond is to be situated within the new area of wildflower meadow and along the northern Site boundary. The basin is to be sown with SuDS Turf and supplemented with seed collected from the existing riverine grassland adjacent to the River Loddon. The margins will be planted with sympathetic marginal and aquatic planting.

Pre-commencement Measures

- 4.66 Any areas of long vegetation, including the existing grassland and tall forbs vegetation, will be strimmed initially to a height of 150mm to allow for any wildlife inhabiting this area to safely

leave. After a 5-day period this area is then to be trimmed to a height of 50mm before being soil stripped read for seeding.

Establishment

- 4.67 All outer edges of the basin and swales should be dug with an angle of less than 20° to create a gently sloping edge as per the Drainage Strategy Layout. This will ensure that the peripheries of the pond are shallow and allow for small mammals, such as hedgehog, to easily escape.
- 4.68 Marginal planting will include pendulous sedge *Carex pendula*, yellow iris *Iris pseudacorus*, and soft rush *Juncus effusus*, marsh marigold *Caltha palustris* and sharp flowered rush *Juncus acutiflorus* as per the Landscape Design Statement.

Long-term Management

- 4.69 The SuDS attenuation basin will be inspected twice a year during early October and November respectively. Any build-up of leaf litter on the pond surface will be raked off and composted elsewhere within the Site.
- 4.70 If pond weed (such as duckweed) begins to encroach across the water surface, this vegetation will be raked out to prevent stagnation.
- 4.71 If any invasive plant species are found within the pond, these will be removed by hand digging and removal of roots. For species listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended) such as New Zealand pigmyweed *Crassula helmsii*, specialist care would be required. Hand digging would be an effective method for this species in the short-term, however chemical treatment would be required to control this species in the long-term. Any removed plant matter must be handled and disposed of with extreme care to ensure that fragments do not spread within the Site or offsite.
- 4.72 The removal of invasive species will be undertaken between October-November when amphibians have typically left the pond for hibernation. All equipment used should be thoroughly washed immediately to prevent the spread of invasive species across different sites.
- 4.73 Leaf litter from nearby trees may block substantial amounts of sunlight from entering the pond to the detriment of numerous species and water quality. Excess leaf litter may also result in reduced oxygen levels and eutrophication of the waterbody as plant material decays.

River Loddon Corridor

- 4.74 The riparian habitat on the east bank of the River Loddon is to be improved to enhance this habitat from moderate to fairly good condition.
- 4.75 The existing wet woodland on the riverbank will be retained in its current condition. Additional tree planting to bolster this habitat will include species sympathetic to river floodplain and wet meadows, including crack willow, white willow *Salix alba*, alder *Alnus glutinosa*, downy birch *Betula pubescens*, small-leaved lime *Tilia cordata*, bird cherry *Prunus padus*, and tulip tree *Liriodendron tulipifera*.
- 4.76 Additional scrub planting will include goat willow, hazel *Corylus avellana*, hawthorn, blackthorn, dog rose, honeysuckle *Lonicera periclymenum*, dogwood *Cornus alba*, crab apple *Malus sylvestris*, guelder rose *Viburnum opulus* and elder.

- 4.77 The existing grassland on the east bank and wider floodplain area will be enhanced through seeding with Emorsgate EM8 Wet Meadow Mix with higher areas to be seeded with Emorsgate EM2 General Purpose Meadow Mix.
- 4.78 The above enhancements and habitat creations are given greater detail for their establishment and management within their own sections.
- 4.79 Long term-maintenance in respect of the river corridor itself include minimising the use of fertilisers or chemicals where possible to minimise risk of detrimental effects to the watercourse, including silting and eutrophication.
- 4.80 Areas of bare earth near the riverbanks should be reseeded with appropriate aquatic-sympathetic seed mix (EM8) or tree or scrub. Failed stock must be replaced where necessary.

5. MONITORING

Landscaping

- 5.1 Monitoring must occur on a schedule of years 1, 2, 5, 10, 15, 20, 25, 30 following completion of the construction phase of works.
- 5.2 After each meeting, the appointed SQE will produce a table with the following information to guide the ongoing habitat creation and maintenance work:
- Landscape feature;
 - Size;
 - Current condition;
 - Actions taken in past 12 months;
 - Actions for next 12 months;
 - Updated LEMP; and
 - Updated Work Schedule

Work Schedule

- 5.3 The requirement of the BNGA (Nicholsons, 2024) along with the management prescriptions within this LEMP must be considered in order to prepare a fully comprehensive Work Schedule. This is likely to be an iterative process but a framework for this is presented in the **Landscape Management Plan** and **Table 2**.
- 5.4 It should be noted that five years is a relatively short period to judge the establishment of newly created habitat and therefore it may be the case that while all these requirements may not be met by the end of the monitoring period, there should be substantive progress towards them.
- 5.5 Any divergence from expected progress towards achieving target ecological condition in early years, and/or deterioration of habitats once target ecological condition has been reached, will be assessed at each monitoring visit.
- 5.6 Any management changes necessary to achieving and/or maintaining target condition will be implemented and their efficacy reviewed at subsequent monitoring visits. Any remedial measures identified will be specified within each monitoring report and implemented at the earliest practicable opportunity, and within 12 months at the latest.

Landscape Management Plan

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
Wildflower meadow							
Areas of wildflower seed EM2 General Purpose Mix and EM8 Wet Meadow Mix	Moderate	5	Criteria A, B, C, D and F (Other neutral grassland condition assessment)	The meadow turf mix will be diverse to achieve conditions A and F. Regular monitoring by an SQE must occur to confirm these criteria is met (see monitoring method). Additional sowing may be required where growth is sparse growth to achieve criteria C. Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub in order to comply with criteria D and F of the BNG Assessment condition assessments. Removal of cuttings each year will decrease nutrient levels in the soil ensuring less vigorous growth of grass plants and allowing other species to thrive. This will also assist in reducing grass seed retention and germination from the seed bank.	Grass cutting in late March/early April and again in late September/early October. Mown paths must be cut fortnightly between April to September. Additional seeding should be considered every two years, if species mix doesn't match the habitat type. Weeding should occur on a yearly basis in April.	Botanical assessment by an SQE will confirm whether habitat has a minimum of 9 species per m ² as specified within the BNG Assessment.	Annual surveys for years 1-5, then surveys every 5 years.
Amenity grassland and Species-rich Flowering Lawns							
Areas of grassland seeded with amenity grassland mix and with EL1 flowering lawn mix.	Moderate	4	Criteria A C, E, F and G (Modified grassland condition assessment)	Additional sowing may be required where growth is sparse to achieve criteria E. Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub in order to comply with criteria D C, F and G. Removal of cuttings each year will decrease nutrient levels in the soil ensuring less vigorous	This habitat and associated mown paths must be cut fortnightly between April to September. Additional seeding should be considered every two years, if species mix doesn't match the habitat type.	Botanical assessment by an SQE in May-August will confirm whether habitat has 6-8 species per m ² as specified within	Annual surveys for years 1-5, then surveys every 5 years.

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
				growth of grass plants and allowing other species to thrive. This will also assist in reducing grass seed retention and germination from the seed bank.	Weeding should occur on a yearly basis in April.	the BNG Assessment.	
Trees							
Feature tree, multi-stem tree, native tree and orchard tree	Moderate	27	Criteria A, B, D and F (Individual tree condition assessment)	Replacement of failed stock to ensure success of coverage of native species to comply with criteria A. Pruning must be 'light-touch' to allow the tree achieve >75% of expected canopy for its age range and height to comply with criteria D. Replacement or reseedling of any ground vegetation near individual trees to comply with criteria F.	Checking and replacement of failed stock, as required on an annual basis. Trees shall be fertilised using an approved feed during early May and late September. No works to trees are to be carried out during the general bird breeding season between March and August.	Biennial assessment of trees by arborist to monitor growth. All newly planted and retained trees targeted will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected health defects and make recommendations for replacement if required.	Biennial
Street tree	Poor	10	Criteria A, and B (Individual tree condition assessment)	Replacement of failed stock to ensure success of coverage of native species to comply with criteria A.	Checking and replacement of failed stock, as required on an annual basis.	Biennial assessment of trees by arborist	Biennial

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
					Trees shall be fertilised using an approved feed during early May and late September. No works to trees are to be carried out during the general bird breeding season between March and August.	to monitor growth. All newly planted and retained trees targeted will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected health defects and make recommendations for replacement if required.	
Scrub							
Native scrub planting	Moderate	5	Criteria A, C and D	Replacement of failed stock to ensure success of coverage of native species to comply with criteria A. Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub in order to comply with criteria C. Leave 1m grassland buffer unmown on at least one side of scrub habitat to comply with criteria D.	Checking and replacement of failed stock, as required on an annual basis. No works to trees are to be carried out during the general bird breeding season between March and August. Weeding should occur on a yearly basis in April.	All newly planted and retained trees targeted will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected	Years 1, 2, 5, 10, 15, 20, 25, 30

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
						health defects and make recommendations for replacement if required.	
Woodland							
New broadleaved woodland	Poor	5	Criteria C, D, F to good condition. Criteria B, E H and M to moderate condition (Woodland condition assessment)	Provisional watering of newly planted trees may be required where necessary Formative pruning of standard trees and subsequent stake/collar removal are to be completed within five to ten years of planting, once specimens have become self-supporting. Primary responsibility on stock health rests with the respective contractor/management team. Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub in order to comply with criteria C.	Checking and replacement of failed stock, as required on an annual basis . Trees shall be fertilised using an approved feed during early May and late September . No works to trees are to be carried out during the general bird breeding season between March and August . Weeding should occur on a yearly basis in April .	Biennial assessment of trees by arborist to monitor growth. All newly planted and retained trees targeted will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected health defects and make recommendations for replacement if required.	Biennial
Enhanced broadleaved woodland	Moderate	10	Criteria C, D, E, F to good condition.	Provisional watering of newly planted trees may be required where necessary	Checking and replacement of failed stock, as required on an annual basis .	Biennial assessment of trees by arborist	Biennial

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
			Criteria A, B, H, J and L to moderate condition (woodland condition assessment)	Formative pruning of standard trees and subsequent stake/collar removal are to be completed within five to ten years of planting, once specimens have become self-supporting. Primary responsibility on stock health rests with the respective contractor/management team. Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub in order to comply with criteria C. Encourage growth of shrub layer through natural regeneration to comply with criteria J, and retain deadwood features where safe to do so for criteria L.	Trees shall be fertilised using an approved feed during early May and late September. No works to trees are to be carried out during the general bird breeding season between March and August. Weeding should occur on a yearly basis in April.	to monitor growth. All newly planted and retained trees targeted will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected health defects and make recommendations for replacement if required.	
Non-native and ornamental hedgerow							
Sections of hedging to be planted in association with the new residential buildings.	N/a	N/a	N/a	Spot spraying and/or hand pulling of invasive or undesirable species and/ or scrub in order to maintain the integrity of this habitat. Remove litter and debris where necessary to reduce nutrient input and maintain healthy habitat. Replace failed stock where required.	No works to trees are to be carried out during the general bird breeding season between March and August. Cut back in January or February to allow winter berry production.	All newly planted and retained hedgerows will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected	Years 1, 2, 5, 10, 15, 20, 25, 30

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
						health defects and make recommendations for replacement if required.	
Hedgerow							
Species-rich native hedge	Poor	1	B1, B2, C2, D1 and D2 (Hedgerow condition assessment)	Hedges must be cut to maintain the structure of the hedgerow and prevent gaps at the base or along sections of hedgerow from forming. Any failed sections of hedgerow must be replaced. These methods must be undertaken to comply with condition B1 and B2. Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub in order to comply with criteria D1. Remove litter and debris where necessary to comply with criteria D2. Replace failed stock where required.	No works to hedges are to be carried out during the general bird breeding season between March and August. Cut back in January or February to allow winter berry production.	All newly planted and retained hedgerows will be surveyed by an SQE. The SQE will check the habitat condition against the BNG Assessment and will flag any failed stock or suspected health defects and make recommendations for replacement if required.	Years 1, 2, 5, 10, 15, 20, 25, 30
Shrub Planting							
A mix of new native and non-native shrub planting	N/a	N/a	N/a	Spot spraying and/or hand pulling of invasive or undesirable species in order to keep this habitat as an attractive amenity feature. Remove clippings, leaf litter and debris to reduce nutrient input. Replace failed stock where required.	No works to shrubs are to be carried out during the general bird breeding season between March and August. Cut back in January or February to allow winter berry production.	Annual assessment by SQE or site management team between May-September.	Annual

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
SuDS Attenuation Basin, Aquatic and Marginal Planting							
Aquatic marginal shrub planting	Good	5	Criteria A, B, C, E1 AND E2 (Urban; SuDS condition assessment)	Cutting and pruning of marginal planting must occur outside the amphibian breeding period to provide benefits for this species group. This is in compliance with criteria A and B. Spot spraying and/or hand pulling of invasive or undesirable species and/ or scrub in order to comply with criteria C and E1.	No cutting or pruning to occur between March to June to avoid amphibian breeding season. Management should occur in October or November .	Botanical assessment by an SQE in May-August will confirm whether habitat has suitable aquatic and marginal species as specified within the BNG Assessment.	Annual surveys for years 1-5, then surveys every 5 years.
SuDS grass seed mix	Moderate	3	Criteria C, E1 and E2 (Urban; SuDS condition assessment)	Cutting and pruning of marginal planting must occur outside the amphibian breeding period to provide benefits for this species group. Spot spraying and/or hand pulling of invasive or undesirable species and/ or scrub in order to comply with criteria C and E1.	No cutting or pruning to occur between March to June to avoid amphibian breeding season. Management should occur in October or November .	Botanical assessment by an SQE in May-August will confirm whether habitat has suitable aquatic and marginal species as specified within the BNG Assessment.	Annual surveys for years 1-5, then surveys every 5 years.
Site In General							
Litter				Remove any litter or debris found over the Site.	Inspection by Site management team every two months .	Site management team to inspect whole site every two months .	Years 1-30

Habitat and Detail	Targeted Condition	Years to Targeted Condition	BNG Condition Targets	Management Methods to Achieve Condition	Management Schedule	Monitoring Methods	Monitoring Schedule
Soil Decompaction and Aeration				Spike / prick up soil using a hand fork or light machinery to aerate the soil and break surface crust. Do not damage plants / bulbs and their roots.	Annual inspection by site management team.	Site management team to inspect on annual basis in late summer/early autumn.	Years 1-30

Table 2: Indicative Work Schedule

Habitat and Detail	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
Trees/Woodland						
Checking and replacement of failed stock, as required on an annual basis						N/A
Semi mature trees or larger						Wires, tensioners and mats should be checked monthly to ensure the tree is stable and the wires are not cutting into the rootball
Fertiliser						Trees shall be fertilised using an approved feed during early May and late September
Watering						Provisional – water where necessary; use of gator bags where appropriate
Biennial assessment of trees by arborist to monitor growth						Formative pruning of standard trees and subsequent stake/collar removal are to be completed within five to ten years of planting, once specimens have become self-supporting. No works to trees are to be carried out during the general bird breeding season of March and August.
Scrub/Hedgerows						
Cut back in winter, in accordance with recommendations for long term management						Natural regeneration of scrub/shrub to be supported and encouraged, young shrub species should be allowed to establish whilst mature species should be managed accordingly. The works will be carried out September to February inclusive, to avoid any potential offences relating to breeding birds during their main bird breeding season
Strim / mow grassland edges in spring and late autumn only						Ecotones to be created as part of management regime, allowing longer grass to blend into scrub habitat.
Species-rich Lawn						
Cutting regime will be on a regular basis during the summer months to facilitate amenity use of this habitat. This will also						Removal of cuttings each year will decrease nutrient levels in the soil ensuring less vigorous growth of grass plants and allowing other species to thrive. This will also assist in reducing grass seed retention and germination from the seed bank.

Habitat and Detail	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
ensure reduction/avoidance of any scrub growth.						
Additional Sowing						Additional sowing may be required where growth is sparse
Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub						To control undesirable weeds such as docks, thistles, nettles, ragwort and willowherb
Botanical survey to be completed on a biennial basis						Botanical assessment will confirm whether habitat has 6-8 species per m ² as specified within the BNG Assessment.
Meadow Grassland & Wildflower Meadow						
Grass should be cut on a rotational basis to provide a variety of structure and encourage species diversity. Cutting should take place in Spring and again in Autumn.						Removal of cuttings each year will decrease nutrient levels in the soil ensuring less vigorous growth of grass plants and allowing other species to thrive. This will also assist in reducing grass seed retention and germination from the seed bank. 20% of the grassland could be cut every 2 weeks during the summer to provide ecotones and structure i.e. a mown path
Botanical survey to be completed on a biennial basis						Botanical assessment will confirm whether habitat has more than 9 species per m ² as per the BNG Assessment. This will also be used to assess structural diversity and presence of invasive species.
Spot spraying and/or hand pulling of non-native/invasive species and/ or scrub						In order to comply with criteria 4 and 5 of the BNG Assessment condition assessments.
SuDs and Aquatic Planting						
Removal of leaf litter and undesirable aquatic plants						Check pond in October and November when amphibian activity has decreased
Top up water level						Provisional – in drought conditions; rain water should preferably be used.

6. ROLES AND RESPONSIBILITIES

- 6.1 This document has been completed in agreement with Croudace Homes “the Client”. As such they, with the support from specialist contractors, will be responsible for the delivery of the information prescribed within this document. The Client will be responsible for appointing the Site Manager, ECoW and Maintenance Contractor as detailed below.

Site Manager

- 6.2 It is understood that the day-to-day management of the development until completion will sit with the appointed Site Manager.

- 6.3 The Site Manager’s responsibilities include:

- Acting as a champion across all areas of environmental management;
- Ensuring the effective implementation of the LEMP through the availability of appropriate resources and to ensure all legal requirements are delivered;
- Regularly review the LEMP throughout its duration to ensure it remains relevant to the project and is effective in delivering ecological benefits;
- If any amendments need to be made, ensure they are agreed in writing with the LPA;
- Manage all necessary documentation to demonstrate compliance with the appropriate legislation for the required period;
- Ensure necessary training is given to personnel to ensure necessary levels of environmental competence;
- Ensure correct procedures are followed in case of an environmental accident; and
- Ensure that the LEMP is implemented on Site on a regular basis (taking into account seasonal constraints).

- 6.4 All Site staff, including all contractors, will be briefed on the LEMP by the Site Manager as part of their Site induction process.

Ecological Clerk of Works (ECoW)

- 6.5 Ahead of works commencing, an ECoW is to be appointed by the Client, who will provide independent advice to the Principal Contractor. The ECoW will be responsible for:

- Ensuring the detail presented within the LEMP is communicated to the Principal Contractor;
- Completion of a toolbox talk to the Principal Contractor prior to works commencing;
- Preparation of materials to support Site inductions;
- Pre-construction and construction phase checks for protected species, as required;
- Provision of an ecological watching brief during vegetation clearance works; and
- Regular record keeping and production of reports, as required, for auditing purposes.

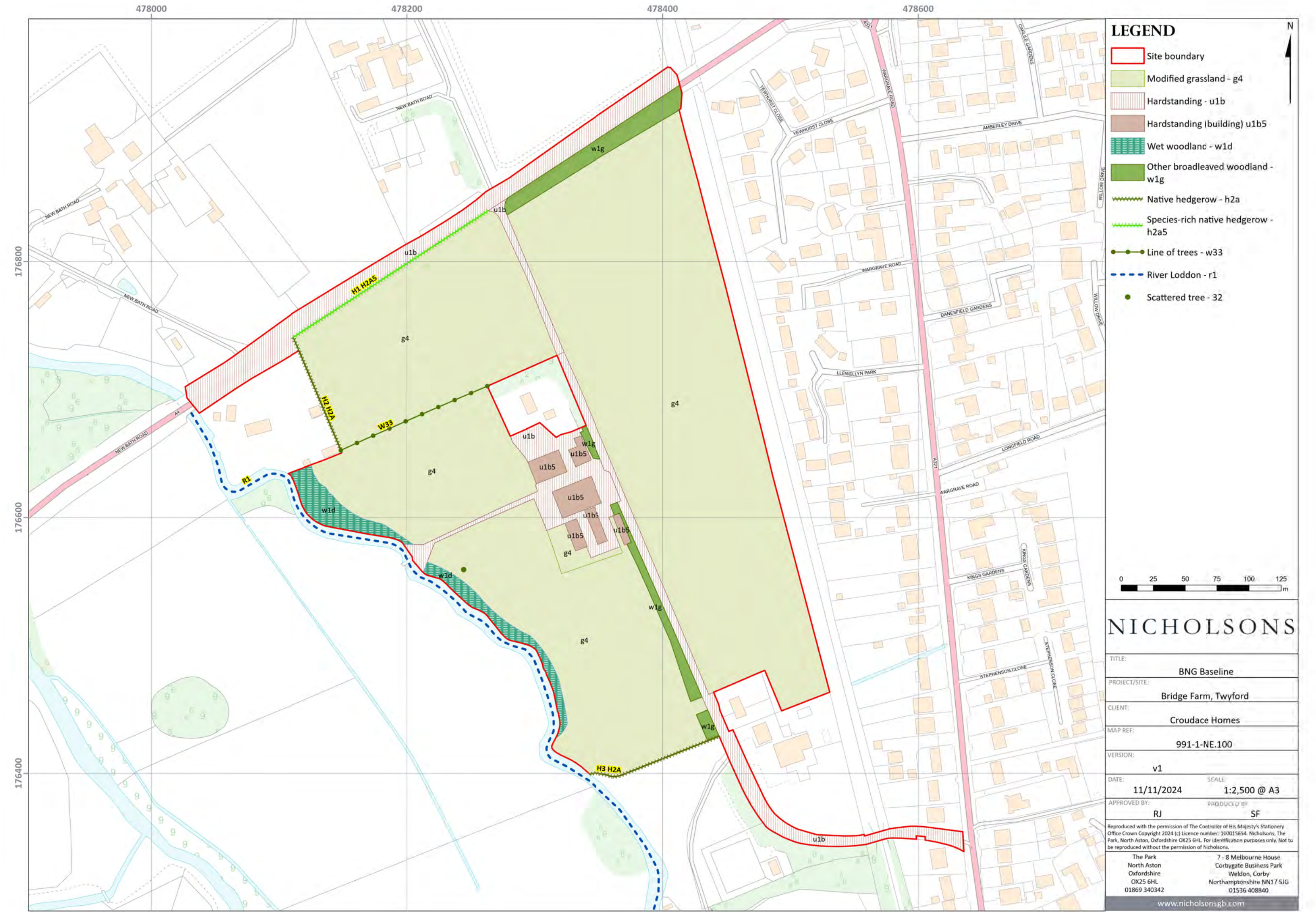
Maintenance Contractor

- 6.6 The Maintenance Contractor will be responsible for ensuring the establishment, aftercare and long-term management of the retained and newly created habitats within the Site are undertaken in accordance with the prescriptions at **Section 5** and in the **Landscape Management Plan**.
- 6.7 If no maintenance contractor is as of yet appointed, this document must be reviewed and resubmitted to the LPA within 4 weeks of appointment and the contractor to be informed of their responsibilities as part of this document.

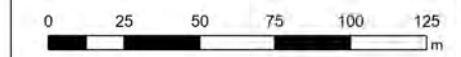
7. APPENDICES

Appendix 1: Baseline Habitat Plan

Ref: 991-1-NE.100-BNG Baseline v1 SF 111124



- LEGEND**
- Site boundary
 - Modified grassland - g4
 - Hardstanding - u1b
 - Hardstanding (building) u1b5
 - Wet woodlanc - w1d
 - Other broadleaved woodland - w1g
 - Native hedgerow - h2a
 - Species-rich native hedgerow - h2a5
 - Line of trees - w33
 - River Loddon - r1
 - Scattered tree - 32



NICHOLSONS

TITLE:	BNG Baseline	
PROJECT/SITE:	Bridge Farm, Twyford	
CLIENT:	Croudace Homes	
MAP REF:	991-1-NE.100	
VERSION:	v1	
DATE:	11/11/2024	SCALE: 1:2,500 @ A3
APPROVED BY:	RJ	PRODUCED BY: SF

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Appendix 2: Landscape Masterplan

Ref: CH038-002H_Lscape_MplanLR

APPLICATION BOUNDARY / S278 BOUNDARY

EXISTING VEGETATION - RETAINED
Refer to Arboricultural Impact Assessment and Method Statement; Changes must be consulted with the arboriculturist

Structural Planting

NATIVE TREE PLANTING
Standard, clear stem trees and feathered trees of British Native Origin. Riverine species in the flood meadows adjacent to the river. 12-14 Girth

STREET TREE PLANTING
Standard, clear stem trees suited to streetscape conditions & urban environments. 12-14 Girth.

FEATURE TREE PLANTING
Standard, clear stem trees suited to urban environments. Cultivars and ornamental species. 14-16 Girth.

GARDEN TREE PLANTING
Standard, clear stem trees. Cultivars and ornamental species. 10-12 Girth.

ORCHARD TREE PLANTING
Including local varieties on semi-vigorous rootstock such as MM106

MULTI-STEM TREE or SHRUB PLANTING
Small species trees and large shrubs; native and non-native. 1.5-3m tall on planting.

LOW NATIVE HEDGE PLANTING
Planted as transplants (60-100cm tall) and to be maintained at 1m tall. Including hawthorn and at least 7 species

LOW PRE-FORMED HEDGE PLANTING
Generally evergreen species and to be maintained at 80cm tall.

TALL PRE-FORMED HEDGE PLANTING
Generally evergreen species and to be maintained at 180cm tall.

NATIVE WOODLAND PLANTING
Planted as transplants in a matrix @ 3 per m2. With stakes and rabbit guards. Mix of at least 9 native species.

NATIVE SCRUB / SHRUB PLANTING
Planted as transplants in a matrix @ 3 per m2. With stakes and rabbit guards. Mix of at least 9 native species.

Other Planting

ORNAMENTAL SHRUB PLANTING
Shrub & herbaceous planting, generally in front gardens with an emphasis on Plants for Pollinators'. 5cm depth bark mulch.

ORNAMENTAL WET SHRUB PLANTING
In 30cm deep depressions, indicating the connection between the streetscape drainage system and attenuation basins

SuDS Planting

NATIVE WET MEADOW PLANTING in SWALES
Native wild-flower SuDS turf, with the potential to contract grow from seed harvested from the local area for distinctiveness

RIVERINE FEATURE PLANTING in SWALES
Native wild-flower SuDS turf and swaths of native wetland grasses such as Pendulous Sedge and Common Rush

NATIVE WET MEADOW PLANTING in BASINS
Native wild-flower SuDS turf, with the potential to contract grow from seed harvested from the local area for distinctiveness

NATIVE AQUATIC & MARGINAL PLANTING in BASINS
Including Pond Lily, Water Hornwort, Yellow Flag Iris, Marsh Marigold, Purple Loosestrife, Common Rush and Pendulous Sedge

Grasslands

AMENITY GRASS for Plots
Amenity Turf to be maintained short mown

SPECIES RICH AMENITY GRASS & MOWN PATHS
Existing grasslands mown short or 'Flowering Lawn' seed or turf

NATIVE MEADOW
Existing species rich native grasslands to be retained and enhanced. Reinstatement (where needed) with site derived donor seed, or a suitable seed mix such as Emorsgate E2M Meadow Mixture for Wetlands for areas with the flood zone, or Emorsgate E2M Standard General Purpose Meadow Mixture for areas above the flood zone.

NEAP and 'Discovery Disks'; PAINTED MACADAM
Hard Surfaced Area

(Play concept and thematic design to be developed through planning conditions)

*** DISCOVERY DISKS / INFORMAL PLAY**
Interactive signage interpreting the landscape and ecological features of the open space / informal play elements such as boulder clusters / logs

Faunal Enhancements / Tree Management
refer to ecologists plans for nestboxes, hibernacula etc.

Shallow Scrapes for Wading Birds
Shallow linear depressions in meadow to ecologists specification.

EXISTING CRACK WILLOW TREES FOR POLLARDING
As per ecological and landscape strategy



Railings

Estate Railing
5 bar estate railing in black, 1m tall

Front Garden Railing
Such as Zaun 'Holloway' Railing 1m tall

Hard surfacing & Furnishings
(refer to DES-703-108 Surface Materials Layout)

Hoggin Footpath

Tarmac

Block Paving
Brett Alpha 'Autumn Gold' with 'Brindle' detailing (or similar)

Block Paving
Brett Omega in Neutral with Charcoal Detailing (Or Similar)

Block Paving
Brett Omega in Autumn Gold with Brindle Detailing (Or Similar)

Paving Slabs
Neutral by Brett (Or Similar)

Levels
Cover Levels (Refer to Drainage Strategy Plan)
Topographic Levels

Bins and Benches
Woodscape Backrest Seats, Type 3a, Straight
Woodscape Litter Bin LBS 220 Single.

Notes
Refer to:
Biodiversity Net Gain Assessment Report (Nicholson's Ecology)
Biodiversity Enhancement Plans (Nicholson's Ecology)
Landscape and Ecological Management Plans (Nicholson's Ecology)
CH038-001 Landscape Design Statement
CH038-002 Landscape Master Plan
CH038-003 S106 Open Space Areas
CH038-004 Tree Planting Plan 1
CH038-005 Tree Planting Plan 2
CH038-006 Tree Planting Plan 3
CH038-007 Tree Planting Plan 4
CH038-008 Canopy Cover xls
CH038-009 Tree Planting Schedule

Bridge Farm , Twyford
LANDSCAPE MASTER PLAN

RESERVED MATTERS

CH038-002H - MW - 10 / 9 / 24

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HBFE 2023
ilex
Landscape Architects