

Prepared by Mark Cooper
14th July 2022
Rev A: 22nd July 2022
Rev B: 4th January 2024
Rev C: 19th January 2024
Rev D: 24th January 2024



www.mcalandscape.co.uk

Landscape and Ecology Management Plan

Kidbrooke Park Road North
Phase 1
KPR-MCA-SW-SW-RP-L-0001
Rev D

Revisions

Revision B: 04/01/24 General Arrangement Plan updated

Revision C: 19/01/24 Planting plan added

Revision D: 24/01/24 Planting plan updated.

Contents

Site Landscape Plan

- 1 Introduction
 - 2 Baseline Ecological Information
 - 3 Biodiversity Enhancements
 - 4 Section Not Used
 - 5 Maintenance of Grass Areas
 - 6 Maintenance of Planted Areas
 - 7 Maintenance of New Trees
 - 8 Maintenance of Hedges
 - 9 Maintenance of Climbing Plants and Wall Shrubs
 - 10 Watering of Planted Areas
 - 11 General Maintenance
- Landscape Maintenance Schedules



Tel. 01993 811888

Email. mark@mcandscape.co.uk

32 New Road, Woodstock, Oxon, OX20 1PB

www.mcalandscape.co.uk

**Landscape
Institute**
Registered practice

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

1.0 Introduction

- 1.1 This report is compiled and written by Mark Cooper BA(Hons) DipLA CMLI; a Chartered Landscape Architect and Principle of MCA Landscape Architects, a practice registered with the Landscape Institute.
- 1.2 This Landscape and Ecological Management Plan (LEMP) will be in effect for the duration of the site's proposed use and is designed to detail how the public realm landscape areas on the site will be managed including existing trees and hedgerows and the ecology therein.
- 1.3 This LEMP presents a scheme for enhancing the biodiversity and overall ecology of the site in conjunction with creating an attractive and sustainable residential environment. The report sets out important information regarding the landscaping, habitats and ecological features and the management required to optimise their functionality within the ecosystems present on site.
- 1.4 The document has been compiled to address condition 13 of the planning permission as follows;

Condition 13 Landscape and Ecological Management Plan

a) Prior to occupation of the residential units, the approved scheme shall incorporate and maintain the avoidance, mitigation and compensation ecological and biodiversity measures, soft and hard landscaping features and achieve the Urban Greening Factor in line with the approved Preliminary Ecological Appraisal Rev 1 prepared by WSP (28 July 2020), Reptile Survey Report prepared by WSP (29 June 2020), Planting Strategy Rev A (RBG-TTG_HTA-L_DR_0904 A) prepared by HTA Design LLP (31 July 2020) and Design and Access Statement prepared by HTA Design LLP (July 2020);

b) Prior to commencement of superstructure works, a Landscape and Ecological Management plan shall be submitted to and approved in writing by the Local Planning Authority. Development proposals must ensure no net loss of biodiversity and wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity for the approved site. The Landscape and Ecological Management Plan shall include: mitigation measures during demolition and construction (if additional measures identified than those approved under Part A);

i. long-term design objectives;

ii. management responsibilities;

iii. maintenance schedules for all landscaped areas;

iv. A scheme of soft landscaping (including details of any trees or hedges to be retained and proposed plant numbers, species, location and size of trees and tree pits) and details of the management and maintenance of the landscaping for a period of five years shall be submitted to and approved in writing by the local planning authority prior to construction of the above ground works.

v. All planting, seeding or turfing shall be carried out in the first planting and seeding seasons following the completion of the development, in accordance with the approved scheme under part (a). Any trees or plants which within a period of five years from the completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of similar size and species.

c) (if required) Where habitats are created as mitigation for development, management plans for the habitat shall also be provided detailing how the areas are to be managed in the longer term. Once approved the mitigation and management plans shall be undertaken in accordance with the approved details.

d) Evidence that the ecological measures approved under parts (A) to (C) have been installed in accordance with the details above and confirmation of installation by the suppliers should be submitted to and approved by the local planning authority prior to occupation of the residential units.

Reason: To ensure the protection of wildlife and supporting habitat and enhance the nature conservation value of the site and character of the area, to prevent the spread of invasive plants and to secure opportunities for the enhancement of the ecological value of the site in line with London Plan (2021) policies G1, G5 and G6 and Core Strategy policy OS4 (Biodiversity), the Mayor's Sustainable Design and Construction SPG (2014) and Greener Greenwich SPD (2014).

1.0 Introduction (continued)

Contractor's Programme and Personnel

- 1.5 The duration of each site visit will vary in length due to the seasonal nature of the works, and shall be such as to ensure that all works defined in the specification are completed.
- 1.6 All works to be carried out Monday to Friday within the hours of 08:00 – 18:00.
- 1.7 Only suitably qualified personnel will undertake the horticultural/arboricultural works scheduled which should be completed in line with best latest relative practices. A suitably qualified person will have professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature. Unqualified personnel will be appropriately supervised by the suitably qualified individual as above.
- 1.8 Contractor's Programme - Prior to the commencement of the contract, the contractor shall provide a programme of his planned activities. In addition, the contractor shall provide a schedule of his proposed service visit dates for the year.

Wildlife & Countryside Act 1981

- 1.9 In compliance with the 1981 "Wildlife and Countryside Act", no works to wild or native hedges will take place in the period 1st March to 31st August inclusive during each year.
- 1.10 In the event that work is required to be undertaken on established trees, shrubs and hedges during the period 1st March to 31st August, a due diligence check for nesting birds will be undertaken by a suitably qualified ecologist. If active nests are found, work will not take place until the young have fledged following further confirmation by a suitably qualified ecologist.
- 1.11 Similarly, in the event that work is required to be undertaken on established trees, shrubs and hedges during the period 1st March to 31st August, a due diligence check for bats and potential roosting features will be undertaken by a suitably qualified arborist, ecologist or licensed bat handler.. In the event that bats or bat habitat is found work will not commence until a licensed bat handler has been engaged to advise and supervise.

Management Company

- 1.12 The management of the landscape and ecology on site will be undertaken by a Management Company employed by the residents and responsible to them.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

2.0 Baseline Ecological Information

2.1 Blakeney Leigh Limited commissioned WSP to undertake a Preliminary Ecological Appraisal of the site on Kidbrooke Park Road, Kidbrooke which was published in July 2020.

2.2 The survey stated that; 'The Site currently comprises areas of tarmac, fragments of woodland, ornamental scrubs, areas of grass, herbs and perennial plants. There is a building on Site currently and a small seasonal pond filled with rubbish'.

2.4 The survey further stated that; 'Eight Phase 1 habitat types were identified within the Site:

- Scrub, dense-continuous (A2.1) 0.14ha 15.06% of site area
- Parkland, scattered trees, broadleaved (A3.1) 0.20ha 21.27% of site area
- Improved Grassland (B4) 0.11ha 11.99% of site area
- Ephemeral/short-perennial (J1.3) 0.01ha 1.12% of site area
- Introduced shrub (J1.4) 0.34ha 36.69% of site area
- Building (J3.6) 0.005ha 1.12% of site area
- Hardstanding 0.12ha 13.31% of site area
- Intact species poor hedgerow (J2.1) 40.71m length

Apha numeric codes refer to JNCC Phase 1 habitat survey classification (JNCC, 2010).

Survey Results

2.5 The survey concluded that;

5.1.1. The Site is dominated by non-native shrub species and scattered trees on improved grassland. Woodland in the east of the Site is regarded as being of local nature conservation importance given that it provides habitat in a densely urban part of London and is buffering vegetation between the Site and the adjacent road and offers some connection with the close HPI deciduous woodland. No protected species were observed on Site, but further surveys are needed to determine the presence/absence of reptiles. Common toad, listed as priority species, was observed and it is suspected to be breeding on Site.

4.5 PROTECTED AND NOTABLE SPECIES

4.5.1. The results of the desk study, Phase 1 Habitat Survey and protected species assessment highlighted the potential presence of several protected species or species of conservation concern within the Site, or within the immediate surroundings including the Survey Area. These include:

- Bats
- Nesting birds
- Reptiles
- Amphibians

BATS

4.5.5. The preliminary roost assessment and endoscope survey carried out on in May 2020 did not find any evidence of roosting bats and thus impacts on roosting bats in trees may be discounted.

4.5.6. Once a tree removal or management plan is agreed, the ash (T1) with low potential should be removed by soft fell, supervised by a suitable ecologist, if it cannot be retained as part of the Proposed Development.

4.5.7. Although the woodland on the Site provides foraging opportunities for bats, most of the Site comprises vegetation which is of negligible importance for bat foraging. In addition, the relatively small size of the Site – in comparison to large expanses of bat foraging habitat available in nearby parks, lakes and open space - mean that they are unlikely to provide important resources for foraging and commuting bats.

BADGER

4.5.9. The Site was not considered of importance for badger owing to its small size and the fact it is fragmented from open countryside by busy roads and areas of dense urban development.

BIRDS

4.5.12. In general, the Site and the surrounding area were considered to have low potential to support notable bird species. It is considered unlikely that black redstart is present given its general rarity in London and the availability of alternative habitats in the near vicinity of the Site.

REPTILES

4.5.16. The Site comprises several but small areas of grassland that are habitat suitable to support small numbers of reptiles. However, based on its small size and the availability of alternative reptile habitat in the surrounds, the removal of vegetation on the Site is unlikely to affect reptile conservation status locally. Further surveys are recommended to assess if reptiles are present on Site.

AMPHIBIANS

4.5.20. The excavation on Site is suspected to be polluted and did not support aquatic or marginal vegetation. It was discounted as a GCN breeding site, but common toad was found on Site, so it likely to be common toad breeding site. Woodland in the northeast of the Site may be used by GCN and common toad for sheltering and foraging.

INVERTEBRATES 4.5.24. The Site is dominated by improved grassland and small areas of secondary woodland which are of negligible importance to terrestrial invertebrates. No impacts are anticipated on protected or notable invertebrate species.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

3.0 Biodiversity Enhancements

The Landscape Proposals for the site reflect the following Biodiversity Enhancements

Landscape Proposals

3.1 In respect of habitats, the proposed redevelopment will provide the following:

- Creation of new areas of species-rich turf lawns.
- Creation of new areas of species-rich native wildflower meadow grassland with native bulbs.
- Creation of new areas of ornamental herbaceous perennial planting with ferns, grasses and flowering plants providing seeds, pollen, flowers and shelter.
- Planting of new native hedges as mature plants.
- Provision of new tree and shrub planting including native species and wildlife friendly exotic species.
- Creation of new Sustainable Drainage Systems (SuDS) including extensive rain-gardens planted with biodiverse shrubs and perennials.
- Implementation of sensitive and beneficial landscape management within areas assigned for biodiversity.
- Biodiverse Green ('Brown') Roof with undulating aggregate substrate, drifts of sand, boulders, shingle beds, log-piles, tree trunks, bricks, wildflowers and Sedum planting.

Bats

3.2 In respect of bats the proposed development will provide the following elements to ensure gains are secured for this group:

- Sensitive lighting scheme protecting potential dispersal and foraging corridors along the existing boundaries of the site and retaining dark corridors within areas of open green space;
- Provision of bat boxes on new buildings, such as Schwegler 1FF, to offer net gains in roosting opportunities within the site;
- Retention of areas of open green space, creation of new linear features and enhancement of the existing grassland to promote foraging and dispersal opportunities; and
- New native planting, including the provision of wildflower grassland and native tree and hedgerow planting, to offer potential new foraging and commuting opportunities.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

3.0 Biodiversity Enhancements (continued)

Hedge-Hogs

3.3 The proposals will ensure that opportunities for Hedgehog (*Erinaceus europaeus*) and other small mammals are retained. These will include:

- Retention and enhancement of a large area of grassland will ensure that foraging and dispersal opportunities are present post-development;
- Provision of log piles in areas along the boundary of the site will allow for refugia opportunities for small mammals; and
- Provision of 'Hedgehog Gateways' along boundary fencing. These comprise small 13cm by 13cm cut outs at the base of the fencing to allow for the movement of Hedgehogs and small mammals across the development.

Birds

3.4 In respect of birds the proposed development shall provide the following elements to ensure gains are secured for this group:

- New native planting, including the provision of areas of wildflower grassland to offer potential new foraging opportunities through an increase in invertebrate interest;
- An increase in tree and hedgerow planting will offer new nesting opportunities for birds; and
- Bat and Bird Boxes on New Buildings
 - Schwegler Winter and Summer Roost 1WQ
 - Schwegler Swift Nest Box No 17
 - Schwegler Sparrow Terrace 1SP
 - Schwegler 2GR Bird Nest Box

Reptiles

3.5 The site shall be subject to several measures that will provide enhancements for reptiles.

- Establishment of areas of wildflower grassland to be sensitively managed to promote suitable conditions for reptiles; and
- Provision of log piles located in discreet areas along the boundary of the site to promote refuge and hibernation opportunities for this group.

Invertebrates

3.6 The site shall be subject to several measures that will allow for net entomological gains to be achieved;

- Log piles are to be provided where public access is restricted, to offer new opportunities for invertebrates;
- New native planting to offer potential new nectar resources for invertebrates including the creation of new wildflower meadow and planted SuDS rain-gardens;
- Ornamental planting throughout the built form of the development will include flowering species that can provide new nectar resources for pollinators; and
- Implementation of sensitive and beneficial management to offer a floristically rich habitat mosaic of value to a wider invertebrate assemblage.

4.0 Section not used

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

5.0 Maintenance of Grass Areas

Grass Lawns

- 5.1 Litter picking shall be carried out prior to grass cutting.
- 5.2 All grass areas shall be cut during each service visit during the growing season using the appropriate machinery to ensure that the grassed areas are maintained in a tidy condition. Cut established grass to leave 25mm of growth and remove all arisings from . Grass should not exceed 50mm height before it is cut.
- 5.3 Grass cutting shall also be carried out during other times of the year, subject to weather and ground conditions, to ensure that grassed areas are maintained in a tidy condition.
- 5.4 The Contractor shall collect and remove from site any arisings from grassed areas, planting beds and hard-surfaces. Any such arisings shall be removed and deposited off-site.
- 5.5 Grass growing along edges, and around the bases of trees, along fences or adjacent to shrub beds and other obstacles, shall be kept tidy by strimming (ensuring that trees are not damaged) and hand trimming during each service visit, or by careful use of a suitable non-selective herbicide. The use of any approved herbicides must comply with COSHH legislation.
- 5.6 Edges to paved areas, hard surfaces and shrub beds shall be cut back using an edging tool (half moon) once during each winter period.
- 5.7 Areas of naturalised bulbs should be left for a period of 6 weeks after flowering has finished before cutting back to normal height.

Correction of Hollows

- 5.8 Major hollows or ridges shall be corrected by cutting out a section of turf, removing or adding topsoil and replacing the turf evenly at the correct level. Mowing shall continue without interruption. Areas so treated shall be kept moist until rectified.

Fertilising

- 5.9 A dressing of lawn fertiliser shall be applied annually at the rate of 60gm/m² in spring.

Weed Control

- 5.10 The grass shall be treated where necessary with selective weed killer once established to maintain a weed-free sward.

Grass Watering

- 5.11 Established grass areas at ground level must rely on natural soil moisture and will usually recover quickly after periods of drought. New turf or repairs must be watered and kept moist until established.

Management of Meadows

- 5.12 Management by mowing or grazing is essential to the maintenance of structure, balance and diversity in meadow grassland. Without management grassland becomes coarse and rank, loses both diversity and interest, and will eventually turn into scrub or woodland.
- 5.13 Areas of meadow grass, where shown on the landscape plans, will be created by seeding with native seed as specified to the supplier's recommended density. Once established, these areas will be mown in late summer on a rotational basis so that no more than half the area is cut in any one year leaving part as an undisturbed refuge.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

6.0 Maintenance of Planted Areas

Weeding

- 6.1 Weed growth in all beds shall be controlled at all times. Manual removal of visible weeds shall be undertaken during each service visit. The use of any approved herbicides must comply with COSHH legislation. Shrub beds shall not be strimmed

Watering of plants after the first year

- 6.2 Plants showing evidence of drought stress shall be individually watered as described later and in the event of prolonged dry weather the planting beds shall be watered at a rate of 24L/m² every two weeks.

Plant Replacements

- 6.3 Failed, trampled or damaged plants will be replanted as the original scheme ensuring that further damage is prevented where possible.

Herbaceous Perennials and Grasses

- 6.4 A herbaceous perennial is a hardy plant that dies down to its roots in the autumn. The roots stay alive through winter, and in spring the plant comes to life again putting on profuse growth in a season.
- 6.5 Herbaceous perennials may be in situ for years and perennial weeds must be cleared from the soil bed prior to planting, taking care to remove all traces of roots.
- 6.6 Each Autumn the foliage will die down, leaving dead stems behind which will be retained for their picturesque character and for their contribution to biodiversity in providing winter shelter for insects and the seedheads will provide forage for birds i.e. Veronicastrum, Eupatorium, Phlomis and Ornamental Grasses.
- 6.7 Perennials with soft stems that will rot and also plants that are prone to diseases like powdery mildew should be pruned back in Autumn i.e. Phlox and Monarda.
- 6.9 Deadhead plants in late summer and into Autumn to encourage further flowering i.e. Salvia nemorosa, Veronica spicata, Helenium, Penstemon, Delphinium and Achillea.
- 6.10 In spring the dead foliage should be removed by hand in time for the flush of new growth from the base of the plants.
- 6.11 As the basal crowns of the plants grow outwards flowering can decrease. Plants may be rejuvenated by lifting, splitting and replanting either in November March/April unless heavy frost dictates a delay until Spring.

Shrubs

Annual Maintenance

- 6.12 Shrub beds and planted areas are to be maintained to ensure that they do not become overgrown.
- 6.13 Plants are to be thinned and removed annually between Christmas and the end of February to maintain an appropriate level of growth.
- 6.15 Shrub beds shall be pruned annually between Christmas and the end of February to remove unhealthy growth and to stimulate future growth. In addition all shrubs and plants shall be trimmed to ensure that they do not overgrow footpaths, roads or parking areas, and pruned or shaped to ensure functionality, healthy growth and a tidy appearance.
- 6.16 Mulch shall be applied to all shrub beds between Christmas and the end of February to prevent weed growth during the following year.

Routine Maintenance

- 6.17 Weed growth in all beds shall be controlled at all times. Manual removal of visible weeds shall be undertaken during each service visit. Shrub beds shall not be strimmed. The use of any approved herbicides must comply with COSHH legislation.
- 6.18 Shrub beds shall be maintained during each service visit to ensure that they are free of weeds, and that shrubs and plants do not overflow the boundaries of the bed.

Vision Splays

- 6.19 Planting within the vision splays at road junctions or at the entrances to car-parks will be maintained at a maximum of 600mm height by regular clipping as required.

Preparation for replacement planting

- 6.20 All weeds on areas to be planted must be cleared prior to being cultivated. All stones, builder's rubbish, weeds, roots > 50mm to be removed and disposed of off-site. Topsoil to be cultivated to a depth of 75mm (500mm for new schemes) using cultivators, rotavators or similar approved equipment taking care not to bring up the subsoil to provide a medium fine tilth. Cultivation by hand to the same standard to be carried out where machinery cannot be used.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

6.0 Maintenance of Planted Areas

Watering of plants after the first year.

- 6.21 Plants showing evidence of drought stress shall be individually watered as described above and in the event of prolonged dry weather the planting beds shall be watered at a rate of 24L/m² every two weeks.

Weeding and Mulching

- 6.22 Shrub beds should be hand weeded until established and mulch should be maintained at a minimum depth of 75mm.

Plant Thinning

- 6.23 In established beds it may be necessary thin out shrubs if one species is threatening to dominate the bed at the expense of the visual appearance of the planting composition. Such thinning should be done in dry weather between late November and early March. Some plants lifted in this operation may be relocated to other areas if space allows. They should be re-planted in large pits backfilled with top soil and well watered until re-established. Plants around the gaps in the original bed should be trimmed to remove dead wood and encourage growth.

Plant Replacements

- 6.24 It should not be necessary to replace shrubs unless permanent damage occurs to planting as a result of vandalism or pedestrian damage. In this case gaps should be cultivated and replanted as the original scheme ensuring that further damage is prevented where possible.

Pruning

- 6.25 The selection and arrangement of plants in shrub beds will usually be intended to create a gradation of plant heights from low-growing at the front or edges of the bed to taller-growing plants at the rear or centre. This presents the best view of the relationships of the plants in terms of texture and colour and ensures that individual plants are not deprived of light or swamped by competition. The aim of shrub bed management is to encourage the development of a diverse and attractive foliage cover which will suppress weeds taking care to avoid the excessive dominance of the most vigorous plants at the expense of variety and ensuring that plants do not become a nuisance or present a hazard. The result should be complete coverage of the ground under a canopy of lower growing plants with a central feature or features of tall shrubs in an attractive balanced composition of scale, form, texture and colour.

- 6.26 The object of pruning shrubs is to keep the plant healthy and vigorous, to promote the correct shape and balance and produce the best decorative effect and to maintain the role of an individual species within a planting composition without detriment to the other plants. Pruning tends to promote a growth reaction in a plant proportional to the severity of the pruning i.e. on a healthy stem the fewer the number of remaining buds after pruning the greater the individual bud's share of nutrients and the more it will grow.
- 6.27 Prune shrubs to encourage root development and to form a strong and balanced branch structure permitting the entry of light and air to the centre of the plant to encourage young vigorous growth from the base. Unbalanced shrubs should be pruned on the weak side to encourage eventual balance; cutting back the vigorous side to match the weak side will have the oppo effect as the vigorous side will grow even more after pruning.
- 6.28 Remove dead, damaged or diseased wood and crossing or weak branches by cutting back to healthy tissue and remove trimmings.
- 6.29 Some shrubs are grafted on to a vigorous root stock, which will tend to develop basal shoots that can dominate and eventually kill the intended named variety. These shoots must be removed as they occur.

Specification for Mulching of Shrub Beds

- 6.30 Mulch shall be applied to each shrub bed on an annual basis between the end of November and the end of February. Prior to the supply and spreading of mulch to shrub beds the areas shall be totally free of weed growth. Any weed infested areas will be brought under control by use of Glysophate chemical taking care not damage shrub's or other live plants growing within the shrub bed. When chemical control has been established, hand weeding, hoeing or forking will take place to remove the dead weeds. If regrowth or new seedlings germinate the shrub bed will be kept weed free until the onset of Autumn when the introduction of mulch to a depth of a minimum of 75 millimetre thickness will take place. Mulching is to commence in early November and be completed by late February. Care must be taken to avoid mulch spilling out of the beds and onto surrounding areas. All mulching material will be free of leaves/pine needles and will have no contamination from soil or other residues with the intention of producing a clean mulching bed to inhibit future weed growth.

Landscape and Ecology Management Plan Kidbrooke Park Road - Phase 1

6.0 Maintenance of Planted Areas

Pruning Techniques

6.30 One of the objects of pruning is to divert the food passing up the stem into one or more buds to encourage development in a particular direction. 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. Begin the cut on the opposite side of the stem level with the bud and cut slightly diagonally upwards to avoid the bud but to leave the smallest possible wound.

6.31 Pruning of individual shrubs and perennials will be carried out in accordance with one of the pruning schedules as set out on this page. Refer also to Appendix 2 – Pruning of Plant Groups and Appendix 3 – Pruning of Individual Species for additional guidance.

Pruning Schedule A

6.32 No pruning required other than light shaping and removal of dead diseased wood. Shaping to be carried out in late Spring, remaining pruning as required. All arisings to be removed off and disposed of.

Pruning Schedule B

6.33 Remove all wood which has borne flowers, retaining the young wood to ripen and produce flowers the following year. Pruning to be carried out immediately after flowering. All arisings to be removed off and disposed of.

Pruning Schedule C

6.34 Remove completely one or two old stems, cut back younger flowering shoots to fresh growth of the main branches. Thin out crowded shoots and remove weak twigs. Pruning to be carried out between November and March. All arisings to be removed off and disposed of.

Pruning Schedule D

6.35 In February or March, cut back previous season's wood to within two or three buds of the old wood. All arisings to be removed off and disposed of.

Pruning Schedule E

6.36 To be cut back to within 75mm of the surrounding bed each Autumn. All arisings to be removed off and disposed of.

SHRUB SPECIES	PRUNING INSTRUCTION	SHRUB SPECIES	PRUNING INSTRUCTION
<u>Amelanchier</u>	B	<u>Osmanthus</u>	A
<u>Arbutus</u>	A	<u>Pachysandra</u>	A
<u>Artemesia</u>	D	<u>Pernettya</u>	A
<u>Aucuba</u>	A	<u>Perovskia</u>	C
<u>Berberis</u>	A	<u>Pittosporum</u>	A
<u>Ceanothus</u>	A	<u>Potentilla</u>	A
<u>Cistus</u>	A	<u>Prunus</u>	A
<u>Cornus</u>	D	<u>Pyracantha</u>	A
<u>Cotinus</u>	A	<u>Rhododendron</u>	A
<u>Cotoneaster</u>	A	<u>Ribes (except R. sanguineum)</u>	D (B)
<u>Cytisus</u>	A	<u>Rosmarinus</u>	B
<u>Elaeagnus</u>	A	<u>Rubus</u>	D
<u>Escallonia</u>	A	<u>Ruta</u>	D
<u>Euonymus</u>	A	<u>Salix</u>	D
<u>Fatsia</u>	A	<u>Salvia</u>	D
<u>Forsythia</u>	B	<u>Sambucus</u>	D
<u>Fuchsia</u>	D	<u>Santolina</u>	D
<u>Genista</u>	A	<u>Sarcococca</u>	A
<u>Griselinia</u>	A	<u>Senecio</u>	A
<u>Hamamelis</u>	A	<u>Skimmia</u>	A
<u>Hebe</u>	A	<u>Spiraea</u>	B
<u>Hippophae</u>	A	<u>Symphoricarpos</u>	A
<u>Hydrangea (Dead head after flowering)</u>	A	<u>Syringa</u>	A
<u>Hypericum</u>	A	<u>Viburnum</u>	A
<u>Ilex</u>	A	<u>Vinca</u>	A
<u>Kalmia</u>	A		
<u>Kerria</u>	B		
<u>Kolkwitzia</u>	C		
<u>Lavandula</u>	D		
<u>Ligustrum</u>	A		
<u>Lonicera</u>	A		
<u>Mahonia</u>	A		
<u>Olearia</u>	A		

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

6.0 Maintenance of Planted Areas (Continued)

Pruning of Individual Species

Acer campestre	Allow to develop unpruned once established. Remove deformed or crossing shoots as necessary to form a balanced head of branches. As a component in a mixed native hedge this species will be pruned annually between October and February to a height of 1500mm with a base slightly wider than the top.
Amelanchier	Thin out weak or crowded growths if necessary after flowering in May.
Arundinaria	Cut dead canes at the end of winter down to ground level.
Aucuba	No regular pruning except to shape and remove dead wood or dieback as it occurs.
Berberis	Prune deciduous Berberis in late winter. Prune evergreen Berberis in April or after flowering in late May or June.
Buddleia alternifolia	Prune after flowering to cut out flower bearing branches.
Buddleia davidii	Prune hard in early spring just as growth starts.
Buddleia globosa	No pruning except removal of weak or dead wood in March and general shaping.
Buxus (Box)	When grown as a shrub needs no pruning. Formal hedges will need clipping at least twice during the summer to maintain their shape.
Caryopteris	Cut back flowering shoots from previous year in February or early March. Shorten growths to 5-10cm each year and remove thin growths entirely.
Ceanothus (evergreen)	Prune evergreen Ceanothus annually after flowering to trim to within 10cm of the base of flowering shoots. Prune short side growths back almost to framework branches.
Ceanothus (deciduous)	Prune deciduous Ceanothus annually in February or March to remove weak wood and to shorten strong shoots back to two or three buds from the base.
Chaenomeles	After flowering shorten side growths back to two or three buds.
Choisya	No regular pruning except removal of dead wood.
Crataegus monogyna	Allow to develop unpruned once established. This species is naturally multi-stemmed with a congested crown. Remove only badly crossing branches as required. As a component in a mixed native hedge this species will be pruned annually between October and February to a height of 1500mm with a base slightly wider than the top.
Cornus sanguinea	Allow to develop unpruned. Restrict spread if necessary by cutting out one in four old shoots every year in early spring. Renovate old neglected plants by cutting hard back to the base of the plant. As a component in a mixed native hedge this species will be pruned annually between October and February to a height of 1500mm with a base slightly wider than the top.
Cornus	Tall flowering Dogwoods, C.kousa, C. florida – No pruning. Bushy Dogwoods, C. alba, C. stolonifera – prune severely in March.
Corylus avellana	Each year remove some older wood in late winter occasionally cutting a branch right to the base. Renovate plants by cutting hard back to the base of the plant in late winter every seven years. As a component in a mixed native hedge this species will be pruned annually between October and February to a height of 1500mm with a base slightly wider than the top.
Corylus	Prune vigorous growths of purple and golden leaved nuts in February or early march annually.
Cotinus	Purple leaved forms can be pruned hard in late March to encourage long shoots or left to develop naturally.
Cotoneaster	Require no regular pruning except removal of dead wood. Hedges require regular clipping.

Pruning of Individual Species (continued)

Cytisus	Prune after flowering to shorten young growth to 2/3 its length taking care not to cut into two year old wood.
Elaeagnus (variegated)	No regular pruning except to remove any green leaved shoots.
Euonymus	No regular pruning unless clipping as low hedge.
Euonymus europaeus	Prune late in Winter or early in Spring. Prune only to thin congested growth by cutting out older stems to the base to open up the centre of the bush.
Fatsia	No regular pruning except removal of dead foliage.
Garrya	No regular pruning except removal of dead foliage.
Genista	No regular pruning except removal of dead foliage.
Hebe	No regular pruning except removal of dead foliage.
Hedera	Clip if required with shears in May or June.
Hydrangea	Cut out old non-flowering wood to ground level and keep shrub well thinned. Leave flower heads over winter and trim plants back to sound wood when the leaves begin to open.
Hypericum	Trim low growing varieties to 100mm annually in March and lightly trim taller growing varieties to remove dead shoots at the same time.
Kerria	After flowering cut out old wood back to young growth or ground level.
Lavandula	Lightly trim over as soon as flowers fade to remove old stalks and shape plants.
Ligustrum	No regular pruning unless trimmed as a hedge.
Ligustrum vulgare	Allow to develop unpruned. Renovate by hard pruning in early spring if required in time. As a component in a mixed native hedge this species will be pruned annually between October and February to a height of 1500mm with a base slightly wider than the top.
Lonicera nitida	No regular pruning unless trimmed as a hedge.
Lonicera pileata	Trim over annually in March to maintain low bushy growth.
Mahonia	Remove long bare stems in late April or May.
Philadelphus	Prune after flowering in summer to remove weak growth and cut back to the strongest young shoots at the base of the plant.
Photinia 'Red Robin'	Shorten long shoots in May.
Prunus lauro/lusitanica	Trim with secateurs in late May or early June unless growing as a hedge in which case trim six to eight weeks later. Old plants should be cut back into hard wood in late April or early May.
Prunus spinosa	Allow to develop unpruned. Remove surplus basal growth annually in mid-summer to control spread if required. As a component in a mixed native hedge this species will be pruned annually between October and February to a height of 1500mm with a base slightly wider than the top.
Pyracantha	As a hedge clip twice annually, once after flowering and again in late August or early September taking care to preserve and expose the fruits.
Rhus	Cut hard back annually in April to within one or two buds of the old wood.
Rosmarinus	Light pruning of shrubs and hedges should be undertaken at the end of May after flowering.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

6.0 Maintenance of Planted Areas (Continued)

Pruning of Individual Species (continued)

Rhamnus cathartica	No routine pruning necessary. Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out.
Rosa canina (Dog Rose) and other Shrub Roses.	
	Allow to develop unpruned. Prune hard in the spring to renovate old plants or to gain access to overgrown areas.
Sambucus nigra (Elder) – Likely to occur naturally in planted areas.	
	Allow to develop a natural form. Cut back old stems to the ground in winter to renovate neglected plans.
Sambucus (varieties)	Cut back to within one or two buds of the old wood in March.
Salvia	Cut back bare stems in spring.
Santolina	Prune annually in April or early May cutting back hard to produce a rounded hummock.
Senecio	Shape if required in the late spring.
Skimmia	Shape if required in the late spring.
Spiraea	Spring or early summer flowering – prune after flowering back to strong young shoots.
Spiraea	Late summer flowering – prune in early spring, cutting back to within two or three buds of the older wood.
Symphoricarpos	Thin out weak stems in late winter.
Tamarix	Spring flowering – Prune after flowering. Late summer/autumn flowering – prune back in February or early March to within two or three buds of the old growth.
Ulex	No regular pruning except old plants can be cut down to 30cm above ground in April to rejuvenate.
Viburnum	No regular pruning. V.tinus can be trimmed as a hedge in May annually.
Viburnum lantana	Allow to develop unpruned. Prune hard in late spring to renovate old plants.
Viburnum opulus	Allow to develop unpruned. Prune hard in late spring to renovate old plants.
Vinca	Clip over in spring as required.
Weigela	Prune after flowering to remove the previous years growth.

Pruning of Plant Groups

The following notes relate to the pruning of plant groups;

Deciduous Shrubs

- Flowering in spring or early summer.

These bear flowers on stems produced during the previous growing season. They include Berberis x stenophylla, Forsythia, Weigela, Philadelphus and early flowering Spiraea. Prune after flowers have faded to remove all one year old stems on which flowers have been borne. As young growths develop from the base of the plant cut them back to leave the lowest one on each former flowering branch.

- Flowering in summer and early autumn.

These bear flowers on the current season's growth. They include deciduous Ceanothus, Buddleia davidii (not alternifolia) and Caryopteris. Prune in March or April to cut back the previous years growth, on which old flower heads can still be seen, to within one or two buds or pairs of buds from the base. Also remove any weak, dead or diseased wood at this time.

Prune lightly in the autumn if plants have developed excessive growth and complete the operation at the normal time in the spring.

Note that evergreen Ceanothus and Buddleia alternifolia should be pruned immediately after flowering.

- Deciduous shrubs grown for their stems or foliage.

Cornus species (Dogwoods). Cut stems back to near ground level at the end of March or early April.

Evergreen Shrubs

Evergreens start to make growth later in spring than most plants and should be pruned in late May or June. Remove diseased or damaged wood at this time.

Do not prune evergreens in late summer or autumn as this will encourage soft growth which will be damaged in the winter.

Also remove shoots bearing green leaves from anywhere on a variegated plant such as Elaeagnus or Euonymus.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

7.0 Maintenance of Trees

Recently Planted Trees

- 7.1 New trees should be regularly monitored and examined for damage, instability and general vigour and remedial action taken accordingly.
- 7.2 Check stakes and ties on a monthly basis and adjust or replace as required to adequately support the tree and avoid chafing. As soon as the tree is established and self-supporting remove the stake and ties to prevent damage or constriction of the trunk.
- 7.3 Fertilise trees each spring with a top-dressing of 100gm of bonemeal.
- 7.4 Weed tree positions by hand as required and remove any basal growth that may develop from root-stock on grafted trees. Avoid strimmer or mower damage to the base of the trunk.
- 7.5 Prune trees as required in the Autumn to remove dead or diseased wood and to encourage the formation of a balanced shape unless the tree is appropriately and naturally deformed due to species or environment.
- 7.6 Remove dead or diseased trees as required and replace.

Pruning Trees

- 7.7 Pruning or shaping of young trees shall be carried out during the winter months. Tree surgery to be in accordance with BS3998. Remove whole branches back to the join with the next largest branch or the main trunk. Do not leave long thick stubs. Cut branch close to but not flush with the trunk or branch to leave the smallest possible wound. Sealant paint is not necessary.

8.0 Maintenance of Hedges

Pruning Ornamental Hedges

- 8.1 Ornamental hedges to be pruned twice annually in September and February.
- 8.2 If a hedge is in a regularly maintained condition remove current growth rather than old wood. Cutting not to exceed 1 year's growth.
- 8.3 Hedges are to be pruned to a rectangular profile with the base slightly wider than the top.

Pruning Native Hedges

- 8.4 To comply with the 1981 "Wildlife and Countryside Act", no wild or native hedge cutting to take place in the period 1st March to 31st August inclusive during each year.
- 8.5 Normally these will consist of hedge type species of Hawthorn, Holly, Hazel, Field Maple which can be layed if overgrown.
- 8.6 Cutting to be carried out once between the months of October to February of the following year.
- 8.7 Hedges are to be pruned to a rectangular shape with the base slightly wider than the top. Hedges must also be impenetrable.
- 8.8 Prune young deciduous hedges in early spring to within 15cm of the base of the young leading shoots to encourage vigorous side branching.

Native Hedge Methodology

- 8.9 Hedges are not to be cut back into the old wood. Hedges will be cut using either sharp secateurs, hand held shears or hand held reciprocating blade powered hedge cutters. All cuts will be clean, and any ragged edges will be removed using a sharp knife. The use of tractor mounted flail type cutters will not be allowed. All arisings will be collected and disposed of at the contractors own expense. All arisings including clippings lodged in the hedge, will be cleared from site at the end of each working day and disposed of at a suitable, previously agreed approved tip or recycled as green waste. All arisings must be removed from adjacent surfaces. All staff using powered hedge cutting equipment will hold a N.P.T.C. or similar certificate of competence. Any damage caused by the contractor will be rectified at the contractor's own expense.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

9.0 Maintenance of Climbing Plants and Wall Shrubs

General

9.1 Wall shrubs and climbing plants can be divided into four groups according to their habit of growth;

Self Supporting Climbers – Ivy, Hydrangea, Virginia Creeper.

Trim shoots in late winter/early spring if required.

Curling or Twining Climbers – Clematis montana, Honeysuckle.

Prune when necessary to thin out flowering shoots. Train to trellis or wire supports to create a fan or espalier shape as the plant develops.

Climbers with Hooked Thorns or Scrambling Stems – Roses.

Climbing Roses flower on the current seasons growth and it is necessary to train out a framework of permanent branches from which flowering growths are produced each year. Prune young growths in late February or March each year to within two or three buds from their base. Remove weak and dead wood at this time.

Wall Shrubs – Garrya, Ceanothus, Cotoneaster, Pyracantha.

Wall shrubs can be trained formally to form an espalier but can also be pruned as shrubs.

10.0 Watering of Planted Areas

Watering of Ground Level Plants

10.1 Ground level planted areas in natural soil will be monitored for soil moisture and drought stress in plants and will be watered if required as follows;

Specimen plants will be watered individually during times of drought by direct application of 10L water to the root-ball by directing a running hose into the root-ball for 1 minute per plant.

Ongoing watering of the entire planted area will be undertaken every two weeks in prolonged dry conditions by application of 24 Litres/m² i.e. a typical hose/sprinkler combination running at 10L/minute will take approximately 2.5 minutes to apply 24 Litres/m² and 25 minutes to apply 24L/m² to 10/m².

Individual trees to be watered individually during times of drought by direct application of 40L water to the root-ball by directing a running hose into the root-ball for 4 minutes per plant.

Watering of Grass Areas

10.2 Grass will be monitored for soil moisture and drought stress and will be watered if required as follows;

Watering of the grass area will be undertaken every two weeks in prolonged dry conditions by application of 24 Litres/m² i.e. a typical hose/sprinkler combination running at 10L/minute will take approximately 25 minutes to apply 24L/m² to 10/m².

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

11.0 General Maintenance

Litter and Debris Collection

- 11.1 During each service visit and prior to commencing cutting the grass, the contractor shall collect all litter and debris from all areas.

Leaf Clearance

- 11.2 The Contractor shall collect leaves from all areas and remove from site as follows:
- On three consecutive service visits after 1st leaf fall early November – Mid December.
- On one further service visit in January after 2nd fall.

Weed Control

- 11.3 A weed is defined as a plant which has grown in the wrong place. This might include self-sown trees and shrubs as well as suckers.
- 11.4 The contractor shall control the growth of weeds and moss on hard surface areas including kerb lines, car parks, gravel areas and paths using a suitable non-selective herbicide. Herbicide shall be applied twice annually in February and September in addition to any necessary spot treatments required during the season. In addition weed growth to hard surfaces and along fences should be kept clear by strimming or manual removal.
- 11.5 All excess weed growth in flowerbeds, herbaceous borders, base of hedges & shrub beds will be removed by hand weeding, forking or hoeing which ever is practicable after chemical application.
- 11.6 All weed growth along kerblines, at kerb junctions with road surfaces, footpaths or hardstanding shall be removed.

Pesticides

- 11.7 The contractor must hold a certificate of competence for the correct use of pesticides, fertilisers and weed killers. All pesticides must be to the latest relevant British Standard and shall be applied strictly in accordance with the manufacturers instructions. Particular attention should be paid to the safety of children, pets or any other specific hazard identified. Spraying shall not take place when the weather is inclement and the contractor will not undertake spraying of any type unless the weather conditions are deemed to be suitable.
- 11.8 If the weather conditions are suitable for spraying, the contractor should be aware of spray drift and familiarise themselves with the areas which will be receiving the application e.g. the possibility of the existence of wind tunnels on the corner of building lines.

- 11.9 The contractor shall be held responsible for any damage due to negligence or carelessness in carrying out spraying operations. All fertilisers and pesticides must be kept in a locked metal or heavy-duty plastic container within or on the contractor's vehicle whilst on the scheme. The container must be clearly marked with the words " Danger Poison". A record must be kept of pesticides and fertilisers being applied, the record must include (as a minimum):

The person who applied the pesticides and fertilisers

The area to which the pesticides and fertilisers have been applied

The date that the application took place

The signature of the operative responsible.

The record must be kept up to date at all times and be open to inspection by the managing agent. Failure to do so will be viewed as a breach of the contract terms and conditions.

Sweeping of Hard Areas

- 11.10 All paved areas shall be swept at each service visit and the arisings removed. Fallen tree branches, debris and fruit shall also be removed.

Biodiverse Roof

- 11.11 The biodiverse roof on Block B should be weeded several times a year, but a less intensive regime will result in more mixed vegetation as grasses and other plants establish. Maintenance would still be required once a year to remove woody plants, such as tree seedlings, that have the potential to disrupt or puncture the waterproof lining of the roof. Maintenance will be undertaken only by contractors fully experienced in high-level access using harnesses and restraints to eliminate the potential risk of falling from height.

Landscape and Ecology Management Plan

Kidbrooke Park Road - Phase 1

Landscape Maintenance Schedule - Soft Landscape							
Item Ref.	Maintenance Component and Tasks	Quantity	Unit	Frequency per Annum	Month or Season	Cost per occasion	Total Annual Cost
A1	Trees						
	Remove epicormic growth		Nr	1			
	Water newly planted trees (first 3 years)		Nr	12			
	Annual inspection		Nr	1			
	Check/adjust stakes/ties		Nr	2			
A2	Amenity Grass						
	Cut Grass		M2	20			
	Trim edges and around trees in lawns		M2	20			
	Rake and Remove Leaves		M2	2			
	Aeration		M2	1			
	Scarify		M2	1			
	Repair (Assume 5% per annum top-dress, re-seed)		M2	1			
A3	Ornamental Planting						
	Fork Over Soil		M2	1	Spring		
	Weeding		M2	8			
	Cut back dead herbaceous vegetation. Note: retain hard stems and seed heads for wildlife and aesthetics		M2	1	Late Autumn		
	Cut back perennials with soft stems		M2	1	Late Autumn		
	Dead-head flowers in late summer and into autumn to encourage further flowering		M2	3	Late Summer/Autumn		
	Lift, divide and replant herbaceous vegetation to fill gaps and rejuvenate plants		M2	1	November or March/April (avoid frost)		
	Remove dead foliage by hand in spring to encourage the flush of new growth from the base of the plants		M2	1	Spring		
	Prune shrubs and climbers		M2	3			
	Replacement planting assumed 10% total area		M2	1			
	Mulch to a depth of 50mm		M2	1			
A4	Hedges						
	Prune to rectangular tapered shape		Linear M	2	Winter		
	Weeding		Linear M	8			
	Mulch to a depth of 50mm		Linear M	1			



Tel. 01993 811888
Email. mark@mcandscape.co.uk
32 New Road, Woodstock, Oxon, OX20 1PB
www.mcandscape.co.uk