Date: October 2023- Vs 1





WOOD WALK, HOYLAND, BARNSLEY

LANDSCAPE MANAGEMENT PLAN

The management plan is intended to discharge planning conditions for the development of 83no. detached dwellings on land off Wood Walk, Platts Common, Barnsley. The plan is to be handed to the building owner/ occupants/ management company/ contractor, or whoever is responsible for the grounds maintenance of the site.

The plan has been prepared and coordinated by Above Zero Landscape Architecture Ltd on behalf of Yell Con Limited

Landscape Institute Registered Practice

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Above Zero Reference:	064.01_Wood Walk, Barnsley, Landscape MP

Issue Version	Status	Prepared by	Checked	Date
VS1	Final	ES	TS	19.10.2023

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1.0 Introduction

Background and Purpose of Management Plan

1.1 This management plan (MP) has been prepared in relation to the development of 83no. detached dwellings on land off Wood Walk, Platts Common, Barnsley. The purpose of this document is to provide a MP for the management of soft landscape areas within the proposed development site for a period of 5 years. The MP sets out guiding principles, aims and objectives. This allows those responsible for the management and maintenance of the site (owner, tenant, management company, contractor) to understand the existing and proposed landscape features with the development as well as implications for ongoing maintenance of the site.

1.1 The development comprises private residential dwellings and curtilages, access roads communal open space and verges. An area of open space, posited centrally in the development has been provided with a footpath linking Wood Walk (B6096) to the rear of the development. An area of existing woodland to the east is retained and will be accessible to new residents.

1.2 The areas of open space covered by this plan are shown on the illustration below

1.3 The site proposes to retain a number of existing landscape features, including an area of woodland to the east, 2no individual mature trees and hedgerows.

1.4 Proposed open spaces and verges also contain a variety of newly created landscape features, including ornamental shrubs, hedgerows, trees, amenity grassland, species rich grassland and also swathes of bulb planting.

Soft landscape areas to be managed under the site management plan



1.5 This MP should be read in conjunction with information contained on the following drawings:

- 064.01.01- Soft Landscaping Key
- 064.01.02- Soft Landscape Layout (Plan 1 of 4)
- 064.01.03- Soft Landscape Layout (Plan 2 of 4)
- 064.01.04- Soft Landscape Layout (Plan 3 of 4)
- 064.01.05- Soft Landscape Layout (Plan 4 of 4)
- 064.01.06-Schedules & Outline Specification (Plan 1 of 2)
- 064.01.07-Schedules & Outline Specification (Plan 2 of 2)
- 064.01.08-Soft Landscape Phasing and implementation Plan

Drawing are shown in Section 3 below.

1.6 Maintenance schedules and a maintenance specification are provided in Sections 4 & 5 of this report. These sets out the detailed maintenance requirements for the existing and proposed soft landscape features. Maintenance of the site must be carried out as per the requirements set out in the specification. Any discrepancies between this plan, the drawings and specification must be highlighted to site owners and overall management staff.

Planning Requirements

1.7 This management plan supports the application to discharge condition 16 of planning application decision reference 2021/1150 as follows:

'No building or use hereby permitted shall be occupied (or use commenced) until details of arrangements for the future management and maintenance of proposed carriageways, footways, footpaths and landscaped areas not put forward for adoption as maintainable at public expense within the site have been submitted to and approved in writing by the LPA. On occupation of the first dwelling (or building) within the site, the streets shall be maintained in accordance with the approved management and maintenance details.'

Reason: *'To ensure that all private streets and landscaped areas are appropriately managed and maintained to ensure the safety of all users.'*

Monitoring and Review

1.8 Annual monitoring reports against measurable targets such as levels of litter, condition of planting, health of mature trees, complaints from residents and instances of anti-social behaviour. The outcomes of this monitoring will form part of a Site Management Monitoring Report to be submitted by the management company to the site owner annually. The report will include management operations undertaken and any actions outstanding or required within the following year that fall outside of this plan and maintenance specification.

1.9 This management plan will be reviewed annually by the site owner, management company and other interested parties to ensure that the aims of the plan are being met. The success of the management company shall be reviewed through regular meetings and inspections including:

- Annual Site Meeting following submission of annual report;
- Quarterly site inspections and reports; and
- Other unscheduled inspections made as required.

1.10 After 5 years the management plan will be reviewed and updated. This will review the type and frequency of maintenance operations to ensure the continued high-quality management of the site in accordance with the design philosophy and habitat requirements as the site establishes and matures.

Content

1.11 The structure of this plan has been set out under the following headings:

- Introduction
- Baseline Information
- Development Proposals
- Site Management
- Implementation of the Management Plan
- Specification for Maintenance

2.0 Baseline Information

Site Location

2.1 The site is situated to the north of Wood Walk (B6096). on the edge of the the town of Hoyland Common. The site is surrounded by highways on all but the western edge, with a thicket of vegetation and woodland between the highway and site to the northern and western sides. The site abuts an existing residential development to the west (Silkstone View) and one single detached property in the south west corner.

Site Description

2.2 The site area is roughly an oblong shape 350m long and extending back from Wood Walk by c.100m, this equates to a site area of approximately 3.6 Hecates. The site has a gentle rise south to north but the character can generally be described as being flat.

2.3 As discussed above the northern and eastern boundary is well vegetated with trees and shrubs, The vegetation to the north is outside the site boundary although the woodland to the east extends across into the site. The site has an open character from the Wood Walk, the hedgerow along this boundary is made up of a mixed species of trees, shrubs, scrub and grass. In places but very gappy. An existing hedgerow, presumably from a former field boundary extends northward into the site from the southern boundary. A single ash tree is situated at the end of this hedgerow. This hedgerow and tree are landscape features proposed to be retained as part of the public open space on site.

2.4 The vegetation within the site is comprised of arable agricultural land which had been left fallow, with colonising weeds and wildflowers.

Existing photographs of the site are shown below and on the following page. (Photographs taken June 2021)

Southern boundary (Wood Walk)



Site area with view towards northern boundary



Single ash tree with former hedgerow extending into the site



Mown tracks and woodland to the east



Western boundary to vegetation and neighbouring dwellings.



3.0 Development Proposals

Landscape Proposals

3.1 Soft landscape proposals are shown on the following drawings. Proposals include the retention of existing trees, woodland and hedgerows together with planting 79no. new trees, over a kilometre of native hedging, over 400 linear metres of ornamental hedging, areas of shrub and herbaceous planting, wildflowers meadows , amenity grass and bulbs.

3.2 A maintenance specification has been provided within section 6 of this plan which sets out the detailed landscape maintenance requirements for the establishment and continued maintenance of new habitat areas across the site.

Key to Soft Landscape Drawings (064.01.01)



Soft Landscape Layout 1 of 4 (064.01.02)



Soft Landscape Layout 2 of 4 (064.01.03)



Soft Landscape Layout 3 of 4 (064.01.04)



Soft Landscape Layout 4 of 4 (064.01.05)



KEY

Existing Trees and Vegetation

- Existing Trees
- Existing Woodland/ Hedgerows

Proposed Trees, Hedges and Vegetation

- Trees (Proposed) (See Annotation and Schedules)
- Ornamental Planting (See Schedule)
- Single Species Hedging (See Annotation and Schedules)
- Mixed Species Native Hedging (See Annotation and Schedules)
- Wildflower and Grassland Meadow Mixture (EM1 by Emorsgate Seeds)
- Amenity Grass
- Tree Root Barrier (Indicative, to be developed with project drainage and structural engineers)

Ecological Enhancement

- Habitat Integrated Bat Boxes (9)
- Schwegler Type 24 Brick Bird Boxes (5)
- Schwegler Swift Brick (4)
- Bee Brick (5)
- Schwegler Insect House-Insect Tower (5)
- Hedgehog House (10)
- Hedgehog Highway Holes

For Planning
Do not Scale from Drawing

Rev C:	Layout Revision/ Bio Enhancement	28.09.2022
Rev B:	Client Amendments	25.03.2022
Rev A:	Client Amendments	17.03.2022

Project: Wood Walk, Barnsley

Drawing Title: Soft Landscape Layout (Plan 4 of 4)

Scale: A3: 1/500 A1: 1/250		Date:	18/08/2021
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Planting Schedules and Outline Specification 1 of 2 (064.01.06)



General Layout Plan 1/ 2,500 @ A3

Outline Specification for Planting

Trees and shrubs planted shall comply with BS.3936 (Specification of Nursery Stock) and shall be planted in accordance with BS.4428 (General Landscape Operations) and BS8545:2014 ' Trees from nursery to dependence in the Landscape'.

Bare root and root-balled stock to be planted in the dormant season.
All planting stock to be clearly labelled on delivery with the full botanical name. Plant stock to be approved prior to delivery to site and planting and trees be set out by Landscape Architect. All topsoil to be of good quality AS-DUG in accordance with BS 3882.2015. Depths of topsoil (Turf -150mm), (Shrubs- 300mm), Hedgerows (350mm) over free draining subsoil.

Organic soil improvement compost to be dug into all planting areas and used at 1cubic m per 10m2. All planting beds to be mulched in 75mm depth medium grade bark mulch immediately after planting.

If very wet or very dry conditions are found in proposed planting areas the landscape architect shall review planting locations and/or species.

Tree pits to be dug 400mm larger than rootball in any direction. Side and base of pit to be forked over to aid drainage help root establishment. Tree pit to be back-filled with a mix of:

- *1 part 'Melcourt topgrow' (or similar)* tree planting compost;
- Mycorrhizal Fungi; and
- 3 parts good quality, as dug topsoil.

1m2 area of medium grade bark mulch to be placed at the base of each trees to a depth of 75mm. Mulch to be maintained at size and depth for two growing seasons.

Tree Stakes

Stakes to be 75mm diameter tanalised softwood and pointed at one end. Top of stake to be 600mm above ground level and fixed to tree with 1 No suitable rubber tie. Stake to be firm in ground, position stake at time of planting.

Any queries in relation to planting schedules, layout or planting stock to be raised with Landscape Architect.

Suitable tree root barriers to be used on boundaries with hard-standing, walling, services, proposed and existing buildings.

Tree Planting Schedule

Name	Form	Age	Girth (cm)	Height (cm)	Clear stem (cm)	Root condition	Breaks	Nr of Trees
Amalanchier arborea 'Robin Hill'	Standard (extra heavy)	3x	12-14	300-350	175-200	RB	5	12
Cercis canadensis 'Forest Pansy'	Standard (Selected)	3x	10-12	min 350	min 200	RB/C		8
Cornus kousa 'China Girl'	Multi stem			min 150		RB/C		4
Crataegus laevigata 'Paul's Scarlet'	Standard (extra heavy)	3x	14-16	400-450	min 200	RB		15
Malus 'Eveneste'	Standard (extra heavy)	3x	14-16	400-450	min 200	RB	5	10
Sorbus aucuparia	Standard (extra heavy)	3x	14-16	425-600	175-200	RB	5	6
Sorbus 'Joseph Rock'	Standard (extra heavy)	3x	14-16	425-600	175-200	RB	5	9
Prunus Amanogawa	Standard (extra heavy)	3x	14-16	450-600	min 200	RB		4
Prunus Sunset Boulevard	Standard (extra heavy)	3x	14-16	400-450	min 200	RB	5	9
Quercus robur	Standard (extra heavy)	3x	16-18	425-600	175-200	RB	5	2
Total								79

Single Species Hedgerow Planting Schedule

Drawing Code	Plant name	Height (cm)	Root Condition	Number of times Transplant	Size (L)	Habit	Breaks	Density/ lin m	Length (m)	Total No. Plants
	Hedgerows (Double staggered row)									
Cb	*Carpinus betulus*	60-80	B	1+1 or 1/1				5	56	280
Cd	*Choisya x dewitteana 'White Dazzler'*	30-40	C		3L	Bushy	4	5	26	130
EDS	*Excallonia 'Donald Seeding'*	30-40	C		3L	Bushy	4	5	76	380
EI	*Excallonia 'Iveyi'*	30-40	C		3L	Bushy	4	5	22	110
GI	*Griselinia littoralis*	30-40	C		3L	Bushy	4	5	42	210
Oxh	*Olearia x haastii*	30-40	C		3L	Bushy	4	5	48	240
Pl	*Prunus lusitanica*	40-60	C		3L	Bushy	4	5	80	400
PRF	*Pyracantha 'Red Firethorn'*	40-60	C		2L	Leader with Laterals	2	5	45	225
Sj	*Skimmia japonica 'Rubella'*	30-40	C		3L	Bushy	3	5	16	80

Mixed Species Native Hedgerow Planting Schedule

Plant name	Common Name	Height (cm)	Root Condition	Number of times Transplant (min)	Form	Length (lin.m)	Plants/ lin.m	Total Number of Plants
Hedgerows (Double staggered row. 5 per m)								
Corylus avellana	*Hazel*	60-80	B	1+1	Branched	10	5	50
Crataegus monogyna	*Hawthorn*	60-80	B	1+1	Transplant	135	5	675
Ligustrum ovalifolium	*Wild Privet*	60-80	B	1+1	Branched	35	5	175
Ilex aquifolium	*Holly*	60-80	B	1+1	Leader and laterals	25	5	125
Viburnum opulus	*Gulder Rose*	60-80	B	1+1	Branched	10	5	50
Viburnum lantana	*Wayfarin g tree*	60-80	B	1+1	Branched	14	5	70
						229		1145

All new hedgerows to include post and 3 wire fencing where no other adjacent fencing type has been specified.

Rev C:	Layout Revision/ Bio Enhancement	28.09.2022
Rev B:	Client Amendments	25.03.2022
Rev A:	Client Amendments	17.03.2022

Project:
Wood Walk, Barnsley

Drawing Title:
Planting Schedules and Outline Specification 1 of 2

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Planting Schedules and Outline Specification 2 of 2 (064.01.07)

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Ornamental Shrub, Indicative Planting Schedule

Plant name	Height (cm)	Root Condition	Size (L)	Habit	Breaks	Planting Mix (m2)	Density (per m2)	Total Number Plants
Aucuba japonica' Rozanne'	20-30	C	3L	Bushy	3	4	3	12
Cornus canadensis	15-20	C	2L	Bushy	9	4	4	16
Euonymus fortunei 'Emerald Gaiety'	20-30D	C	3L	Bushy	7	4	3	12
Euonymus fortunei 'Silver Queen'	20-30D	C	2L	Bushy	3	6	2	12
Gaultheria mucronata 'Mother of Pearl'	20-30	C	2L	Several shoots	3	4	4	16
Hebe 'Nicola's Blush'	20-30	C	2L	Bushy	5	6	4	24
Hebe 'Mrs Winder'	30-40	C	3L	Bushy	5	6	5	30
Hebe 'Red Edge'	30-40	C	3L	Bushy	5	6	3	18
Hydrangea 'Dart's Little Dot'	40-60	C	3L	Branched	5	4	3	12
Hydrangea macrophylla 'Lanarth White'	40-60	C	3L	Branched	5	6	3	18
Lonicera nitida 'Baggeesen's Gold'	30-40	C	3L	Bushy	2	4	3	12
Pachysandra terminalis	15-20	C	3L	Several shoots	7	6	3	18
Philadelphus 'Belle Etoile'	30-40	C	3L	Branched	5	3	3	9
Pittosporum tenuifolium 'Tom Thumb'	30-40	C	3L	Branched	3	6	3	18
Prunus laurocerasus 'otto luyken'	30-40	C	3L	Bushy	3	6	3	18
Rosa 'Kent'	40-60	C	3L	Bushy		5	3	15
Rosa 'Lancashire'	40-60	C	3L	Bushy		4	3	12
Rosa 'Moonlight'	40-60	C	3L	Bushy	4	4	3	12
Rosmarinus officinalis 'Miss Jessopps Upright'	30-40	C	3L	Branched	4	6	3	18
Sarcococca humilis	20-30	C	3L	Bushy	7	4	3	12
Skimmia x confusa 'Kew Green'	30-40	C	3L	Bushy	3	6	3	18
Spirea thunbergii	40-60	C	3L	Branched	5	4	3	12
Viburnum davidii	40-60	C	3L	Bushy		5	3	15
Viburnum x juddii	40-60	C	3L	Branched	5	8	3	24
Viburnum opulus 'Compactum'	60-80	C	3L	Bushy	4	6	3	18
		Totals				127		401

Ornamental Planting- Proportion of Mix

	Total Area	Shrubs (%/ m2)		Herbaceous Perennials and grasses (%/m2)		Total (m2)
Unit	(m2)	%	(m2)	%	(m2)	
Ornamental Planting	364	35	127	65	237	364

Herbaceous, Perennial and Grass, Indicative Planting Schedule

Plant Name	Root condition	Size	Propagation	Planting Mix	Density (m2)	Total Number Plants
Achillea 'Terracotta'	C	1L	V	8	6	48
Anemanthele lessoniana	C	1L		8	6	48
Armeria maritima	C	1L	S	7	6	42
Astilbe 'Deutschland'	C	1L	S	8	6	48
Bergenia 'Beethoven'	C	1L	V	8	6	48
Brunnera macrophylla	C	1L	V	7	6	42
Calamagrostis x acutiflora 'Karl Foerster'	C	1L	V	5	6	30
Calamagrostis brachytricha	C	1L	V	5	6	30
Carex oshimensis 'Evergold'	C	1L	V	8	6	48
Deschampsia cespitosa 'Goldtau'	C	1L	V	8	6	48
Dryopteris erythrosora	C	1L	S	8	6	48
Epimedium x perralchicum 'Frohnleiten'	C	1L	V	8	6	48
Geranium macrorrhizum	C	1L	V	8	6	48
Geranium phaeum 'Album'	C	1L	V	8	6	48
Geranium 'Wargrave Pink'	C	1L	S	8	6	48
Geum 'mai tai'	C	1L	S or V	8	6	48
Hakonechloa macra	C	1L		8	6	48
Helleborus foetidus	C	1L	S	8	6	48
Heuchera 'Ebony and Ivory'	C	1L	S or V	8	6	48
Iris reticulata	C	1L	V	8	6	48
Miscanthus sinensis 'Ferner Osten'	C	1L	V	8	6	48
Origanum vulgare 'Aureum'	C	1L	S	8	6	48
Persicaria affinis 'Superba'	C	1L	S or V	12	6	72
Rudbeckia fulgida var sullivantii 'Goldstrum'	C	1L	V	8	6	48
Salvia nemorosa 'Ostfriesland'	C	1L	V	8	6	48
Salvia x superba	C	1L	V	8	6	48
Sedum spectabile 'Brilliant'	C	1L	V	8	6	48
Scabiosa 'Butterfly Blue'	C	1L	V	8	6	48
Stipa tenuissima	C	1L	S or V	8	6	48
Thymus 'Hartington Silver'	C	1L	V	8	6	48
		Totals		236		1416

Bulb Planting Schedule

Plant Name	Form	Grade	Density/m2	% of Area	Area	Number of Bulbs
Crocus (mixed colours)	Bulb	5./6	15	20	300	900
Galanthus nivalis	Bulb	5./6	15	10	300	450
Hyacinthoides non-scripta	Bulb	8./9	15	30	300	1350
Narcissus 'Tete a Tete'	Bulb	10./12	15	40	300	1800

Bulbs to be planted randomly in front of hedgerows and within Public Open Space

Rev A: Client Amendments 17.03.2022

Project:
Wood Walk, Barnsley

Drawing Title:
Planting Schedules and Outline Specification 2 of 2

Scale: A3: 1/500 A1: 1/250

Date: 18/08/2021

Status: Planning

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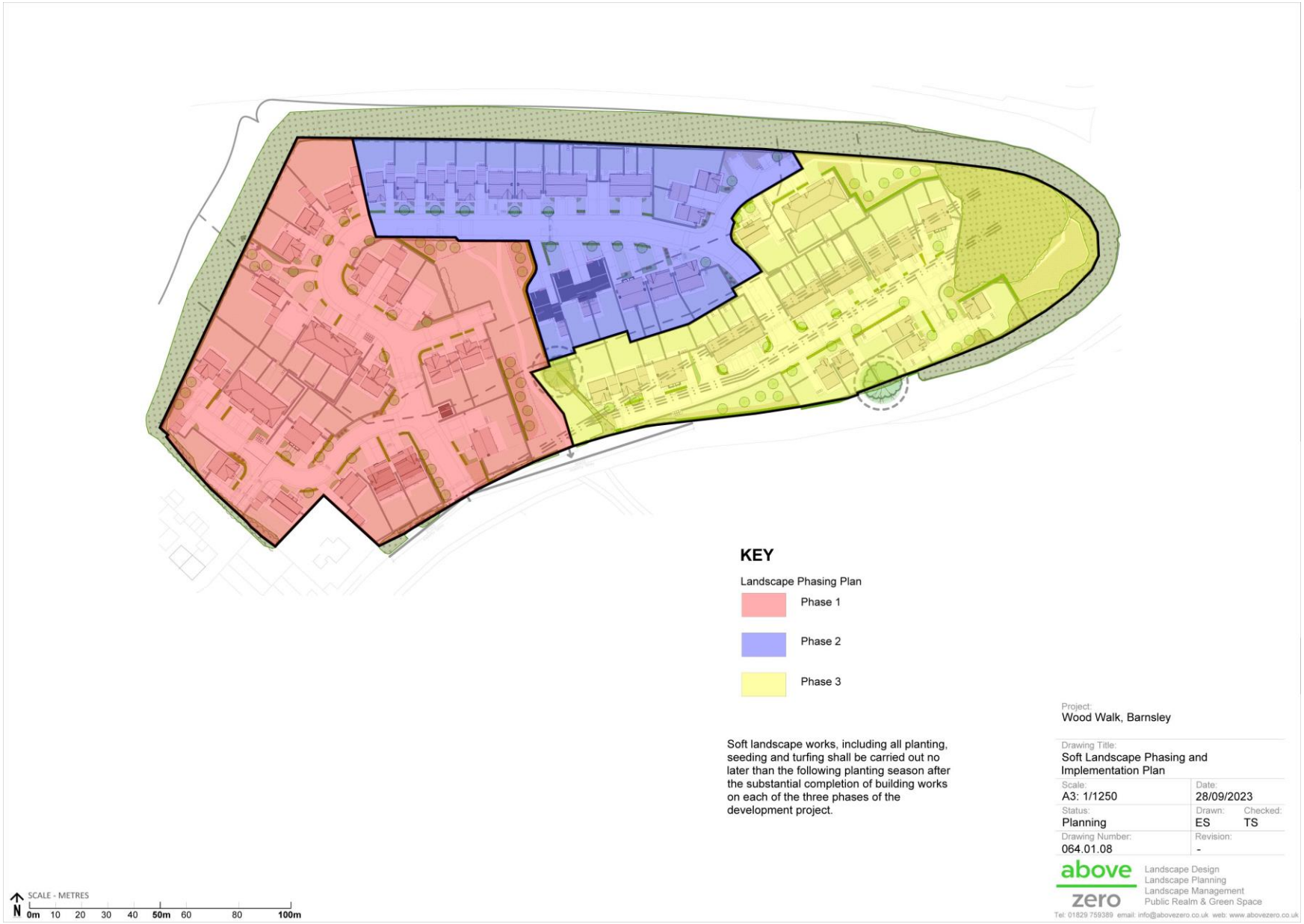
Drawing Number: 064.01.07

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Soft Landscape Phasing and Implementation Plan (064.01.08)

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4.0 Site Management

Long-term Design Objectives

4.1 The residential site has been designed to retain existing landscape features including trees and hedgerows.

4.2 New planting, including trees, hedges and meadow grass has been chosen to integrate the development into the landscape, soften the appearance of new build housing and provide an attractive welcoming environment to live and visit.

4.3 There are 6 strategic design objectives for the scheme:

1. Retain and protect the site's valued landscape features and provide new landscape features that will sympathetically integrate into the wider environment and mature to create an attractive setting for residents and visitors.

2. Maintain and enhance existing and proposed habitats to ensure they develop naturally and thrive.

3. Ensure the landscape is high quality yet robust and complementary to the architectural style of the buildings.

4. Provide a tidy, safe and well-maintained environment for residents and visitors

5. Ensure that landscape proposals are cost effective and not overly onerous or unpractical to develop and manage.

6. Provide an environment which local people care for and promotes active engagement in the management and maintenance of it.

Objectives for Specific Landscape Features

There are various landscape elements/habitats proposed for the site which have varying management requirements. The landscape features are listed below and can be seen on the approved landscape layouts for the site (above). Management objectives and tasks are described in detail on the following pages.

Existing Landscape Features

1. Existing Mature Trees
2. Established Hedgerows

Proposed Landscape Features

3. New Trees
4. New Hedgerow
5. Shrub and herbaceous planting
6. Amenity grass
7. Species Rich Meadow
8. Bulbs with Amenity Grassland

Landscape Feature 1: Existing Mature Trees

Objective

W1 Allow trees to continue to develop naturally, selectively prune for visual amenity and safety.

W2 Retention of deadwood or small, low brash piles as habitat features

W3 Monitor trees for condition and safety. If trees are thought to be diseased, take action to prevent disease spreading.

*NOTE: Obtain correct permissions from local authority prior to any work on protected trees or trees with conservation areas.

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspection of trees by a trained arboriculturalist for hazards, tree safety and disease (Objective W3)		Every 2 years.	■	■	■	■	■	■	■	■	■	■	■	■
Carry out selective pruning as required to main visual amenity and remove any crossing, damaged or diseased limbs. Carry out any recommendations contained in tree condition reports. (Objective W1 &W3)	1	1 to 5	■	■								■	■	■
Annual inspection to ensure tree roots are not causing damage to nearby foundations, pavings or roads. (Objective W3)	1	1 to 5	■	■								■	■	■
Carry out tree works as required. Leave some dead wood within small, low brash piles in appropriate locations to provide habitat (Objectives W2)	As required	1 to 5	■	■								■	■	■
Carry out selective pruning as required to ensure tree crown clearance from the ground is maintained at a minimum of 2m to aid access and natural surveillance. Selective removal of limbs and branches. (Objective W1)	As required	1 to 5	■	■								■	■	■
Check any bird and bat boxes are secure. Reposition if they are continually not in use. (W2)	1	Every 5 years	■	■								■	■	■

Landscape Feature 2: Established Hedgerow

Objective
H1 Hedgerow to be managed proactively to maintain structure to provide bird nesting habitat.
H2. Introduction of native species to increase diversity of plants.
H3 Manage hedgerow to prevent conflicts with people, built environment.
H4. Manage hedgerow and maintain visibility where required (not more than 900mm in height).

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter and detritus from within hedgerows as part of fortnightly site cleanse (Objectives H1 and H3)	26	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Trim/face up hedgerows twice annually to maintain form and encourage bushy growth avoiding bird nesting season (March to August). Trim/ face and top to maintain clear visibility splays on highway and road junctions and ensure footpaths and roads are not obstructed. (Objectives H3 and H4)	2	1 to 5		■							■			
Gap up existing hedgerow with new planting stock where there are existing gaps or to replace thick stemmed or 'woody' species such as sycamore with young stock. (H1 & H2)	1	1 to 5	■	■								■	■	■
Remove any ivy from hedgerows by cutting at the base and carefully removing stems (Objective H3)	2	1 to 5		■							■			

Landscape Feature 3: New Trees

Objective

T1 To allow trees to successfully establish to provide an attractive setting to the residential area whilst ensuring a safe environment.

T2 Management to provide conditions where a healthy tree root system and canopy will develop.

T3 Monitor trees for signs of disease and take action to prevent the spread through the site.

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspect guys, stakes and ties regularly for firmness and support. Adjust ties twice annually. Remove ties and supporting posts once trees have established. Straighten leaning trees or refirm trees as required (Objectives T1 and T2)	12	1 to 5			*						*			
Maintain loose mulch around base of trees (Objectives T1 and T2)	2	1 to 5												
New trees to be watered as required to ensure successful establishment of trees. Programmed fortnightly during the growing season and more during prolonged periods of drought. Watering not to take place if rootball already looks saturated (Objectives T1 and T2)	As required	1 to 5												
Carry out hand weeding or spot spraying to vegetation within 0.5m of base of tree (Objectives T1 and T2)	Monthly	1 to 5												
Fertilise and aerate trees which are not thriving (Objectives T1 and T2)	2	1 to 3												
Replacement of failed tree planting in the next available planting season (Objective T1)	As required	1 to 3												
Formative pruning to maintain health and vigour. Annual crown lifting, pruning, thinning and shaping of trees as required. (Objective T2)	1	5												
Undertake safety inspections by an arboriculturalist to check for damage and diseases. Carry out remedial works as required. Also check roots are		Every 2 years.												

not causing damage to roads, pavements or buildings. If they are report to management team and take effective, appropriate action (Objective T3)														

Landscape Feature 4: New Hedgerows

Objective
H1 Hedgerow to be managed proactively to maintain structure to provide bird nesting habitat.
H2 Manage hedgerow to prevent conflicts with people, built environment and maintain visibility.
H3. Ensure newly planted hedgerows establish and thrive.
H4. Manage hedgerow and maintain visibility where required (not more than 900mm in height).

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter and detritus from within hedgerows as part of fortnightly site cleanse (Objectives H1 and H2)	26	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Replant/ gap up hedgerow where plants have not established or have died. Ensure species are as per the original specification. (Objective H3).	1	1 to 2	■	■	■								■	■
Keep area weed free through regular hand weeding (Objectives H1 and H3)	12	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Watering as required during establishment particularly during times of prolonged drought. (Objective N1)	As required	1 to 2				■	■	■	■	■	■			
Keep area beneath new hedgerow mulched with c. 75mm depth bark, until hedge thickens and becomes established	1	1 to 2	■	■	■	■	■	■	■	■	■	■	■	■
Trim/face up hedgerows twice annually in first 3 years to maintain form and encourage bushy growth avoiding bird nesting season (March to August). Maintain clear visibility splays on highway and road junctions and ensure footpaths and roads are not obstructed. (Objectives H1/ H4)	2	1-3									■			
Trim/face up hedgerows annually years to maintain form and encourage bushy growth avoiding bird nesting season (March to August). Maintain clear visibility splays on highway and road junctions and ensure footpaths and roads are not obstructed. (Objectives H1/ H4)	1	4-5									■			

Fertiliser application in spring and autumn as required (Objective H2)	2	1 to 3				■					■				
Manage ivy from hedgerows by cutting at the base and carefully removing stems (Objective H2 &H3)	1	1 to 5			■						■				

Landscape Feature Type 5: Shrub and Herbaceous Planting

Objective

S1 Maintain a neat and tidy appearance to provide an attractive setting to the development through ensuring successful plant establishment.

S2 To achieve all year interest through appropriate management of ornamental species.

S3. Maintain and enhance the habitat within the wildlife area for the benefit of intended fauna species.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter from planting beds as part of fortnightly site cleanse. (Objective S1/S3)	26	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Remove weeds from all planting beds by hand weeding during the growing season. Pull up weeds to aid successful establishment and maintain a tidy appearance. (Objective S1/S3)	7	1 to 5			■	■	■	■	■	■	■			
Maintain mulch within ornamental planting beds to a depth of 75mm (Objective S1)	Twice annually	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Fertiliser application in spring and autumn (Objectives S1 and S2)	2	1 to 5				■					■			
Prune, trim and dead head shrub and herbaceous planting in accordance with species requirements to maintain vigour and growth. Retain seed heads (herbaceous and grasses) over winter to provide interest and food source and cover for wildlife. Cut back herbaceous plants and grasses in Spring. (Objective S2)	As required	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Remove any failed or diseased planting as soon as possible, replace in the next available planting season. (Objective S1/S3)	As required	1 to 5	■	■								■	■	■

Landscape Feature 6: Amenity Grassland

Objective
G1 To maintain a tidy appearance and ensure safe private usage

Operation/Prescription	Frequency per annum	Years applicable/ or frequency over the 5-year plan period	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
First cut of grass to be to 50mm height. Arisings removed from site (Objective G1)	1	1			■									
Fortnightly cut during the growing season to maintain a height of 40mm. Spread arising evenly over grass areas. (Objective G1)	18	1 to 5				■	■	■	■	■	■	■		
Cultivate and re-seed as required (Objective G1)	As required	1 to 5				■	■	■	■	■	■			
Spring and autumn slow release fertiliser application (Objective G1)	2	1 to 5			■						■			
Carry out weed control as required including spot treatment using selective herbicide on noxious weeds such as ragwort, nettles, thistles, dock and willowherb. (Objective G1)	As required	1 to 5			■	■	■	■	■	■	■			

Landscape Feature Type 7: Species Rich Meadow

Objective

NG1 Management of meadow grassland to encourage diverse plant communities but discourage perennial and annual weeds and amenity grasses.

NG2 Manage scrub and ruderal vegetation to prevent it becoming established.

NG3 Provide a wildlife corridor and habitat to provide a food source for pollinators and habitat for small mammals.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Cut meadow grassland to a height of 40-60cm during the first year to discourage annual weeds. Remove arisings from site. (Objectives NG3)	3	1				■			■			■		
Annual cut to a height to 60cm in height between late July to mid-August (for wildlife benefit carry out a late cut in September every 3rd year) to allow a diverse sward to develop. Allow seed to drop before removing arisings from site. (Objectives NG1, NG2, NG3 and NG4)	1	2 to 5							■	■	■			
Weed control achieved by hand removal and spot spraying. (Objective NG3)	As required	1 to 5			■	■	■	■	■	■	■			
Remove any invading scrub annually. (Objectives NG3)	As required	1 to 5	■	■							■	■	■	■
5 yearly inspection of meadow areas to ensure maintenance regime is encouraging diversity. Carry out targeted remedial works (additional planting, seeding or amend maintained regime) if single species dominate or if there is a high proportion of perennial weeds such as docks, thistles and nettles. (NG1)	Every 5 years	5					■	■	■					

Habitat Type 8: Bulbs within Amenity Grassland

Objective
B1 Establish and maintain spring bulb planting to provide seasonal interest within areas of amenity grassland.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Fortnightly cut to 40mm height during the growing season 6 to 8 weeks after bulbs have flowered. (Objective B1)	1	1-5												

5.0 Implementation of the Management Plan

Responsibilities

5.1. The management responsibility of landscape features and habitats across the site will fall to the developer and owner/ occupiers and/or their appointed third party management company responsible for management and maintenance on shared open spaces. The management plan sets a standard for this maintenance to ensure establish of landscape features.

5.2. This MP plan sets a standard for this maintenance to ensure establish of natural landscape features.

5.3. It is the owners, tenants or managing landlord's responsibility to ensure the management plan is updated and passed to the relevant person or organisation throughout the plan period.

5.4. The owners, tenants or managing landlord's may employ other organisations to carry out landscape maintenance operations on their behalf. The management company must ensure the third parties have the relevant experience and certificates of competence to carry out the management operations.

5.5. Owners, tenants or managing landlord's (and/or third party and maintenance companies) will be responsible for ensuring that maintenance operations are in accordance with this MP. The site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP's) and Health and Safety Executive guidance.

5.6. Owners, tenants or managing landlord's and third parties will be responsible for preparing risk assessments for all elements of work as required under the Management of Health and Safety at Work Regulations 1999 and for carrying out monitoring and review. The Health and Safety Procedures for the site will follow the guidelines within the HSE publications including HSG65 'Managing for Health and Safety and HSG268 'How to Control Risks at Work'. The managing company will need to comply with the relevant legislation including:

- Health and Safety: Health and Safety and Work Act (1974);
- The Wildlife and Countryside Act 1985 as amended;
- Environmental Protection Act 1990;
- Control of Pollution Act (1974) / Pesticides Act (1998);
- Building Regulations Approved Documents;
- BS3936:1989 Part 1 Nursery Stock, Trees & Shrubs;
- BS5837:2012 Trees in Relation to Construction;
- BS3998:2010 Recommendations for Tree Work;
- BS7370-4:1993 Grounds Maintenance. Recommendations for Maintenance of Soft Landscape;
- The Control of Pesticides Regulations 1986;
- The Code of Practice for the Use of Approved Pesticides in Amenity Areas 1988;
- The Code of Practice of Plant Handling 1980;
- National Plant Specification Section 10.2 'Handling & Establishing Landscape Plants'; and
- CPSE Recommended Form of Tender for the Supply & Delivery of Plants.

6.0 Specification for Maintenance

General

6.1. Trees and shrubs planted shall comply with BS.3936 (Specification of Nursery Stock) and shall be planted in accordance with BS.4428 (General Landscape Operations) and BS8545:2014 ' Trees from nursery to dependence in the Landscape'.

6.2. Contractor to familiarize themselves with location of underground services using routing plans, CAT scans and onsite survey prior to planting and excavations.

6.3. Any damage or disturbance to the soil structure, planting area, grass, fencing, hard landscaping, structures or buildings during planting operations should be restored to their original condition.

6.4. Watering should be carried out as necessary to ensure the continued thriving of all planting. Ideally water using rain harvested water or mains water if not available. Wet the full depth of topsoil. Care should be taken to avoid damage or loosening of plants. Any compacted soil should be loosened by lightly forking.

6.5. Unless specified otherwise, dispose of all arisings to a licensed recycling centre or composted on site.

6.6. Any chipping operations undertaken on site should be chipped into a pile and either stored on site or removed to licensed recycling centre.

6.7. All rubbish on site should be collected and removed from site to a licensed tip.

6.8. Care should be taken to protect all areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly onto grassed areas.

6.9. Soil and arisings: should be removed from hard surfaces, car parking and footpaths around the building. Works should be left in a clean and tidy condition at completion and after any maintenance operations.

6.10. Apply a suitable foliar acting or residual herbicide to all hard surfaces and allow time for it to take effect before

clearing arisings. Remove litter, leaves and debris from hard surfacing and remove arisings from site.

Grassed Areas

6.11. Standard: To BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:
- Objectives: To BS 7370-3, table 6.
- Programme: To BS 7370-3, clause 11.
- Mowing methods: To BS 7370-3, table 3.

6.12. Prior to grass cutting, remove all litter and debris from grassed areas.

6.13. Amenity grassed areas should be cut 12-14 times per season, between mid March and late September, on a fortnightly basis to maintain the grass at a height of 40mm. An initial cut should be made at 75mm height in mid-March prior to fortnightly cutting commencing.

6.14. Grass should be maintained as a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt. Prevent compaction from maintenance operations and maintain reasonably free from moss, excessive thatch, noxious weeds, frost heave, worm casts and mole hills.

6.15. Any damage such as trampling, abrasion or scalping caused by mowing should be repaired immediately. Edges should be neat and well defined, in clean straight lines or smooth flowing curves. Litter and fallen leaves should be removed fortnightly to maintain a neat appearance.

6.16. After cutting the grass should be neat and even, without surface rutting, compaction or damage to grass and edges should be neat and well defined. Neatly trim around obstructions. Arisings should be removed and all footpaths and hard surfacing kept free from grass cuttings.

6.17. Do not use mowing machinery closer than 100mm to tree stems. Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.

6.18. The area of bulbs within grassland should not be cut until 6 to 8 weeks after the plants have finished flowering. There after cutting should be as paragraph 6.12.

6.19. Collect fallen leaves as part of the fortnightly cleansing operations by hand raking and remove from site or shred and use as mulch around the base of trees.

6.20. Spring, autumn and winter fertiliser application to use organic products and the application rate to be as per manufacturers instructions. Submit proposals before using.

Maintaining grassed areas with perennial wild flowers:

6.21. Before each cut remove litter and debris.

6.22. In the first year wildflower grassed areas should be cut every 6-8 weeks until autumn. Maintain the grass at a height of 50mm. Grass not to exceed 100mm in height. Arises to be removed from site.

6.23. In second and subsequent years, wildflower grassed areas to be cut annually in late July to mid-August to a height of 50mm. Arisings to be removed from site- after seed has dispersed.

6.24. Remove perennial weeds by- hand or spot spray if weeds are wide spread and persistent.

Reinstatement of damaged or failed grass

6.25. Worn or damaged areas: Make good by returfing or reseeding:

- Returfing standard: To BS 7370-3, Clause 12.2.
- Reseeding standard: To BS 7370-3, Clause 12.6.

6.26. Remove to a depth of 40mm and cultivate the ground to a fine tilth. Contractors choice for reinstatement via seeding or re-turfing but quality and appearance must match existing amenity grass areas.

6.27. If reseeding fill with a fine topsoil to BS3882 and reseed with a seed mix to match the existing grass sward. Provide necessary watering and protection to ensure successful germination and establishment.

6.28. Reseeding to be carried out between April and mid October.

Maintaining Herbaceous Plants/ Shrubs/ Trees/ Hedges

6.29. Planting beds should be kept free from weeds by hand-weeding. A minimum diameter of 1m around each tree and all of each ornamental planting bed should be maintained weed free. Weed cover to be less than 5% across planting areas and no weed to be greater than 100mm in height.

6.30. Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch. Mulch should be maintained to 75mm depth.

6.31. Fertiliser should be applied to areas of new planting annually in March or April using an organic product. It should be spread evenly after carefully lifting mulch. Mulch to be replaced on completion of the operation and maintained for 3 years or when the hedge has thickened and established.

6.32. Soil aeration to be carried out to all compacted surfaces to aerate the soil of roots areas and break surface crust. Reduce soil to crumbs and level off. Adjacent planted are not to be damaged during operations.

6.33. Tree stakes and ties should be inspected monthly and adjusted twice annually. Loose, broken or decayed stakes should be replaced to original specification. If the stake is longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.

6.34. Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing at each inspection as required. If chafing has occurred, reposition or replace ties to prevent further chafing.

6.35. All trees and shrubs should be refirmed after strong winds, frost heave and other disturbances. Tread around the base until plant is firmly bedded.

6.36. Any collars in soil at base of tree stems, created by tree movement should be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

6.37. Pruning shall be carried out annually in accordance with good horticultural and arboricultural practice to BS 7370-4. When removing branches do not damage or tear the stem.

6.38. Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.

6.39. Larger branches prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

6.40. Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance. Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.

6.41. At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems from site. Retain seed heads on herbaceous perennials during the winter Cut back herbaceous perennials in January or February and dispose of plant material off site.

6.42. Do not use growth retardants, fungicide or pruning sealant unless instructed.

6.43. Watering to be carried out as required during prolonged drought in the growing season to ensure the healthy establishment and growth of plants.. Watering points to be confirmed on site, if none available water supply to be via bauser. If water supply is likely to be restricted by emergency legislation, submit proposals ad await instructions before carrying out operations.

Pruning trees, shrubs and hedges

6.44. Prune trees and shrubs to BS 7370-4

6.45. Pruning to take place once annually on young trees above 4m in height.

6.46. Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader. Remove duplicated branches and potentially weak or tight forks. When undertaking pruning operations ensure the branches are cut back to live wood.

6.47. Do not prune whips or feathered trees.

6.48. Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist.

6.49. Cavities in trees to be investigated. Remove rubbish and rotten wood and probe the cavity to determine the extent of any decay and give notice. Waterfilled cavities are not to be drained. Sound wood inside cavities is not to be removed and cavity openings not to be covered.

6.50. Trim hedgerows twice annually in June and September to encourage bushy growth down to ground level. This should be undertaken after the plants have been established for three full growing season. All hedgerow to reach disered dimensions only by gradual degrees, depending on the growth rate and habit of each species. Trim annually once hedge has reached desired height.

Weeding

6.51. Hand weeding should be carried out monthly between April and September.

6.52. Remove weeds entirely, including roots and ensure that the minimum quantity of soil is removed to minimise disturbance to plant, bulb and mulched surfaces. On completion of hand weeding rake planting area to a neat, clean condition and reinstate mulch to original depth.

6.53. In areas of persistent or aggressive weed establishment treat with a suitable foliar acting herbicide to kill regrowth. Allow recommended period for herbicide to take effect before clearing arisings and disposing off site.

Reinstatement of planting

6.54. Remove dead or diseased plants as soon as possible and replace in the next available planting season.

- Deciduous trees and shrubs: Late October to late March.
- Conifers and evergreens: September/ October or April/ May.
- Herbaceous plants (including marginal): September/ October or March/ April.
- Container grown plants: At any time if ground and weather conditions are favourable.
- Dried bulbs, corms and tubers: September/ October.

6.55. Carefully move mulch to one side and dig over the soil leaving it fit for replanting. Do not disturb the roots of adjacent plants. Use plants to the original specification or to match the size of adjacent plants. Include a slow release fertiliser in each planting pit as per manufacturers recommendations.

6.56. Thinning by removal of surplus plants is to be carried out the BS7370-4 when foliage of adjacent plants has begun to touch and overlap. Minimise disturbance to other plants and refill holes with topsoil to leave an even graded surface. Maintain mulch to 75mm depth. Select plants with a strong healthy habit for retention.