



Landscape Management Plan

Land off Hawthorne
Place, Clitheroe, BB7
2HP

Ref: P.1239.19

February 2022
(See revision dates
below)

Rev	Date	Details
A	28/02/2022	Minor Amendments
B	24/03/2022	Minor Amendments
C	09/08/2024	Minor Amendments
D	24/08/2024	Minor Amendments to the Landscape Proposal Plans (Rev J)
E	09/10/2024	Minor Amendments to the Landscape Proposal Plans (Rev K)
F	30/10/2024	Minor Amendments

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P.1239.19

Landscape and Ecological Management Plan

of

Land off Hawthorne Place, Clitheroe, BB7 2HP

for

Persimmon Homes Ltd

23rd February 2022

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QA Review & Approval	Ciaran Power - Office Manager

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Appendix 1	P.1239.19.03L (Landscape Proposal- 2 sheets) @A0
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1 Introduction

Ascerta has been instructed by Persimmon Homes Ltd to carry out a Landscape Management Plan for Land off Hawthorne Place, Clitheroe, BB7 2HP (hereafter referred to as the site). Our client seeks planning consent to develop the site for the erection of 57 dwellings with associated access, landscaping, public open space, and attenuation pond.

The detailed soft landscaping scheme is shown on the following drawing: P.1239.19.03L (Landscape Proposal- 2 sheets) @A0.

This management plan covers a period of 30 years, and it should be reviewed at the end of this period based on the condition of the site at that time to ensure the initial objectives are being achieved. The recommendations from the ecological reports are included within the management prescriptions.

2 Site Description

2.1 The Existing Site

The site is located Land off Hawthorne Place, Clitheroe, BB7 2HP (the site OS grid reference is SD743425), as per image below.

The site is approximately 1.7 hectares in size located on the edge of a residential area on the northern margin of Clitheroe. The site comprises an agricultural field used for sheep grazing with improved grassland, areas of tall-herb vegetation, scattered broad-leaved trees, young trees, and shrubs. The current access is a field gate off Hawthorne Place that enters onto an area of hardstanding within the site. The site is bound by sections of hedgerows, stock proof fencing and walling.



Figure 1 Satellite image showing the proposed development site

2.2 Site Ecology and Arboricultural Impact Assessment

The following reports were completed following a series of site surveys and the recommendations made for ecological mitigation have been included in both the design and management proposals.

- *Ecology Survey and Assessment by ERAP Ltd (September 2019).*
- *RE: Bat Access Panel and Bird Box Provisions: Hawthorne Farm, Clitheroe, BB7 2HU (2nd March 2021)*
- *P.1239.19 Arboricultural Impact Assessment, Land off Hawthorne Place, Clitheroe, BB7 2HP (September 2019)*

The Ecology report stated the key habitats identified on site or along the boundaries are as follows:

- Broad-leaved trees
- Hedgerows
- Young trees and shrubs
- Cotoneaster
- Tall-herb vegetation
- Improved grassland
- Hardstanding
- Walls
- Fencing

The ecology report noted Wall Cotoneaster located outside of the site on the opposite side of the boundary fence, located in the south-eastern corner of the site. Wall Cotoneaster is included within the invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and it is an offence to cause the spread of this species in the wild. Removal is not feasible; therefore, an Invasive Species Management Plan is not necessary in this case. Instead, the ecology report has recommended that the soil from the area associated with the Wall Cotoneaster is not removed from the site or spread in the wild.

The ecology report recommends compensatory hedgerow planting if any section of Hedgerow 1 (along the northern boundary) is scheduled for removal the site layout must incorporate compensatory native linear planting. The compensatory hedgerow planting must be of an equal length, or greater than, the length of hedgerow scheduled for removal.

The ecology report recommends landscape planting within the residential site composed from native species and species known to be of value for the attraction of wildlife. It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species include Field Maple, Hazel, Hawthorn, Holly, Crab Apple, Wild Cherry, Bird Cherry, Blackthorn, Field rose, Dogrose, Elder, Rowan, Wych Elm, and Guelder Rose.

The ecology report recommended that the understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates, such as feeding bumblebees and butterflies. Where possible, the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.

The ecology report stated that planting schemes that include flowering species such as Viburnum, Ceanothus, Hebe, Lavandula, Lonicera, Potentilla, Rosmarinus and Vinca can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.

The ecology report suggests for further plants suitable for the attraction of pollinators please refer to the Perfect for Pollinators Plant List (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.

The response letter regarding Bat Access Panel and Bird Box Provisions suggests the following:

- 5 Ibstock 'B' or 'C' Enclosed Bat Access Panels;
- 5 House Sparrow Nesting Terraces;
- 5 Small Bird Nest Boxes;
- Starling Nest Boxes; and
- Swift Nest Boxes.

The arboricultural impact assessment indicates the partial loss of the mixed hedgerow (H1) along the northern boundary, the partial loss of the Beech hedge (G5) and tree (T1) along the western boundary, the loss of trees (G1) and partial loss of G2 along the southern boundary, and the loss of scattered trees/ shrubs within the site (G3) and one dead standing Hawthorn (G4).

The arboricultural impact assessment recommends that a landscape proposal is prepared for the site, to include where feasible, provision for the planting of a mixture of native as

well as ornamental trees, shrubs, and hedges, implemented as a condition of planning consent. Also, tree protection measures are implemented in accordance with the finalised versions of the drawings appended in the arboricultural impact assessment.

2.3 The Proposed Site Description

The residential development proposes the construction of 57 dwellings with rear gardens, front gardens and driveways or shared parking facilities. The proposed development includes inner roads, public open space with attenuation pond, native and ornamental tree planting, formal hedges, native hedgerows, ornamental planting beds, amenity grass seeding, Eco species rich lawn seeding, and mixed scrub. Wildflower seeding, GerminalWFG9 Wetland and Pond Areas is to be seeded within the attenuation pond.

The new access road will be created off Hawthorne Place from the southern boundary. The proposal will retain most of the existing perimeter hedgerows with trees, and line of trees where the proposed public open space is to be located.

Proposed tree and shrub planting including species from the RHS *Perfect for Pollinators* plant lists. The landscaping design is shown on P.1239.19.03L (Landscape Proposal- 2 sheets) @A0 which provides:

- Proposed ornamental shrub planting (Total area: 236m²)
- Proposed native tree planting (Total: 13 no. trees)
- Proposed ornamental tree planting (Total: 16 no. trees)
- Proposed formal hedge (Total length: 265.6 lin.m)
- Proposed mixed native hedgerow (Total length: 171 lin.m)
- Turfed areas (Total area: 1045m²)
- Grass seeding Germinal AberSustain mix (Total: 601m²)
- Wildflower seeding, Germinal WFG20 Eco Species Rich Lawn Areas (Total: 232.6m²)
- Wildflower seeding, Germinal WFG9 Wetland and Pond Areas (Total: 334.1m²)
- Mixed scrub as mainly whip planting, for additional wildlife habitat (Total: 39.5m²)

The proposed native specimen trees include Alder, Silver Birch, Scots Pine, Bird Cherry, and Rowan which are mostly in keeping with recommended native species from the ecology report to provide a food or shelter resource for the attraction of wildlife.

The proposed native hedgerow includes Hazel, Hawthorn, Holly, Wild Cherry, and Dog Rose are all in keeping with the recommended native species from the ecology report to provide a food or shelter resource for the attraction of wildlife. The proposed hedgerow mix will sufficiently compensate for the partial loss of hedgerow 1 along the northern boundary.

The proposed mixed scrub planting will include Hazel, Hawthorn, Holly, Wild Cherry, Blackthorn, Field rose, Dogrose, Elder and Guelder rose. These species are all in keeping with recommended native species within the ecology report to provide a food or shelter resource for the attraction of wildlife. The proposed mixed scrub planting will create a wildlife corridor for species within the main area of public open space to allow connectivity with the rest of the site.

The ornamental shrub beds include flowering species such as different Hebes and Potentilla for feeding invertebrates and for the attraction of foraging bats and birds.

The ecology response letter regarding bat access panel and bird box provisions suggests in total 5 bat access panels and 19 bird box provisions. All bat access panels, and bird box provisions are to be integrated within new residential buildings or garages, subject to permission.

The cherry laurel 'Rotundifolia' hedging along the southern boundary is to act as a landscape buffer. The hedge is planted as a double staggered row with maintenance access on both sides. The hedge can then be cut on its sides only leaving the top of the hedge to grow up to 5m high and provide screening and softening of views from the south.

This landscape and ecological management plan details management of the public roads and open space areas only following development only. It is assumed that landscaping within private gardens will be maintained by the occupiers/residents of the associated property.

This landscape and ecological management plan should be implemented in its entirety by a suitable management agent who will be responsible for achieving long term objectives. A management agent will be confirmed and appointed by the developer once the main development works have commenced on site.

3 Landscape Design Objectives

The overall design objectives are as follows:

1. Carry out ornamental tree planting, formal hedging, ornamental shrub planting, and turfed grass around the housing plots to soften the development and provide an attractive setting.
2. Carry out native tree planting, native hedgerows, mixed scrub planting, amenity grass seeding, and wildflower seeding within the attenuation pond to provide an attractive setting in keeping with the wider landscape.
3. To include the recommendations of the Arboricultural Impact Assessment report including:
 - a. a landscape proposal is prepared for the site, to include where feasible, provision for the planting of a mixture of native as well as ornamental trees, shrubs, and hedges, implemented as a condition of planning consent.
4. To include the recommendations of the ecological report including:
 - a. Soil from the area associated with the Wall Cotoneaster located in the south-eastern corner of the site is not removed from the site or spread in the wild.
 - b. Compensatory hedgerow planting to replace the partial loss of Hedgerow 1 (along the northern boundary). The compensatory hedgerow planting must be of an equal length, or greater than, the length of hedgerow scheduled for removal.
 - c. Landscape planting within the residential site composed from native species and species known to be of value for the attraction of wildlife. It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species include Field Maple, Hazel, Hawthorn, Holly, Crab Apple, Wild Cherry, Bird Cherry, Blackthorn, Field rose, Dogrose, Elder, Rowan, Wych Elm, and Guelder Rose.
 - d. Understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.
 - e. Planting schemes that include flowering species such as Viburnum, Ceanothus, Hebe, Lavandula, Lonicera, Potentilla, Rosmarinus and Vinca can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.
 - f. For further plants suitable for the attraction of pollinators please refer to the Perfect for Pollinators Plant List (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.
5. To include the recommendations of the response letter regarding Bat Access Panel and Bird Box Provisions:
 - a. 5 bat access panels and 19 bird box provisions to be integrated onto proposed residential buildings and garages
6. To carry out buffer planting to provide screening or softening of the built form where required.

7. Implementation of new native trees, hedgerows, shrub planting, and wildflower seeding that will benefit wildlife habitats.

4 Management Proposals

This management plan covers detailed maintenance operations for an initial maintenance period of two years, followed by an establishment period covering years three-five. During this period, the operations proposed will ensure new planting and grass is establishing well and showing healthy growth, and that groundcover planting is provided as per the attached planting plans (See Appendix 1).

Long term management proposals are included for years six to thirty (the maturing phase) and this period will involve less intensive management of planting, although ongoing monitoring will be essential to ensure the character of the proposed trees and public open space is maintained and replacement planting is accomplished when necessary to ensure good species diversification. Long term management of the proposed and existing trees may include some felling of mature trees at the end of their life span to maintain healthy development of the woodland. Any felled trees are to be replaced with suitable species to retain the character of the trees.

Although this management plan covers a thirty-year period, it should be reviewed at a minimum of five-year intervals to ensure the initial objectives are being achieved. Additional monitoring of the different habitat areas is essential as natural changes are likely to occur and there could be future changes in legislation, both of which could have an impact on the future management of the site. The proposed native hedgerows, specimen trees, formal hedging, and mixed scrub planting within the site will form wildlife corridors both through and around the perimeter of the site connecting the site to the surrounding wildlife habitats and corridors.

4.1 Management Proposals Objectives

Residential Development Management: To ensure good establishment of ornamental planting and the maintenance of communal planting areas. To retain and enhance the existing trees and hedgerows to maintain a range of different types and sizes of species, to support a wide variety of wildlife and provide a corridor to allow movement of wildlife. The hedgerows should have a continuous, dense base, although gaps created by wildlife for access should be left. The hedge along the southern boundary is to be maintained to provide a tall landscape buffer that screens and softens views from the south.

Public Open Space: To ensure the existing trees, and new trees, shrubs, amenity grass, and wildflower areas are managed to retain the character and diversity of the area whilst providing good protection of habitats. To ensure the management and maintenance of the proposed attenuation pond is kept in working order whilst also being an attractive feature within the public open space. Monitor and enhance biodiversity of habitats to ensure flora and fauna continue to thrive. Ensuring that the public open space is maintained and managed as an attractive setting for the residential development whilst in keeping within the wider landscape.

4.2 Detailed Management Proposals

4.2.1 Maintenance Phase (Years 1-2)

Feature	Description and specification
Existing Trees and Hedgerows	
Existing trees to be retained:	Re-inspect once a year and specify any applicable management / and any on-going monitoring to ensure trees are safe and to improve / maintain health where necessary. Preliminary recommendations made at the time of the Tree Survey can be found within P.1239.19 Arboricultural Impact Assessment
Existing hedgerow to be retained:	Prune in January / February on a 3-year rotational basis (1/3 per year) and carry out new planting, laying, or coppicing to gap up if required.
New Specimen Tree Planting, Shrub Mix Planting, and Native Hedgerows	
Works in area of soil near Wall Cotoneaster:	Soil within the south-eastern corner of the site associated with the neighbouring Wall Cotoneaster is not to be removed from the site or spread in the wild.
New tree planting:	Water to ensure good establishment. Undertake formative pruning. Annually replace dead or dying stock and check/ adjust/ replace double stakes, crossbar and webbing or ties if necessary. Hand weed around a 0.5m radius of the base of each tree to ensure weed free and top up mulch annually.
New mixed scrub planting	Weed control by hand to ensure planting area is weed free. Check stakes, ties and shelter guards are in place and replace where necessary. Replace dead / dying stock in winter.
Native mixed hedgerow planting:	Prune in January / February on a 3-year rotational basis (1/3 per year) and carry out new planting if required. Weed control by hand to ensure planting area is weed free. Check stakes, ties and shelter guards are in place and replace where necessary. Maintain a neat appearance. Prune back to a height of 2m.
Formal hedge along southern boundary landscape buffer	Trim sides only twice a year in early June and late September and carry out new planting if required. Weed control by hand to ensure planting area is weed free. Allow hedge to grow up to 5m high.
Seeded Areas	
Amenity grass (Germinal AberSustain mix)	Mow every two weeks during the growing season to a height of 30mm. Apply fertiliser annually and spot treat pernicious weeds.
Wildflower seeding, Germinal WFG20Eco Species Rich Lawn mix	<p>Establish the wildflowers by creating a fine friable seedbed down to 150mm in depth. Carry out two equal sowings at right angles to each other and diagonally to main axis. Broadcast manually or use seed drill, rake level and roll. Ensure good seed to soil contact. Sow in Autumn or Spring.</p> <p>First cut mid-September - 1st October and collect the arisings. Cutting height 70-100mm From year 2 onwards cut from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to</p>

	<p>stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed.</p> <p>If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.</p> <p>Clippings should be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.</p> <p>Spot treat pernicious weeds and reseed as required.</p>
Wildflower seeding, Germinal WFG9 Wetland and Pond Area	<p>Establish the wildflowers by creating a fine friable seedbed down to 150mm in depth. Carry out two equal sowings at right angles to each other and diagonally to main axis. Broadcast manually or use seed drill, rake level and roll. Ensure good seed to soil contact. Sow in Autumn or Spring.</p> <p>First cut mid-September - 1st October and collect the arisings. Cutting height 70-100mm</p> <p>From year 2 onwards cut from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed.</p> <p>If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.</p> <p>Clippings should be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.</p> <p>Spot treat pernicious weeds and reseed as required.</p>
Invasive weed monitoring:	Herbicide monitoring and treatment programme to control and eradicate any unlikely regrowth by competent invasive weed contractors. Two visits a year for first 4 years. Reseed as required.
Other Features	
Hard surfacing	Check annually and repair any defects.
Fencing and walling	Check annually, repair any defects, and replace when necessary.
Bat and bird provisions	Bird nest boxes to be checked annually. Bat access panels to be checked annually by a licensed bat ecologist. Repair any defects and replace when necessary. If a bat box is damaged, it should only be replaced by a licensed bat ecologist.
Inlets and outlets structures	Check monthly for obstructions and remove as necessary, to allow free water flow through the pond.
Silt management	Check twice a year for silt accumulation and remove as necessary.
Basin liner	Check the liner twice a year for damage (any leakage/ reduced water levels) and repair when if necessary.
Litter Management	

Litter	Check monthly for litter or other debris and remove, as necessary.
Attenuation pond litter	Check monthly for litter or other debris and remove, as necessary.
Weed Control	
Hard surfacing weed control	Check pavements and kerbs annually for weeds and spray affected areas with herbicide to keep weed free.
Paths	Remove encroaching moss/ grass from paths annually to keep edging exposed. Spray with herbicide if necessary.
Weed control within attenuation pond	Occasionally remove any pond vegetation if it spreads across the pond by hand clearing or raking, being careful not to damage the pond liner. Monitor for invasive weeds such as Japanese Knotweed and control if found.

4.2.2 Establishment Phase (Years 3-5)

Feature	Description and specification
Existing Trees and Hedgerows	
Existing trees to be retained:	Re-inspect as advised in Maintenance Phase (Years 1-2) and specify any applicable management / and any on-going monitoring to ensure trees are safe and to improve / maintain health where necessary. Preliminary recommendations made at the time of the Tree Survey can be found within P.1239.19 Arboricultural Impact Assessment
Existing hedgerow to be retained:	Prune in January / February on a 3-year rotational basis (1/3 per year) and carry out new planting, laying, or coppicing to gap up if required.
New Specimen Tree Planting, Shrub Mix Planting, and Native Hedgerows	
Works in area of soil near Wall Cotoneaster:	Soil within the south-eastern corner of the site associated with the neighbouring Wall Cotoneaster is not to be removed from the site or spread in the wild.
New tree planting:	Check double stakes are in place and replace where necessary. Remove double stakes, crossbar and webbing/tie by year 5. Annually replace dead or dying stock in winter. Hand weed around the base of tree to ensure weed free and top up mulch annually.
New mixed scrub planting:	Annually replace dead or dying stock in winter and check stakes and shelter guards are in place and replace where necessary. Remove stakes, ties, and shelter guards by year 3. Hand weed around the base of plants to ensure weed free and top up mulch annually.
Native mixed hedgerow planting:	Prune in January / February on a 3-year rotational basis (1/3 per year) and carry out new planting in winter if required. Check stakes and shelter guards are in place and replace where necessary. Remove stakes, ties, and shelter guards by year 3. Prune to encourage good establishment and a neat appearance. Prune back to a height of 2m.
Formal hedge along southern boundary landscape buffer	Trim sides only twice a year in early June and late September and carry out new planting if required. Weed control by hand to ensure planting area is weed free. Maintain a neat appearance. Allow hedge to grow up to 5m high.
Seeded Areas	
Amenity grass (Germinal AberSustain mix)	Mow every two weeks during the growing season to a height of 30mm. Apply fertiliser annually and spot treat pernicious weeds.
Wildflower seeding, Germinal WFG20Eco Species Rich Lawn mix	Cut from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed.

	<p>If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.</p> <p>Clippings should be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.</p> <p>Spot treat pernicious weeds and reseed as required.</p>
Wildflower seeding, Germinal WFG9 Wetland and Pond Area	<p>Cut from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed.</p> <p>If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.</p> <p>Clippings should be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.</p> <p>Spot treat pernicious weeds and reseed as required.</p>
Invasive weed monitoring:	Herbicide monitoring and treatment programme to control and eradicate any unlikely regrowth by competent invasive weed contractors. Two visits a year for first 4 years. Reseed as required.
Other Features	
Hard surfacing	Check annually and repair any defects.
Fencing and walling	Check annually, repair any defects, and replace when necessary.
Bat and bird provisions	Bird nest boxes to be checked annually. Bat access panels to be checked annually by a licensed bat ecologist. Repair any defects and replace when necessary. If a bat box is damaged, it should only be replaced by a licensed bat ecologist.
Inlets and outlets structures	Check monthly for obstructions and remove as necessary, to allow free water flow through the pond.
Silt management	Check twice a year for silt accumulation and remove as necessary.
Basin liner	Check the liner twice a year for damage (any leakage/ reduced water levels) and repair when if necessary.
Litter Management	
Litter	Check monthly for litter or other debris and remove as necessary.
Attenuation pond litter	Check monthly for litter or other debris and remove as necessary.
Weed Control	
Hard surfacing weed control	Check pavements and kerbs annually for weeds and spray affected areas with herbicide to keep weed free.
Paths	Remove encroaching moss/ grass from paths annually to keep edging exposed. Spray with herbicide if necessary.

Weed control within attenuation pond	Occasionally remove any pond vegetation if it spreads across the pond by hand clearing or raking, being careful not to damage the pond liner. Monitor for invasive weeds such as Japanese Knotweed and control if found.
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4.2.3 Maturing Phase (Years 6-30)

Feature	Description and specification
Existing Trees and Hedgerows	
Existing trees to be retained:	Re-inspect as advised in Maintenance Phase (Years 1-2) and specify any applicable management / and any on-going monitoring to ensure trees are safe and to improve / maintain health where necessary.
Existing hedgerow to be retained:	Prune in January / February on a 3-year rotational basis (1/3 per year) and carry out new planting if required. Prune to encourage good establishment and a neat appearance. Lay or coppice hedgerow initially between 8 to 15 years when condition of the hedge is poor. Lay or coppice hedgerow a second time after 8 to 12 years after first cut.
New Specimen Tree Planting, Shrub Mix Planting, and Native Hedgerows	
Works in area of soil near Wall Cotoneaster:	Soil within the south-eastern corner of the site associated with the neighbouring Wall Cotoneaster is not to be removed from the site or spread in the wild.
New tree planting:	Year 10 and every five years after - Formative pruning of established trees to remove crossing/rubbing branches and any other defects. Removal of competing leaders if considered appropriate. Hand weed around the base of tree to ensure weed free and top up mulch annually.
New mixed scrub planting:	Annually replace dead or dying stock in winter. Hand weed around the base of plants to ensure weed free and top up mulch annually.
Native mixed hedgerow planting:	Prune in January / February on a 3-year rotational basis (1/3 per year) and carry out new planting, laying, or coppicing to gap up if required. Prune back to a height of 2m.
Formal hedge along southern boundary landscape buffer	Trim sides twice a year in early June and late September and carry out new planting if required. Weed control by hand to ensure planting area is weed free. Prune back to a height of 5m.
Seeded Areas	
Amenity grass (Germinal AberSustain mix)	Mow every two weeks during the growing season to a height of 30mm. Apply fertiliser annually and spot treat pernicious weeds.
Wildflower seeding, Germinal WFG20Eco Species Rich Lawn mix	Cut from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed.

	<p>If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.</p> <p>Clippings should be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.</p> <p>Spot treat pernicious weeds and reseed as required.</p>
Wildflower seeding, Germinal WFG9 Wetland and Pond Area	<p>Cut from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed.</p> <p>If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.</p> <p>Clippings should be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.</p> <p>Spot treat pernicious weeds and reseed as required.</p>
Invasive weed monitoring:	Herbicide monitoring and treatment programme to control and eradicate any unlikely regrowth by competent invasive weed contractors. Two visits a year for first 4 years. Reseed as required.
Other Features	
Hard surfacing	Check annually and repair any defects.
Fencing and walling	Check annually, repair any defects, and replace when necessary.
Bat and bird provisions	Bird nest boxes to be checked annually. Bat access panels to be checked annually by a licensed bat ecologist. Repair any defects and replace when necessary. If a bat box is damaged, it should only be replaced by a licensed bat ecologist.
Inlets and outlets structures	Check monthly for obstructions and remove as necessary, to allow free water flow through the pond.
Silt management	Check twice a year for silt accumulation and remove as necessary.
Basin liner	Check the liner twice a year for damage (any leakage/ reduced water levels) and repair when if necessary.
Litter Management	
Litter	Check monthly for litter or other debris and remove as necessary.
Attenuation pond litter	Check monthly for litter or other debris and remove as necessary.
Weed Control	
Hard surfacing weed control	Check pavements and kerbs annually for weeds and spray affected areas with herbicide to keep weed free.
Paths	Remove encroaching moss/ grass from paths annually to keep edging exposed. Spray with herbicide if necessary.

Weed control within attenuation pond	Occasionally remove any pond vegetation if it spreads across the pond by hand clearing or raking, being careful not to damage the pond liner. Monitor for invasive weeds such as Japanese Knotweed and control if found.
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5 Annual Maintenance Schedule

The annual schedule summarises the maintenance operations required for a one year period, to be repeated for the first five years and should be reviewed on an annually to allow for any changes that may be required as the site develops and matures.

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
OPERATION												
Management of Existing Trees and Hedgerows												
Inspect for hazards and deteriorations in health and/ or structural integrity								X				
Pruning	In accordance with recommendations made during inspection / identification of work											
Other works	In accordance with recommendations made during inspection / identification of work											
Trim existing native hedgerow on a three-year rotation.	X											
Carry out planting to fill any gaps in hedgerow											X	
Replace dead or dying trees											X	
Crown lift trees above pavements and roads.	X											
New Specimen Tree Planting, Shrub Mix Planting, Formal hedge on southern boundary, and Native Hedgerows												
Do not remove soil associated with neighbouring Wall Cotoneaster from the site or spread into the wild	X	X	X	X	X	X	X	X	X	X	X	X
Water as required to ensure good establishment				X	X	X	X	X	X			
Basic formative pruning	X											
Check stakes, crossbar, webbing or sties, and shelter guards and adjust / replace if necessary.	X				X				X			
Top up mulch											X	
Carry out replacement of dead or dying stock of trees, mixed scrub planting, and hedgerows											X	
Formative pruning to new native hedgerow	X											
Trim hedgerow on a three-year rotation from year three	X											
Trim sides twice a year in early June and late September.						X			X			
Carry out planting to fill any gaps in native hedgerows and formal hedge on southern boundary											X	
Apply compost or fertiliser to new planting				X				X				
Management of Seeded Areas												
Mow amenity grass areas every two weeks during spring / summer to a height of 30mm				X	X	X	X	X	X	X		

First cut of Wildflower mixes (Eco species rich lawn and Wetland and Pond Area) during mid-September - 1st October and collect the arisings. Cutting height 70-100mm.									X	X		
From year 2 onwards cut Wildflower mixes (Eco species rich lawn and Wetland and Pond Area) from mid-August to early October. This can be done as one cut but preferable, and if the meadow is big enough, you will cut it in sections leaving a week to a fortnight between cuts. Ensure you collect the arisings. If the meadow is large enough, consider allowing up to a fifth to stand uncut through the winter and cut down and remove the clippings in March the following year, this will provide a habitat for invertebrates and some vertebrates over the winter. Rotate this area so a different section is left uncut each year. This more closely replicates the grazing of animals which would leave some small areas not grazed. If possible, and with the obvious exception of areas you are leaving uncut, lightly mow the sward down to 70-100mm as required throughout the winter months until March and collect the clippings.	X	X						X	X	X		X
Herbicide monitoring and treatment programme to control and eradicate any unlikely regrowth by competent invasive weed contractors. Two visits a year for first 4 years. Reseed as required.					X			X				
Spot treat weeds and reseed as required.			X									
Management of Other Site Features												
Check and fencing, walling, surfacing and street furniture. Repair when required					X							X
Check Inlets and outlets structures, silt accumulation, basin liner, and weed control of attenuation pond					X							X
Visually inspect bat and bird provisions and replace if damaged by suitably licenced ecologist.										X		
Crown lift trees above pavements and roads	X											
Check monthly for litter or other debris and remove, as necessary.	X	X	X	X	X	X	X	X	X	X	X	X
Check pavements and kerbs annually for weeds and spray affected areas with herbicide to keep weed free.										X		

6 Long Term Maintenance Schedule (Years 6-30)

The long-term management plan is a guideline for the maturing phase of the site. As mentioned earlier this should be reviewed every 5 years as a minimum to take account of site based ecological changes and amendments to legislation.

Manage and maintain the Cherry Laurel 'Rotundifolia' hedge along the southern boundary to act as a landscape buffer of up to 5m high that will provide screening and softening of views from the south.

YEAR	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Management of Trees and shrubs																									
Monitor and manage existing and new trees, mixed scrub planting.	Annually if appropriate				x					x					x					x					x
Crown lift / thin existing trees					x					x					x					x					x
Monitor for invasive species	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Management of Hedgerows																									
Remove stakes, ties, and shelter guards from whips of new hedgerows as required	x	x	x																						
Manage new and existing native hedgerows by trimming one-third each year	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Manage formal hedge along the southern boundary by trimming the sides twice a year and	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

allowing to grow up to 5m high.																									
Manage hedgerows by planting in gaps if required	x				x					x					x						x				x
Manage new and existing native hedgerows by laying or coppicing if required			Lay or coppice new hedgerows initially between 8 to 15 years when condition of the hedge is poor.										Lay or coppice hedgerow a second time after 8 to 12 years after first cut.												
Management of Seeded Areas																									
Mow amenity grass	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Wildflower mixes cut once in late summer several times over winter.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Herbicide monitoring and treatment	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Spot treat weeds and reseed as required.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Other Site Features																									
Monitor and repair fencing / surfacing and street furniture	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Visually inspect bird and bat boxes once a year and replace if damaged by suitably licenced ecologist.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Check monthly for litter or other debris and remove, as necessary.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Weed and moss control of pavement and kerbs.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

7 Summary

This report described the proposed development, the landscape design objectives and set out detailed management proposals to ensure high-quality environment within the development.

This report has:

- Described the site, proposed development and landscape design objectives;
- Set out management proposal objectives;
- Provided detailed descriptions of the management proposals with maintenance and establishment operations required for the first five years following completion; and
- Included long term management guidelines for years 6 to 30 years during the maturing phase.

The long-term management objectives within this report are to be reviewed at least every five years and adjusted in accordance with site specific requirements and legislation pertinent at the time.

Appendix 1



DO NOT SCALE
 ALL COORDINATES RELATED TO LOCAL GRID LOCATED TO OS NG BY BEST FIT TO DETAIL. EXTRACTED FROM OS DIGITAL DATA.
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- Landscape planning key:**
- Site Boundary
 - Existing trees to be retained and protected during the works.
 - Proposed ornamental planting on 400mm depth of topsoil with 75mm bark mulch.
 - Proposed native tree planting, tree pit and stake as detailed in the specification.
 - Small ornamental tree/ large shrub planting, tree pit and stake as detailed in the specification.
 - Proposed mixed native hedgerow planted in a double staggered row at 0.4m centres and 0.3m offset. Bare root transplants with 60cm tubex shelter guards.
 - Proposed single species hedgerow in a double staggered row or single row using container stock.
 - Front gardens to be turfed on 150mm topsoil.
 - Public open space to be sown with GerminAberSustain mix, or similar approved, to be sown at a rate of 40g/m2 on 150mm topsoil.
 - Wildflower seeding, GerminWFG20 Eco Species Rich Lawn, to the public open space to be sown at 10g/m2.
 - Wildflower seeding, GerminWFG9 Wetland and Pond Areas, to the existing water course to public open space to be sown at 5g/m2.
 - Native tree / shrub planting woodland to be planted as 60-80cm whip planting at 0.7m centres, for additional wildlife habitat.
 - Cheshire Pink Gravel 20mm to be laid to a depth of 3-4cm.
 - Approximate locations of rootbarrier (for the sides and bottom of the trenches for perimeter hedging), confirmed by Engineer.
 - Approximate locations of Green Blue Urban GRN20 plastic open reinforcing mesh, 20mm aperture. Only required on side of hedge trenches next to drainage system, confirmed by Engineer.

Sunnymede Cottage

attenuation pond

Refer to Dwg No. P.1239.24.05 Rev B for cross section B-B1

Refer to Dwg No. P.1239.24.04 Rev A for cross section A-A1

L	Minor amendments	18/10/24
K	Minor amendments	09/10/24
J	Minor amendments	24/09/24
I	Minor amendments	31/07/24
H	Minor amendments	21/05/24
G	Minor amendments	29/09/22
F	Minor amendments	24/03/22
E	Minor amendments	28/02/22
D	Updated to layout "...Standard 11.10.21"	13/10/21
C	Updated to layout "Planning Layout J"	16/06/21
B	Updated to layout "Planning Layout H"	25/11/20
A	Updated to layout "Planning Layout G"	07/09/20
REV	DESCRIPTION	DATE

ASCERTA
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CLIENT: Persimmon Homes
 PROJECT: Land off Hawthorne Place, Clitheroe
 DRAWING TITLE: Planting Plan (Sheet 1 of 2)
 SCALE: 1:200 @ A0
 DRAWN BY: AM
 CHECKED BY: AM
 DATE: 23/06/2020
 P: 1239.19.03

LANDSCAPE AND MAINTENANCE SPECIFICATION

All operations to comply with appropriate British Standards unless otherwise stated on drawings or in the specification.

GENERAL TREATMENT OF PLANTING AREAS

Ensure that planting areas are protected from consolidation by heavy construction plant.

For work near a retained tree: Refer to BS 5837 *Trees in relation to design, demolition & construction - Recommendations*- Section 9 (Appendix C).

Damage to Plants to be Retained: If a plant is to be retained is damaged, the plant is to be repaired or replaced by the contractor at their own expense. "Damaged" means:

- The destruction of a plant the breaking of branches or roots
- The debarking of trunks or limbs
- The contamination of root zone soil or plants from drift sprays, dust or contaminated storm water
- The damage by the placement of fill or building materials within the canopy perimeter or otherwise.

1) GROUND PREPARATION AND SOIL SPECIFICATION

Subsoil:
Before receiving topsoil, subsoil shall be loosened using appropriate equipment to a depth of 300mm. This shall be done when the subsoil is dry so as to encourage soil shattering. All stones and other objects larger than 50mm shall be removed from the prepared surface. The loosened subsoil shall be roughly levelled so that an even depth of topsoil can be achieved.

Topsoil (To Comply with British Standard 3882:2015 - Specification for Topsoil):

Imported topsoil shall be Multipurpose Grade as described in BS 3882:2015 and suitable for sustaining plant life. Stockpiling of soil shall be avoided whenever possible to minimise loss of physical quality, diffusion of oxygen and biological activity.

Any stockpiling shall not exceed 1.5 metres high and shall be sited so as to avoid risk of muddy water run-off into a watercourse, not exceeding 1.5 metres high.

The site of the stockpile will be prepared in advance by grading, removing rubbish and ensuring no fuel or chemicals were previously stored in area.

Topsoil shall be lightly consolidated in layers not exceeding 150mm using track laying machinery.

Soil shall not be handled in inappropriate conditions of weather and soil moisture i.e.

During or shortly after heavy precipitation

When soil is in a waterlogged condition

When the ground is frozen or covered by snow

When there are pools of water on the ground's surface.

Topsoil shall be laid to the following minimum depths:

150mm below new grass areas

300mm to rear gardens

400mm beneath new shrub areas.

Finished levels, after settlement, shall be as follows:

25mm above adjacent paving from new grassed areas and non-mulched shrub beds

75mm below adjacent paving and grass for mulched planting beds.

150mm below damp proof courses.

2) GROUND CONDITIONING

40 litres of compost to be incorporated into the top 200mm of each square metre of topsoil for all ornamental shrub beds.

3) PLANT AND PLANTING SPECIFICATION

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

BS 8945:2014 'Trees' from nursery to independence in the landscape

BS 3936: Part 1 1992 Nursery stock (Specification for trees and shrubs)

BS 3936: Part 4 1984 Nursery stock (Specification for forest trees)

BS 3936: Part 9 1987 Nursery stock (Specification for bulbs, corms and tubers)

BS 3936: Part 10 1990 Nursery stock (Specification for ground cover plants)

BS 4428: 1989 Recommendations for general landscaping operations.

BS 4043: 1989 Recommendations for transplanting root-balled trees, (withdrawn)

The Code of Practice for Plant Handling 1985. (Horticultural Trades Association).

Plant Stock:

Plant stock to be supplied in accordance with the size and description specified ion the plant schedule and position indicated on the most current revision of the planting plan.

Plant stock shall be healthy, vigorous, free from pests and diseases and suitably hardened off for the proposed situation of planting and lifted at a time in accordance with good nursery practice. Stock shall have a well-formed fibrous root system and be free from perennial weeds. The form of trees shall be in accordance with BS 3936: Part 1:1992, section 7, *Form of Trees*.

Plant Handling:

All plant materials shall be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in the publication, *"Plant Handling"* (Horticultural; Trades Association) and relevant sections of BS 4043: 1989 *Transplanting Root-Balled Trees*.

Tree Planting:

Trees to be pit planted following supplier recommendations. Minimum pit size: Leader with laterals tree 700 x 700 x 700mm / Heavy standard tree 1000 x 1000 x 750mm.

Pits to be prepared to base and sides of pit to be further scarified

Deciduous specimen trees to be double staked using two stakes (75mm dia.), driven into ground 300mm below bottom of pit. Base of pit to be filled with 200mm of 3:1 mix of approved topsoil / compost.

Trees to be centrally located and stem placed in an upright position. Pit to be backfilled with a 3:1 mix of an approved topsoil / compost. Backfill firmly to 50mm above previous ground level to allow for settlement.

Stakes to be saw leave 600mm above soil level.

Water each tree in same day of planting, amount of water dependant on root size and soil conditions.

All works shall be carried out to the minimum standard according to BS 3936: 1992 Part 1 Nursery Stock. Specification for Trees and Shrubs. BS 4043: 1989 Recommendations for transplanting root-balled trees.

Staking:

Stake all deciduous specimen trees with double short stakes, feathered trees with low single stake. Stakes to be round timber with chamfered tops. Position stake close to tree on windward side and drive vertically at least 400mm into bottom of pit before planting. Backfilling: consolidate material around stake. Height of stakes: cut to approximately one third of the tree height above ground level, taking care not to damage the bark. Ties: Hessian. Tying: secure tree firmly but not rigidly to stake with at least 2 ties within 25mm of top of stake.

Mulch:

All shrub beds shall be spread with a medium grade bark mulch to a settled depth of 75mm. Mulch to be free from fines, weeds, disease and contaminants.

Ornamental shrub planting:

To be set out carefully and evenly over indicated areas. Remove plants from pots and plastic containers, plant and water in thoroughly. Shrubs shall be individually pit planted in prepared pits sized to accommodate full spread of roots. Plants shall be evenly spaced over the planting area. Firm backfill by treading, ensuring the ground is not overly compacted and that the plant is positioned upright.

Native tree / shrub planting

Bare root stock shall be planted between November and March/April. Consistent in species, cultivar and clone to ensure a uniform hedge. Plants to be planted in groups of 3, 5 or 7 of the same species.

Plants shall be evenly spaced over the planting area. Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Undertake formative pruning if necessary.

New formal hedges

Consistent in species, cultivar and clone to ensure a uniform hedge. Tips of leading branches of the Cherry laurel 'Rotundifolia' with wilted leaves should be cut as the plant is being planted in the ground.

Cherry Laurel 'Rotundifolia' hedges in front gardens to be planted in a previous prepared planting trench 300mm deep and 0.6 metre wide unless stated by section drawing or statement. 100g per sq/m of blood fish and bone fertilizer should be sprinkled along the base of the trench just before each plant is healed into place with a topsoil mix. The trench is to be backfilled with 300mm of a 3:1 mix of an approved topsoil with compost. Backfill firmly to 50mm above previous ground level and creating a slightly domed shape with the highest point being at the centre of the trench to assist drainage and settlement. Planting bed to be covered with a medium grade bark mulch to a settled depth of minimum 50mm. Container plant stock to be planted centrally in a single row at 250mm spacings (4 per linear metre). Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Prune back hedges in front gardens to a height of 1 metre.

Cherry Laurel 'Rotundifolia' hedge along the southern boundary that is to be a landscape buffer to be planted in a previously prepared planting trench 300mm deep and up to 1 metre wide. Bare root stock shall be planted between November and March/April. 100g per sq/m of blood fish and bone fertilizer should be sprinkled along the base of the trench just before the plants are individually healed into place with a topsoil mix. The trench is to be backfilled with 300mm of a 3:1 mix of an approved topsoil with compost. Backfill firmly to 50mm above previous ground level and creating a slightly domed shape with the highest point being at the centre of the trench to assist drainage and settlement. Planting bed to be covered with a medium grade bark mulch to a settled depth of 75mm. Bareroot plant stock to be planted in a double row in the centre of the plant bed, 330mm between plants and 300mm between rows (6 no. plants per linear metre). Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Prune back the sides only of the landscape buffer and allow the top of the hedge to grow up to 5m high before the top is cut back.

Cherry Laurel 'Rotundifolia' hedges running along sections of the eastern boundary are to act as screening for residents to the east. Planted in a previously prepared trench 1000mm wide and 1000mm deep enclosed by ReRoot 1000 - Ribbed Root Barrier (or similar approved) along the sides of the trench and Terram 1000 Permeable geotextile membrane or similar approved. A 200mm depth stone channel will be at the bottom of the trench comprising of gravel with two perforated pipes, then 300mm depth of subsoil and 450mm depth of topsoil with compost (1 in 3 mixture) or as stated. Container stock (20 litre pots) to be used with 100g per sq/m of blood fish and bone fertilizer should be sprinkled along the base of the topsoil layer just before the plants are individually planted into place with the topsoil mix. Backfill topsoil firmly to 50mm above previous ground level and creating a slightly domed shape with the highest point being at the centre of the trench to assist drainage and settlement. Planting bed to be covered with a medium grade bark mulch to a settled depth of 50mm. 20L container stock to be planted in a single row in the centre of the plant bed, planted at 2 plants per linear metre. Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Prune back the sides only of the landscape buffer and allow the top of the hedge to grow up to 8m high.

New mixed native hedges - Double staggered row

Bare root stock shall be planted between November and March/April. Consistent in species, cultivar and clone to ensure a uniform hedge. Plants to be planted in groups of 3, 5 or 7 of the same species.

To be planted in a previous prepared planting bed 1metre wide. Planted to be centrally in a double row, 400mm between plants and 300mm between rows. Ensure plants are planted to the correct depth to correspond to the soil mark on main stems.

Prune back to a height of 2 metres.

Turfed Areas:

To be specified and laid in accordance with BS. 3936:1998 Recommendations for turf for general purposes. Turf to be Lindum Festival Turf (or similar approved). Hardwearing with a dense sward containing a mixture of 25% perennial ryegrass, 55% fescues and 20% smooth stalked meadow grass. This mix is easy to maintain and will recover well from general wear.

Turf to be laid in suitable weather conditions on a prepared bed with no weeds and a suitable slow release fertiliser applied to bed prior to laying. Turf to be watered regularly until it is well established.

Rear gardens:

Subsoil to be prepared to a depth of 300mm as per ground preparation and soil specification.

Topsoil to be supplied as per ground preparation and soil specification to a depth of 300mm, after gentle compaction and to be left bare in rear gardens.

Grass Seeding:

Seed mix shall be Germinal AberSustain mix, or similar approved. Sowing to be taken between March and October.

Topsoil shall be cultivated to a fine tilth, be free from weeds, stones and other debris. Levels to be graded to form finished levels as indicated in section, 'Topsoil'.

Roll, fertilise at 50gms/sq m, 10-14 days prior to seeding, sow at rate of 40g/m2 and lightly rake. First cut to be undertaken when grass reaches 50mm.

Wildflower Seeding:

Seed mix shall be Germinal WFG20 Eco Species Rich Lawn, or similar approved. Sowing to be taken between March and October.

Topsoil shall be cultivated to a fine tilth, be free from weeds, stones and other debris. Sow at rate of 10 g/m2 and lightly rake. First cut to be undertaken 6 weeks after sowing or when reaches 40 - 70mm.

Wildflower Seeding:

Seed mix shall be Germinal WFG9 Wetland and Pond Areas, or similar approved. Sowing to be taken between March and October.

Topsoil shall be cultivated to a fine tilth, be free from weeds, stones and other debris. Sow at rate of 5 g/m2 and lightly rake. First cut to be undertaken 6 weeks after sowing or when reaches 40 - 70mm.

Weeding:

A plant that roots directly from its base and has shallow roots is to be removed by hand, by removing the main root system.

A weed that grows from a clumped, fibrous root system is to be removed using the crowning method, by cutting the roots from the crown of the weed.

A large weed infestation is to be removed by spraying an approved chemical directly onto the target infestation.

A plant being a tree or a vine is to be removed using the cut and paint method, by cutting the base of the stem close to the ground and immediately applying herbicide to the cut.

4) MAINTENANCE AND MANAGEMENT

Plant stock and soft landscaped areas shall be maintained for a period of five years via the developers' agent or appointed Management Company during which time the following operations shall be carried out:

Regular visits:

Monthly maintenance visits to include the following operations:

- Hand weed planting beds
- Remove litter
- Sweep mulch spillage
- Re-firm plant stock as necessary
- Adjust stakes and ties as necessary
- Prune plant stock as required to encourage good form
- Check all plant stock and report signs of pests, disease, death and damage

Mulch:

Top up mulch levels (using matching material) surrounding trees and within beds to 75mm at the end of the maintenance period.

Watering:

Plant stock to receive the following quantities of water each month, depending on soil conditions and weather conditions:

Heavy Standard trees: 35 litres each month between April and September

Leader with lateral trees: 25 litres each month between April and September

Shrubs and transplants: 5 litres/plant on three occasions throughout growing season.

Watering to be undertaken during the first 24 months as needed to maintain plant health.

Grass cutting:

Grass shall be cut throughout the growing season to maintain a sward of approximately 38mm. Shall be edged, watered as necessary and clippings removed.

Wildflower cutting:

Wildflower areas shall be cut 2 times a year during the late spring and after the flower season (September / October) to maintain a sward of approximately 40-70mm. The clippings shall be left in situ for 3 days to allow seed drop, then removed to prevent nutrient build up.

Landscape buffer new tree/shrub planting:

Weed control by hand to ensure planting area is weed free. Check stakes and guards are in place and replace where necessary. Replace dead / dying stock in winter.

Plant replacements:

All dead, dying and vandalised plant stock shall be replaced, at the landscape contractor's expense, at the end of each growing season throughout the maintenance period.

Plant Schedule							
Trees							
Number	Abbreviation	Species	Specification	Pot Size	Grith	Height	
3 -	ALN GLU	Alnus glutinosa	3x; Heavy Standard; clear stem minimum 200cm; 5 breaks; RB		12-14cm	350-425cm	
4 -	BET PEN	Betula pendula	3x; Heavy Standard; clear stem 175-200cm; 5 breaks; RB		12-14cm	350-425cm	
5 -	COT COR	Cotoneaster cornubi	Branched; clear stem 125-150cm; 3 breaks	35L	8-10cm	350-400cm	
5 -	LIGLU	Ligustrum lucidum	Heavy Standard; bushy head; clear stem 150-175cm	50L	12-14cm	250-300cm	
5 -	MAG GAL	Magnolia 'Galaxy'	Leader with laterals	25L		175-200cm	
1 -	MAL TSC	Malus tschonoskii	3x; Heavy Standard; clear stem 175-200cm; 5 breaks; RB		12-14cm	350-425cm	
2 -	PIN SYL	Pinus sylvestris	Leader with Laterals: 4x; RB			200-250cm	
1 -	PRU PAD	Prunus padus	3x; Heavy Standard; clear stem 175-200cm; 5 breaks; RB		12-14cm	350-425cm	
3 -	SOR AUC	Sorbus aucuparia	3x; Heavy Standard; clear stem 175-200cm; 5 breaks; RB		12-14cm	350-425cm	
Total :29 -							
Shrubs							
Number	Abbreviation	Species	Specification	Pot Size	Density	Area	
38 -	CHO PEA	Choisya 'Aztec Pearl'	Bushy: 6 brks: C	5L	2/m ²	17.0971m ²	
34 -	COR ELE	Cornus alba 'Elegantissima'	Branched: 4 brks: C	5L	2/m ²	16.1624m ²	
40 -	ERI PIN	Erica carnea 'Springwood Pink'	Bushy: C	3L	5/m ²	7.5406m ²	
22 -	EUO GAI	Euonymus fortunei 'Emerald Gaiety'	Bushy: 9 brks: C	5-7.5L	2/m ²	9.8824m ²	
72 -	EUO QUE	Euonymus fortunei 'Silver Queen'	Bushy: 7 brks: C	5L	3/m ²	22.4198m ²	
35 -	HEB WIN	Hebe 'Mrs Winder'	Bushy: 5 brks: C	5L	2/m ²	15.2711m ²	
47 -	HEB GEM	Hebe 'White Gem'	Bushy: 7 brks: C	5-7.5L	2/m ²	21.4412m ²	
70 -	POT ELI	Potentilla fruticosa 'Elizabeth'	Bushy: 5 brks: C	5-7.5L	2/m ²	32.4994m ²	
32 -	SAN CHA	Santolina chamaeoparissus	Bushy: 8 brks: C	5L	2/m ²	14.5901m ²	
75 -	SKI RUB	Skimmia japonica 'Rubella'	Bushy: 4 brks: C	5L	3/m ²	23.8986m ²	
66 -	SKI GRE	Skimmia x confusa 'Kew Green'	Bushy: 4 brks: C	5L	3/m ²	21.0282m ²	
36 -	SPI WAT	Spiraea japonica 'Anthony Waterer'	Branched: 7 brks: C	5-7.5L	2/m ²	16.6307m ²	
37 -	SPI PRI	Spiraea japonica 'Little Princess'	Bushy: 7 brks: C	5L	2/m ²	17.6794m ²	
Total :604 -						Total :236.141m ²	
Formal Hedge							
Number	Abbreviation	Species	Specification	Height	Pot Size	Density	Length
430 -	PRULARO	Prunus laurocerasus 'Rotundifolia'	Bushy: 7 brks: RB	80-100cm		0.33Ctr	Double Staggered at 0.3m offset 70.7864m
726 -	PRU ROT	Prunus laurocerasus 'Rotundifolia'	Bushy: 2 brks: C	40-60cm	2L	0.25Ctr	178.3349m
34 -	PIR	Prunus laurocerasus 'Rotundifolia'	Bushy: 8 brks: C	175-200cm	20L	2/m	16.5091m
Total :1190 -							Total :265.6304m
Native Hedging Mix (Hawthorn)							
Number	Abbreviation	Species	Specification	Height	Pot Size	Density	Length
89 -	COR AVE	Corylus avellana	1+2: Transplant - seed raised: Branched: 3 brks: B	60-80cm		0.4Ctr	Double Staggered at 0.3m offset 17.1056m
473 -	CRA MON	Crataegus monogyna	1+1: Transplant - seed raised: B	60-80cm		0.4Ctr	Double Staggered at 0.3m offset 94.0805m
133 -	ILE AQU	Ilex aquifolium	Bushy: 3 brks	40-60cm	3L	0.4Ctr	Double Staggered at 0.3m offset 25.6583m
89 -	PRU AVI	Prunus avium	1+1: Transplant - seed raised: B	60-80cm		0.4Ctr	Double Staggered at 0.3m offset 17.1056m
89 -	ROS CAN	Rosa canina	1+1: Transplant - seed raised: Branched: 3 brks: B	60-80cm		0.4Ctr	Double Staggered at 0.3m offset 17.1056m
Total :873 -							Total :171.0556m
Mixed scrub							
Number	Abbreviation	Species	Specification	Height	Pot Size	Density	
13 -	COR AVE	Corylus avellana	1+2: Transplant - seed raised: Branched: 3 brks: B	60-80cm		0.7Ctr	
21 -	CRA MON	Crataegus monogyna	1+1: Transplant - seed raised: B	60-80cm		0.7Ctr	
9 -	ILE AQU	Ilex aquifolium	Bushy: 3 brks	40-60cm	3L	0.7Ctr	
5 -	PRU PAD	Prunus padus	1+1: Transplant - seed raised: B	80-100cm		0.7Ctr	
13 -	PRU SPI	Prunus spinosa	1+1: Transplant - seed raised: Branched: 2 brks: B	60-80cm		0.7Ctr	
9 -	ROS ARV	Rosa arvensis	1+0: Seedlings: Branched: 2 brks: B	50-60cm		0.7Ctr	
9 -	ROS CAN	Rosa canina	1+1: Transplant - seed raised: Branched: 3 brks: B	60-80cm		0.7Ctr	
5 -	SAMB NIG	Sambucus nigra	1+1: Transplant - seed raised: Branched: 3 brks: B	60-80cm		0.7Ctr	
5 -	VIB OPU	Viburnum opulus	1+2: Transplant - seed raised: Branched: 3 brks: B	60-80cm		0.7Ctr	
Total :89 -							



Acer campestre



Alnus glutinosa



Betula pendula



Cotoneaster cornubi



Ligustrum lucidum



Pinus sylvestris



Magnolia 'Galaxy'



Prunus padus



Sorbus aucuparia



Malus tschonoskii

DO NOT SCALE
ALL COORDINATES RELATED TO LOCAL GRID
LOCATED TO OS NG BY BEST FIT TO DETAIL
EXTRACTED FROM OS DIGITAL DATA.
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REV	DESCRIPTION	DATE
L	Minor amendments</	