

LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

**Guide to the Management of Landscape at
Haverhill, Phase 5a and 5c**

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**ON BEHALF OF
Persimmon Homes Suffolk**

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF DOCUMENT

- 1.1.1 The Management Plan shall be taken to include this document and any supporting plans, reports and specifications approved as part of the planning application for the residential redevelopment of land at Suffolk, Haverhill - Phase 5a and 5c. This includes any documentation containing quantitative and qualitative information about the external areas of the site that will be useful to those responsible for managing and maintaining them.
- 1.1.2 The purpose of this document is to schedule all required maintenance regimes, operations and works necessary for the satisfactory management of the landscape in perpetuity. The Management Plan sets out the management aims and objectives for the site along with the specific management objectives for each landscape component, and the associated maintenance works required on an Annual and Occasional basis. The Annual Works are those works that will be required every year, such as watering, weeding and cleaning. The Occasional Works are those that will be required on an irregular or cyclical basis, such as repairs and renewals.

1.2 THE GROUNDS

1.2.1 Location

Phase 5a and 5c are located within southern area within a wider Haverhill residential development. The proposals for the wider site include the provision of a new Relief Road, up to 1150 dwellings, a local centre and primary school. The Relief Road is located to the north of the development site and links to Haverhill Road in the east and Hales Barn Road in the west. Ann Suckling Way County Wildlife Site lies to the north of the relief road. See Fig's 1 & 2

1.2.2 Site Description and Development Proposals.

The proposals for the site comprise incidental public open space, together with parking areas, amenity areas and landscaping. The proposed boundaries of the site will be a mix of hedges, wildflower and floral lawn mixes and knee rail. Trees of native species are also proposed.

Fig 1. Location plan: Site Boundary: Not to scale

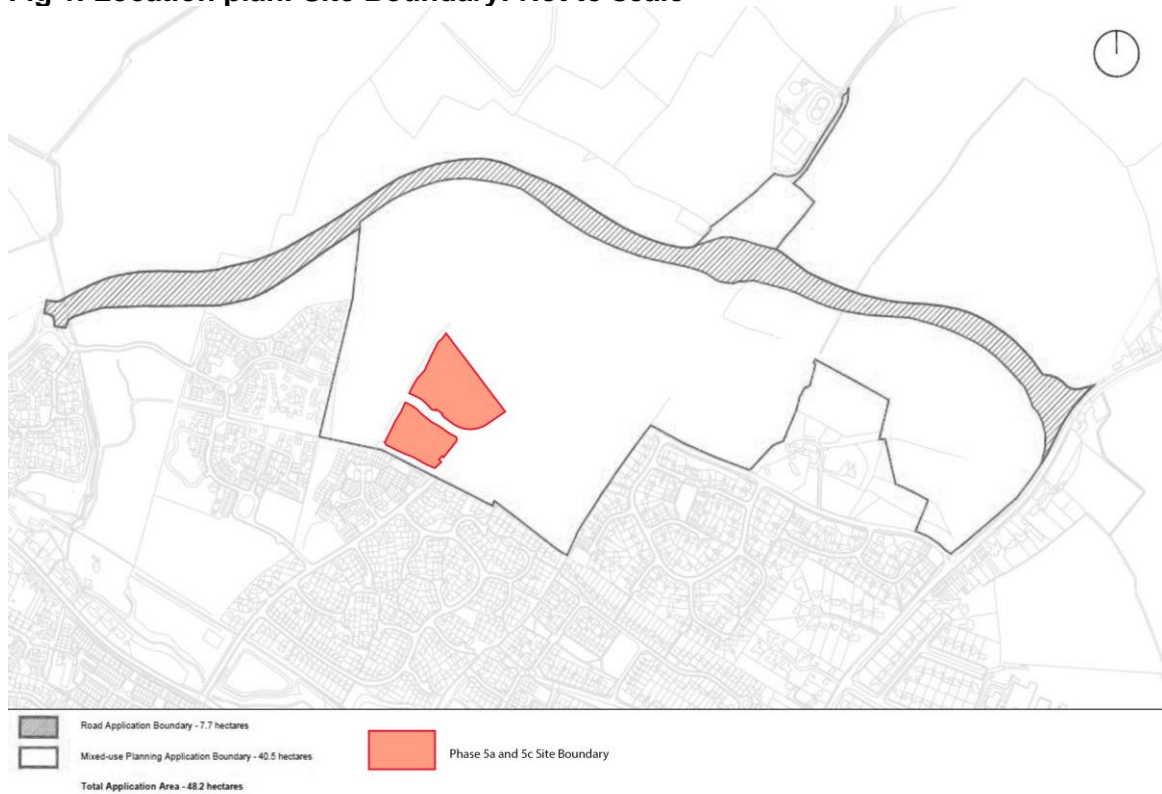


Fig 2. Location plan: Road Map: Not to scale



1.2.1 Management Plan Areas

The purpose of this management plan document is to ensure the appropriate management of the retained and proposed landscape areas on the site following the construction and completion of the development. The landscape areas include all new planting (trees, hedges, shrubs and grass) and other hard or soft landscape components outside of private gardens.

- 1.2.2 All of the landscape areas of the site, except for private gardens, will be the subject of the Landscape Management Plan. The landscape areas subject to this Management Plan are set out in Appendix 6.1.

1.3 RECITALS

1.3.1 Parties Involved

- **The Developer:** Persimmon Homes Suffolk is responsible for the construction of this development. The developer will be responsible for the protection and management of existing landscape components through the construction phase and the implementation of the hard and soft landscape works in accordance with the planning drawings, including any contractual maintenance period associated with these works.
- **The Local Planning Authority:** This term (abbreviated to LPA) shall refer to West Suffolk Council and its Planning and Landscape Officers who are involved in the process of the approval of landscape and other documentation.
- **The Adopting Organisation:** This is the organisation that will adopt ownership of the landscape areas and is therefore responsible for their management and maintenance including all landscape components and features within them. The Adopting Organisation for the site will be either Private Management Company or West Suffolk Council as per the S106 to be appointed by the Developer. The Adopting Organisation shall also be taken to mean any employee or representative of the organisation in ownership of the grounds.
- **The Landscape Management Contractor:** the company who may be appointed by the Adopting Organisation to carry out the landscape maintenance works.

1.3.2 Status of the Landscape Management Plan

Prior to the commencement of development (or such other date or stage in development as may be agreed in writing with the LPA) a detailed long term Landscape Management and Maintenance Plan for all landscape areas shall be submitted to and approved by the LPA in writing. The plan shall include:

- Aims and Objectives;
- A description of Landscape Components;
- Management Prescriptions;
- Details of maintenance operations and their timing; and

- Details of the parties/organisations who will be maintain and manage the site, to include a plan delineating the areas that they will be responsible for.

The plan shall demonstrate full integration of landscape, biodiversity and arboricultural considerations. The areas of planting shall thereafter be retained and maintained in perpetuity in accordance with the approved Landscape Management and Maintenance Plan, unless any variation is approved in writing by the Local Planning Authority.

- 1.3.3 The LPA will approve this document as part of the planning process and this document therefore forms part of the approved planning documents. Management shall therefore be carried out in accordance with this document following completion of the implementation management plan (and any contractual maintenance periods associated with these works). This document will outline the minimum standard of maintenance to ensure a safe, comfortable, attractive, biodiverse and sustainable landscape is achieved in perpetuity.
- 1.3.4 This Management Plan is submitted together with the Detailed Soft Landscape Proposals (drawing number JBA 23/434-1-4), the Management Areas and Responsibilities Plan and the Schedule of Maintenance Operations, attached as Appendices (6.1-6.3) to this document. The document should also be read in conjunction with the following planning documents:
- Sensitive Lighting Scheme – Haverhill Phase 5A and 5C, by James Blake Associates, Feb 2024
 - Tree Survey Schedule by James Blake Associates, Apr 2024
 - Tree Constraints Plan by James Blake Associates, Apr 2024
 - Tree Protection Plan by James Blake Associates, Jul 2024
 - Arboricultural Method Statement by James Blake Associates, Jul 2024

2.0 AIMS AND OBJECTIVES OF THE LANDSCAPE MANAGEMENT PLAN

2.1 AIMS

2.1.1 The principal aims of this Landscape and Ecological Management Plan are to secure a coordinated and high standard of landscape management for the landscape areas within the site, to ensure the successful integration of the residential development with the surrounding landscape and to protect and enhance nature conservation interests in accordance with the design objectives in the approved planning documents. This will include the appropriate maintenance of existing retained, and proposed landscape components.

2.2 OBJECTIVES

2.1.2 The main objectives of the Landscape Management Plan are to manage the landscape in such a way as to:

- **To maintain landscape character:** To protect and conserve the existing landscape character and to incorporate locally indigenous species within screening/structural landscape areas, to provide an attractive and robust landscape setting for the buildings on the site and reinforce local distinctiveness;
- **The sustainable management of existing vegetation:** To retain existing trees, hedgerows and other vegetation that are worthy of retention, and to enhance their character, composition and age structure through positive management with consideration to long-term viability and health and safety;
- **To achieve a high standard of maintenance:** To take measures to ensure the successful establishment and growth of new structural and incidental planting and to take appropriate long-term management measures to ensure the satisfactory appearance and sustainability of vegetation. To ensure that landscape components are replaced, augmented and/or improved over time as appropriate;
- **To maintain and enhance biodiversity:** To protect and enhance the nature conservation interest of both existing and new habitats and to ensure the adoption of management practices that enhance the biodiversity value of the site. To fulfil all legal requirements in relation to the protection and management of ecological features and the protection and management of target species including bats and reptiles;
- **To ensure health and safety:** To uphold the duty of care that all landscape components are safe and that all reasonable steps are taken to minimise risk of injury and damage to people and property; and

2.2.1 **To provide a mechanism or monitoring and review: To ensure that management practices are monitored and where necessary reviewed on**

3.0 GENERAL ECOLOGICAL ADVICE

3.1 INTRODUCTION

- An important aim of this Management Plan is to prescribe works which will maintain and enhance habitats and features of benefit to protected species known to be present within the local area, as well as provide general enhancements for the wider benefit of local flora and fauna.

3.2 GENERAL MANAGEMENT ADVICE (APPLYING TO ALL PHASES OF DEVELOPMENT)

No Category A or B trees are to be removed unless otherwise agreed in writing by Suffolk County Council.

Any tree surgery works should be undertaken by a suitably qualified arboricultural contractor, registered with the Arboricultural Association.

All tree surgery works shall be undertaken in accordance with the requirements of BS 3998:2010 'Tree Work - Recommendations' and BS 5837:2012 'Trees in Relation to design, demolition and construction'.

All pruning/removal works to trees should ideally be undertaken outside the nesting season to ensure breeding birds are not disturbed; the bird nesting season is generally accepted to be from the 1st March to 31st August inclusive (though may extend into February and August for some species). Work during the nesting season could take place but only if an inspection by a suitably qualified ecologist/arboriculturalist confirms no nesting birds are present.

Where tree surgery is planned as part of this management plan or in the situation where an approved tree surgeon has recommended remedial work for health and safety reasons, the potential for bats to be present must be assessed before work is carried out. It is recommended that this assessment be carried out by a suitably experienced and licensed bat worker to avoid unlawful harm to these protected species.

If at this time any bats are found further advice should be obtained by the ecologist from Natural England.

4.0 SPECIFIC ELEMENTS REQUIRING MANAGEMENT AND MAINTENANCE

4.1 LANDSCAPE AREAS AND LANDSCAPE COMPONENTS

- 4.1.1 The landscape areas subject to this Landscape Management Plan include the following components:
- Proposed tree planting;

- Proposed ornamental Hedgerows;
 - Proposed ornamental shrubs;
 - Proposed amenity grass, SCC Highway Verge and Floral Lawns
 - Structures, walls, railings, fencing and gates; and
 - Hard landscape areas.
- 4.1.2 The information includes a description and specific management objectives for each component along with the annual and occasional management regimes required.
- 4.1.3 The extent and location of areas to be managed is shown on the Landscape Management Areas Plan in Appendix 6.1.

4.2 PROPOSED TREE PLANTING

4.2.1 Description

- New tree planting is incorporated into the proposed development within front gardens, parking areas and incidental public open space to provide landscape structure and amenity value. Such tree planting will define focal points, enclose streets and spaces and soften the built form.

4.2.2 Management Objectives

The management objectives for new tree planting is to:

- Ensure the satisfactory establishment and growth of new tree planting typical of the respective species;
- Promote conditions so that trees are healthy and safe; and
- Ensure continuity of the design approach and amenity value of tree planting.

4.2.3 Annual Works

- i) **General tree maintenance during establishment:** Check all trees for firmness and stability in the ground. Check and adjust tree ties, replacing if necessary. Top up bark mulch levels where necessary around the base of new trees, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. Where trees are in grass areas, remove weed growth by hand and retain a circle of bark mulch (approximate radius of 500mm) to aid mowing and prevent damage to the main stem. All trees shall be fertilised using a suitable and approved liquid feed (N10:P15:K10) at a rate of 60g/m² during early May and again in late September. Prune back any diseased or rotten wood (including the removal of main stems and limbs) back to sound wood as required. Remove all cut material from site.
- ii) **Watering trees:** Water trees during dry periods (being any period without substantial rainfall for 14 days or more), until trees are successfully established. Water at a rate of 25 litres per tree position into watering tubes. Apply water at a frequency of once per fortnight from April to the

end of September (to a maximum of 15 visits). Increase watering frequency during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

4.2.4 Occasional Works

- i) **Checking and removal of tree stakes and ties:** Review the need for tree stakes and ties annually for up to 6 years. Remove stakes and ties between 4 to 6 years after planting, but be sure trees are firm and stable. Stakes and ties removed shall be cut at ground level, below lowest grass height (to prevent snagging mower blades) or pulled from the ground and the post holes filled with suitable topsoil. If the tree is found to be weak or unstable after the stakes have been removed, then check the base of the tree for signs of rot. If rotten or unlikely to stabilise, remove the tree and replace. If the tree is free from rot or other cause of its instability, then re-instate a tree support, using 100mm diameter chestnut stake and single tie. The stake should be pushed into the ground with a post rammer, to a depth of 600mm and cut to one third the height of the tree. Fix the tree stem with a rubber tie and spacing device attached to at a point no more than 25-35mm below the top of the post, in order to prevent chaffing against the post in high winds. Remove old posts and ties and arisings and dispose off site.
- ii) **Long-term tree surgery works:** After 10-20 years of maintenance as above (or earlier if required), newly planted trees will reach semi-maturity and at this time may be in need of corrective surgery. Trees should become subject to the annual Arboricultural Assessment and any works recommended shall be carried out in accordance with paragraphs 4.2.3 and 4.2.4.
- iii) **Tree replacement and enhancement of tree cover:** Any tree that dies or is necessarily felled, but which is not removed as part of a programme of tree removals, shall be replaced with a tree of appropriate species and stock size. Such replacement shall be with a tree of either the same or similar species as those existing. The option for replacing with a different species is to allow some flexibility avoiding problems encountered with 'Same Species Disease' and to ensure sustainable tree cover in the interests of visual amenity. Possible damage to drainage/services and adjoining building foundations must be considered before choosing a replacement tree species and location. Where alternative species are being considered, then the species should be suitable to the character of the location and adjoining trees. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of trees and tree groups, in the interests of the long-term sustainability of strategically important vegetation. Trees should be a minimum stock size of standards (10-12cm girth), and

implemented and maintained in accordance with good horticultural practice. Replacement and enhancement planting is best undertaken during the planting season (November through to March inclusive).

4.3 PROPOSED ORNAMENTAL HEDGEROWS

4.3.1 Description

- New ornamental hedgerows are proposed throughout the site, within the housing area they provide enclosure to front gardens and define the street.
- New hedgerows will use a range of ornamental species of value to wildlife (as a result of providing shelter and food e.g. flowers and berries).

4.3.2 Management Objectives

The management objectives for new hedgerow planting is to:

- Ensure the satisfactory establishment and growth of new hedgerow planting with a typical hedge height, form and density according to species;
- Maintain planting in a healthy and attractive condition of value to wildlife;
- Maintain natural and informal surveillance of the street from adjoining properties; and
- Ensure continuity of the design approach and amenity value of planting.

4.3.3 Annual Works

- Weeding and general maintenance:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Seven visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb sheet or bark mulch; top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. Note: For planting using a non-biodegradable weed suppressant membrane, reduce visits to 4 times per year in the growing season. Where a biodegradable weed suppressant fabric has been used, this will have disappeared within the establishment phase. Weeding frequency should therefore be varied according to the site and density of vegetation cover and in any event should be between 4 and 8 i.e. whatever is required to achieve a weed free scheme. All weeds shall be removed from the site.
- Cutting / trimming of ornamental hedges:** Cut ornamental hedges at least twice annually, once in June and again in late November. Ornamental hedges associated with front garden areas will be regularly maintained to an approximate height of between 1 and 1.5m to form a square, even and tidy hedge that is formal in character. Cut larger stems, and prune any diseased rotten wood back to sound wood. Remove all cut material from site.

iii) **Watering of ornamental hedges:** Water ornamental hedges during dry periods (being any period without substantial rainfall for 14 days or more). Water shrubs to field capacity (minimum 10 litres per m²) applying water in the morning or early evening to reduce evaporation. Apply at a frequency of up to 2 times per week from April to the end of September (to a maximum of 20 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

4.3.4 Occasional Works

i) **Gapping up and replacement of ornamental hedges:** Remove failed plants and replace with a plant of the same species, to a minimum size of a 3L pot with a minimum height and spread of 400mm (300mm if the plant is Box or Hebe). Gap up areas of less dense growth with additional plants as required planted in a single row to achieve a continuous hedge alignment, taking due allowance for the natural growth and regeneration of cut material. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal of dead material off site and for topping up/replacement of bark mulch.

4.4 PROPOSED ORNAMENTAL SHRUBS

4.4.1 Description

- Ornamental shrubs, groundcover, herbaceous and climbing plants are proposed in the areas around the new houses in conjunction with trees, hedges and lawns. The majority of this planting is domestic in character and is designed to contribute to the settling of the dwellings, provide visual interest and amenity value and to enhance the built form.
- Species will include a range of ornamental, specimen and climbing plants with a mix of evergreen and deciduous species.
- Although generally ornamental in character species will be selected to provide general habitats and foraging for wildlife including flowering and fruiting varieties.

4.4.2 Management Objectives

The management objectives for new shrub and groundcover planting are to:

- Ensure the satisfactory establishment and growth of new ornamental planting;
- Maintain planting in a healthy and attractive condition and enhance the value of planting as a food source to wildlife; and
- Ensure continuity of the design approach and amenity value of planting.

4.4.3 Annual Works

- i) **Weeding:** Remove all weed growth by hand as necessary to ensure weed free and tidy planting areas. Eight visits are required per growing season. Visits should occur approximately monthly in the growing season, subject to weather conditions from April to October, with an extra visit outside of the growing season in December or January to inspect the condition of the beds. Take great care not to disturb sheet or bark mulch; top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied. Note: For planting using a non-biodegradable weed suppressant membrane, reduce visits to 4 times per year in the growing season. Where a biodegradable weed suppressant fabric has been used, this will have disappeared within the establishment phase. Weeding frequency should therefore be varied according to the site and density of vegetation cover and in any event should be between 4 and 8 i.e. whatever is required to achieve a weed free scheme. All weeds shall be removed from the site.
- ii) **Spot Herbiciding:** Where required, persistent perennial weeds can be controlled using herbicide. For planting beds containing herbaceous plants and shrubs, apply a suitable folia-acting systemic translocated herbicide using a weed wiper device to avoid killing wanted plants. The use of herbicides should only be made following a risk assessment to consider potential effects on the environment and on human health, but also spray drift killing the wrong plants. The purchase, transport and storage of herbicides are regulated by Part III of the Food and Environment Protection Act 1985, Control of Pesticides (Amendment) Regulations 1997; the Health and Safety at Work Act 1974; the COSHH Regulations, the product COSHH sheet and EC Directive 91/414/EEC (the "Authorization Directive") and the Plant Protection Products Regulations 1995 as amended by the Plant Protection Products (Basic Conditions) Regulations 1997. All herbicides must have an appropriate full or "off-label" approval for use in a relevant situation. Refer to the Pesticide Safety Directive, for which the website is given here for your assistance: www.pesticides.gov.uk. All pesticides shall be applied in suitable calm weather conditions; allow for repeat spraying as required to achieve a complete kill. Apply herbicide as required and at intervals to ensure no regeneration of weed, usually equating to four sprays per year during the growing season at 6 week intervals, from late April onwards. The timing of visits may vary according to weather conditions. Extreme care must be taken to avoid damage to surrounding plants and grass, and to avoid spray drift. Any damage resulting from incorrect usage, spillage, and spray drift, to be rectified at the Landscape Management Contractor's expense.
- iii) **General planting maintenance:** At each visit firm in and straighten any loose plants. Top up bark mulch levels where necessary for the first 3 years, using the same or similar product to that previously supplied to maintain an approximate depth of 50mm to reduce competition from weeds and retain soil moisture. All shrubs shall be fertilised using an approved liquid feed (N10:P15:K10) at a rate of 60g/m² during early May and late September.

- iv) **Pruning of ornamental planting:** Prune back shrubs in the period between October to March in accordance with sound horticultural practices, pruning back to a node, shoot or bud; prune out dead, leggy and broken branches, without damage to the natural habit or appearance of plant without box clipping or rounding off plants. Prune out crossover branches, invasive suckers, dead wood, damaged stems, any spindly growths and any epicormic growth that will weaken the plant. Prune back Rosaceous and quick and leggy growing plants much harder than other species, but prune back by no more than 30% in any one-year. Prune Cornus varieties back to 200mm above ground every 3rd year, but retaining any young growths. Cut back Lavender after flowering. In terms of herbaceous plants cut back all deciduous grasses in spring by removing dead stems before new growth starts to appear. Prune Geraniums hard after flowering to reduce foliage by 80%.
- v) **Watering:** Water both shrubs and specimens during dry periods (being any period without substantial rainfall for 14 days or more). Water all shrubs to field capacity (minimum 10 litres per m²) and water all large specimens at 10 litres each. Apply water at a frequency of up to 2 times per week from April to the end of September (to a maximum of 15 visits in any one calendar year) as required during any continuous hot weather lasting more than 7 days. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water. The Landscape Management Contractor shall be responsible for any tree failures or excessive die back from drought stress during the management contract.

4.4.4 Occasional Works

- i) **Replacement and enhancement planting:** Cut back any shrubs and herbaceous plants where they have become old, misshapen, leggy or they have lost their vigour. Specimens, shrubs or herbaceous plants that fail to show growth or develop full foliage (including plants damaged during management operations), where such plant failure leaves a gap in the foliage not filled by adjacent plants, shall be replaced with stock of the size, species and quality originally specified. Include any plants that are destroyed by vandalism, theft or similar cause through no fault of the Landscape Management Contractor, up to and not exceeding 5% of the plant stock. Specimens, shrubs or herbaceous plants so replaced shall be the same as those specified, previously supplied and approved. Nursery stock shall be container grown and shall be a minimum stock size of a 3L pot. Planting should be implemented and maintained in accordance with good horticultural practice. Include any works necessary to enable planting to be properly carried out i.e. removal and disposal of dead material off site and for topping up/replacement of bark mulch. Once annually the site shall be considered for the need for any strategic replacement or enhancement planting, to broaden the age class of

vegetation in the interests of the long-term sustainability of strategically important vegetation.

4.5 PROPOSED AMENITY GRASS, SCC HIGHWAY VERGE AND FLORAL LAWNS

4.5.1 Description

- Areas of cultivated amenity grass, as well as flower lawn and specific Suffolk County Council (SCC) Highway Verge Seed Mix are located across the incidental open space and amenity areas. It is vital to ensure that correct seed is used in each area as specified in the Detailed Soft Landscape Proposals by James Blake Associates.
- The mowing frequency will be related to the grass mix and function of the area. The height of the sward can be varied according to amenity and to ensure nature conservation benefits.

4.5.2 Management Objectives

The management objectives for amenity grass areas will be to:

- To ensure the satisfactory establishment of the grass sward and
- To maintain healthy and suitable grass areas appropriate to function and use.

4.5.3 Annual Works

- Mowing and edging:** Amenity grass areas shall be mown in order to maintain the visual amenity of the area. Mowing frequency and height shall be adjusted the function and use of each area. All grass shall be mown initially with a rotary mower once during the spring (mid-March), to a height of 50mm and thereafter using a cylinder mower, collecting the arisings each time, and removing off site. Soft edges between grass areas and planting beds shall be kept free from grass by cutting the grass with a 'half moon' edging tool to ensure a neat, clean-cut finish once per year at the start of the growing season. The edge of paving and shrub beds shall be kept free of grass using strimmers or edge clippers once per month during the growing season.
- General lawn care:** Apply an approved turf fertilizer, selective weed killer and moss retardant in May and September, applying strictly in accordance with the manufacturer's instructions, Control of Pesticide Regulations, COSHH Regulations and product COSHH sheet in suitable weather conditions. Otherwise amenity grass areas shall be weeded either by hand or (especially persistent weeds) herbicide treated in order to maintain the visual amenity of the area (refer to paragraph 4.6.3).
- Watering amenity grass areas:** During the first 3 years following initial seeding or following re-seeding operations, water amenity grass areas during periods of extreme drought (2 or more weeks without substantial rainfall) to a maximum of 15 occasions. After establishment continue to water only if deemed to be required. To aid the natural establishment of grass areas, only water where unavoidable, where the grass is going brown and appears to be suffering from severe drought stress. When watering, water to field capacity (minimum 20L/m²) in the morning or in the

evening to reduce water evaporation, when the water is more likely to reach the roots. The Landscape Management Contractor shall be entirely responsible for varying the frequency of these visits according to climatic conditions and for contacting the Adopting Organisation and agreeing the timing of any additional watering visits if required and where restrictions are placed on the use of water, sources and costs of obtaining second class water.

4.5.4 Occasional Works

- i) **Replacement of failed turf:** Small areas of dead, dying or failing grass shall initially be made good through changes to the mowing regime or through temporary protection of high wear areas using temporary fencing or similar. Larger areas of degradation may require re-cultivating and reseeded. Cut out sections of distressed and failing or dead areas of turf using a suitable turf-stripping machine or for small areas by hand. Supply and lay new turf of a suitable standard and lay flush with existing sward, filling any cracks and top dressing with a 70:30 ratio mix of sand and screened topsoil. This sand/soil mix shall also contain grass seed of the same or similar species to the turf. For more wholesale degradation of the turf sward, the entire area will require to be re-seeded. Cultivate or power-harrow the affected area until a fine tilth is achieved (removing stones greater than 20mm) and grade until level with adjoining areas. It is vital to ensure that correct seed is used in areas as specified by the Detailed Soft Landscape Proposals by James Blake Associates. Apply a pre-seeding fertilizer at a rate of 70g/m² and seed with a grass seed specified on Detailed Soft Landscape Proposals. For general amenity grass, you may use a mix such as "EG22" Mix by Emorsgate Seeds or other equal and approved, raking until the seed is a few millimetres below the surface. Water thoroughly and maintain the soil in a moist condition, removing stones, weeding and mowing until the grass is established.

4.6 STRUCTURES, WALLS, RAILINGS, FENCING AND GATES

4.6.1 Description

- Throughout the site a combination of elements, such as walls, railings and fencing have been used to define and enclose private spaces associated with the residential premises, such as back and front gardens.

4.6.2 Management Objectives

The management objectives for these areas will be to:

- To ensure structures, walls and fencing are safe, functional, sound, clean and free from dilapidations, hazards, rot, vandalism or damage, graffiti and grime.

4.6.3 Annual Works

- i) **General maintenance for structures and walls:** Inspect structures, walls monthly taking great care to inspect piers, masonry, pointing and jointing, copings, damp proof courses etc. Look for and record any cracking, loose elements, damage, graffiti, spalling cement, efflorescence or dampness

issues, sapping, flaking or crumbling of masonry or units. All defect shall be carefully recorded and arrangements for repair made within seven days with an approved masonry contractor as appropriate.

- ii) **General maintenance for timber fences:** Inspect posts, footings, rails, styles, braces, fixings, latches, bolts, fasteners and paint or stain work. Check that posts are upright and firm and that footings are intact. Ensure that fixings show no signs of rust. Record all defects carefully and making arrangements for making good, repair adjusting, tightening or re-painting/ staining as required within seven days with an approved fencing, decorating or cleansing contractor as appropriate.
- iii) **General maintenance for railings:** Inspect posts, footings, rails, rods, braces, fixings, latches, bolts, fasteners, galvanising and paint work. Check that posts are upright and firm and that footings are intact. Ensure that fixings, metalwork and paint work show no signs of rust, chipping, flaking, abrasion or any other defect. Record all defects carefully and making arrangements for making good, repair adjusting, tightening or re-painting/ staining as required within seven days with an approved fencing, decorating or cleansing contractor as appropriate. Railings that have defective paintwork shall be painted with paint to match existing – apply with a suitable brush for the paint type (e.g. some metal work paints need a Turks-head brush, and ensure 100 Microns per coat, and a total of 3 coats, applied in dry open weather, above the dew point and following suitable preparation work, cleansing the surfaces with soap and water and then allowing adequate drying time. Re-painting shall take place at 5-10 year intervals or as required to keep paintwork in good condition.

4.6.4 Occasional Works

- i) **Changes and renewals for structures, walls, railings, fencing and gates:** Where scheduled inspections report defects to structures and other enclosing elements, that are in need of wholesale replacement, extension or alteration in order to function satisfactorily and to minimise risk of injury or harm, and where such items are found to be beyond repairable condition, then these changes or renewals should be effected immediately. Demolish and remove defective elements and replace or add masonry, panels, posts, timber work, or metalwork, as appropriate - including carting away the failed and excavated or broken out materials to skip, ensuring all new elements match those existing in all respects, both the material type and gauge/ dimensions and the decorative finish and colour.

4.7 HARD LANDSCAPE AREAS

4.7.1 Description

- A range of hard landscape areas will be incorporated into the development layout including footpaths and shared car parking areas.

4.7.2 Management Objectives

- To ensure that hard landscape surfaces are safe and comfortable to use and are clean from litter and other debris.

4.7.3 Annual Works

- i) **General cleanliness:** All paved surfaces shall be swept monthly to ensure that they are clean, tidy and free from dust, litter and debris (removing all arisings off site). Increase sweeping to fortnightly in autumn when leaves are falling.
- ii) **Condition of paved surfaces:** All hard landscape surfaces and edgings shall be inspected monthly checking for mechanical damage, vandalism, settlement, frost heave, staining, litter and debris or any other defect. Any such defects shall be documented and a corrective methodology agreed with the Adopting Authority and implemented as appropriate by the Landscape Management Contractor.

4.7.4 Occasional Works

- i) **Repairs and renewals:** Where scheduled inspection detects paved areas are in need of replacement, extension or alteration to their original intended function or to minimise risk of injury, then such repair and/or renewals should be effected immediately. Remove defective paving, through excavation and make good base and sub-base materials as required, re-use salvageable paving units, and relay paving, buying in new products to replace any that are damaged or defective. Where there is differential settlement or the units wobble, or are not firmly bedded, jointed or pointed, ensure that the units are relayed firmly, re-bedding, jointing and where appropriate pointing, all to match the bonding pattern existing on site.

5.0 IMPLEMENTATION, MONITORING AND REVIEW

5.1 IMPLEMENTATION

- 5.1.1 A Private Management Company will be established for the site to undertake all management aspects relating to the external landscape areas that lie outside of private residential gardens.
- 5.1.2 The Private Management Company will coordinate all management of the site in perpetuity in accordance with this Landscape Management Plan and the accompanying maintenance schedules. A representative of the Private Management Company will be appointed as the main point of contact for residents, relating to the management of the site.
- 5.1.3 The Private Management Company may employ a Landscape Management Contractor to carry out general maintenance operations. Specialist Contractors may be used on an as needs basis to complete specialist operations and/or occasional works.
- 5.1.4 The Private Management Company may also appoint from time to time consultants to provide specialist advice, monitoring or to undertake a watching brief in relation to particular aspects of this site or specific maintenance operations. This may include suitably qualified ecologists, arboriculturists, landscape architects, engineers and/or health and safety executives.

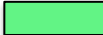
- 5.1.5 All works, materials and operations will be in accordance with relevant legislation, British Standards, Regulations (including the CDM Regulations) and Codes of Practice.

5.2 PROCESS FOR MONITORING AND REVIEW

- 5.2.1 The Landscape Management Plan and maintenance schedules will be monitored and assessed for their effectiveness on an annual basis for the first five years following the completion of the development.
- 5.2.2 Each annual review will be coordinated and completed by a suitably qualified representative of the Adopting Authority. The review will include advice from specialist consultants as required (such as a qualified Arboriculturist and ecologist), the Landscape Management Contractor and other stakeholders including representative(s) from the LPA and local residents.
- 5.2.3 **To this end the review may include (as appropriate):**
- Specialist reports - advising on particular aspects such as protected species, general silvicultural husbandry and health and safety issues;
 - Records or attendance sheets demonstrating the maintenance work undertaken; and
 - A walk over assessment of the landscape areas to assess landscape components and their condition, and the need for enhancement including minutes.
- 5.2.4 The review should identify any changes to site conditions and circumstances, whether the aims and objectives of the Landscape Management Plan are being met, and where identified changes are need to existing management practices and timeframes. Furthermore, any strategic enhancements, including new planting should be identified and priorities established for undertaking these works.
- 5.2.5 Within 1 calendar month of the review, a revised Landscape Management Plan shall be produced (if appropriate), and circulated to stakeholders. Within 5 years of the completion of the site, then the revised document shall be submitted to the LPA as a non-material amendment to the previously approved Landscape Management Plan.
- 5.2.6 After the first five years the Landscape Management Plan will be reviewed every five years, or as required to ensure the satisfactory management of the landscape in perpetuity.

6.0 APPENDICES

6.1 MANAGEMENT AREAS PLAN (Not to Scale)

 Areas to be managed



6.2 SCHEDULE OF MAINTENANCE OPERATIONS

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
GENERAL							
Collection and removal of litter and other debris	Once per month	Once per month	Once per month	Once per month	Once per month	12	All hard and soft areas. Cart away litter/debris and remove off site to licensed tip.
SOFT WORKS							
Visual inspection of mature trees	Once per month	Once per month	Once per month	Once per month	Once per month	12	On each visit or as required.
Annual Arboricultural Assessment of mature trees and hedgerows		*	*	*		1 (plus additional visits as required)	To be completed by a qualified Arboriculturist annually when trees are in leaf or as required when visual inspections identify a health and safety risk.
Tree Surgery and significant works to boundary vegetation/hedgerows	*				*	1	As identified by arboricultural assessment following approvals from LPA. To be carried out outside of the bird nesting season and following advice from an ecologist.
Cutting/trimming of native hedgerows	*				*	1	To be carried out outside of the bird nesting season.
Hand weeding		Once every two months	Once every two months	Once every two months	*	2-4	Weed by hand taking care not to disturb sheet or bark mulch. Remove arisings off site.
Spot herbiciding		Once in late April and once in early June (approx. 6 week intervals)	Once in mid July and once in late August (approx. 6 week intervals)			4	To occur at approximately four per year – only if required. Herbicide weed growth within a 0.5m radius of each plant. Treatment to end when the canopy closes.
Watering		Where required	Where required	Where required		12	Water where required until trees/plants/grass areas are established. Watering frequency should be adjusted by the

Maintenance Operation	Number of Visits (to be dependent on season – where not dependent on season, if appropriate, the timing shall be agreed between the Adopting Organisation and the Contractor. Indicative timings are shown with a *)					Total number of visits per year	Additional Comments
	Jan – March (13 weeks)	April – June (13 weeks)	July – Aug (9 weeks)	Sept – Oct (9 weeks)	Nov –Dec (8 weeks)		
							Landscape Management Contractor depending on climatic conditions. Increase watering during hot and dry weather until plants have established.
General maintenance of planted areas	*	*	*	*	*	12	Check at each visit.
Fertilising new trees (other than those within areas of wildflower meadow)		Once in early May		Once in mid-September		2	Fertilize new trees, once in early May and once in late September. Use a slow release product, ideally granular.
Checking, adjusting, replacing or removing tree stakes and ties, rabbit guards and shrub and canopy mix fencing	*	*	*	*	*	12	At each visit as required
Replacement of tree, hedgerow and shrub planting	*				Optimum time for most species	1	As required. To include enhancement planting.
Removal of woody plants with roots (which are suitable habitat for dormice)			Rest removed between May and Oct.		Cut to 30cm Dec-Feb	2	As required.

6.3 INDICATIVE PRUNING SCHEDULE FOR PLANTS

Plant Species	Pruning dates	Pruning amount	Crown raising	Additional Comments
<i>Betula pendula</i>	Dec/Jan	n/a	every 5 years	Thin by 50% in year 15
<i>Cornus sanguinea</i>	Feb/March	Reduce by 20%	Never	Coppice - 4 years
<i>Corylus avellana</i>	Dec/Jan	Reduce by 10%	If required	Coppice - 8 years
<i>Crataegus monogyna</i>	Dec/Jan	Reduce by 5%	Every 5 years	Thin at 15 yeas (30%). Coppice 8 years
<i>Ligustrum vulgare</i>	Dec/Jan	Reduce by 10%	Never	Prune leggy growth only
<i>Prunus spinosa</i>	Dec/Jan	Reduce by 5%	If required	Coppice - 8 years
<i>Prunus avium</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Quercus robur</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Rhamnus cathartica</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 8 years
<i>Sorbus aucuparia</i>	Dec/Jan	n/a	Every 5 years	Thin at 15 years
<i>Salix viminalis</i>	Dec/Jan	Reduce by 10%	Never	Coppice - 8 years
<i>Viburnum lantana</i>	Dec/Jan	Reduce by 5%	Never	Coppice - 8 years
<i>Viburnum opulus</i>	Dec/Jan	Reduce by 5%	Never	Coppice - 8 years