

# **Landscape Maintenance & Management Plan**

# Land off New Mill Road, Cardigan, Ceredigion, SA43 1NE

Prepared for: Wales & West Housing

Date: October 2023

### **Table of Contents**

1.0 Introduction	1
2.0 Management Responsibilities	
2.1 Legal Considerations	
3.0 The Development Site	2
4.0 Landscape Vision	2
5.0 Landscape Management Objectives	2
6.0 Establishment Period	3
6.1 General Long-term Maintenance Objectives	3
7.0 Landscape Establishment & Maintenance Specifications	3
7.1 Specimen Trees	
7.2 Ornamental Raingardens	5
7.3 Hedgerows	
7.4 Amenity Turf	
7.5 Grassland/Wildflower meadow	
7.6 SuDs Attenuation Pond	
7.7 Existing Trees and Hedgerows	
7.8 Cleaning and Litter Removal	
8.0 Monitoring and Review	
9.0 Landscape Maintenance Schedule	
10.0 British Standards	
11.0 Proposed Planting Schedule	
12.0 Appendix	15

#### 1. Introduction

RDS Landscaping Ltd were appointed by Wales and West Housing to prepare a Landscape Management Plan for the external landscape of the proposed development at land off New Mill Road, Cardigan, Ceredigion, SA43 1NE.

The purpose of this document is to outline the general principles and quality standards required for the establishment and long-term maintenance of the common external landscaping and retained natural vegetation, and to describe the activities required to allow the planting to flourish to achieve the envisioned landscape strategy.

All references to landscape treatments are based on the following planning submission drawings:

- Landscape Masterplan RS-230829-01-002
- BS5837 Tree Survey 22 June 2023
- Proposed Planting Plan RS-230918-02-001

#### 2. Management Responsibilities

- The current site owner shall be responsible for the implementation of the Landscape Management Plan and will therefore be responsible for adhering to all relevant legislation.
- The landscape operations must be undertaken by suitably experienced and qualified landscape contractors appointed by the site owner.
- The contractor appointed for implementation of the landscape scheme will be responsible for maintaining all works during the construction phase, and subsequent maintenance period (two years post completion). The client or appointed management company would hold responsibility thereafter.

#### 2.1 Legal Considerations

- It is assumed that none of the existing trees on site are protected by Tree Preservation Orders (TPO), Tree preservation orders are issued by the local planning authority, in this case Ceredigion County Council (CCC).
- The site is not subject to any nature conservation or landscape designations.
- All birds and their nests are protected under the Wildlife and Countryside Act 1981. Site management must be aware of the need to avoid disturbance or harm to nesting birds either by avoiding the nesting season, March to August inclusive and / or by checking that no nests would be affected by works.
- Health and Safety: All work undertaken on the site by contractors, volunteers or direct employees must comply with the appropriate legislation relating to health and safety and the Control of Substances Hazardous to Health (COSHH).

#### 3. The Development Site

The proposed development site lies to the west of New Mill Road, approximately 30 metres to the north of the A487 trunk road. It is located approximately one mile to the north-east of Cardigan town centre, site grid reference SN 18914 47003. The site is currently utilised as agricultural grazing land and is comprised of semi-improved grassland bordered by native species rich hedges with trees.

The total application area extends to approximately 1.9 Hectares. The proposed development would consist of the construction of 51 units with private gardens and parking bays. Additional construction would include all the associated infrastructure and services required for operation. Provision has also been made for landscaped public open space with SuDS features. Majority of the existing trees and boundary hedges would be retained to form part of the wider landscape scheme and boundary treatments. They would be managed according to BS5837:2012 Trees in relation to design, demolition and construction.

#### 4. Landscape Vision

- The landscape proposal has been designed and proposed in relation to the existing character of the area and in particular the specific site in general.
- The proposed design seeks to introduce a high-quality landscape which can be used and enjoyed by residents and visitors alike.
- The new planting scheme will provide character to improve amenity and increase biodiversity by providing habitat and food for fauna.
- The existing trees and vegetation retained will preserve and enhance the nature conservation interests.
- The existing and introduced vegetation will provide seasonal interest as well provide a green framework to the new built environment.
- All hard and soft landscape elements shall be maintained to a high standard to ensure that the residential development retains a high-quality finish which is attractive, orderly, and safe for all.

#### 5. Landscape Management Objectives

The residential development including homes, associated infrastructure and public open space would occupy majority of the site. The overall landscape setting is illustrated in the Landscape Strategy RS-254-230829-01-002. The strategy details the spatial layout and arrangement of the proposed hard and soft landscape elements within the site.

The key components and list of vegetation types are:

- Specimen tree planting along main access road and within public open space (POS)
- Native hedgerow buffer planting along new site boundaries
- Amenity lawn areas to private gardens and road verges

- Wild meadow planting within areas of POS
- SuDs Features including raingardens and detention basin
- · Existing trees, hedgerows and grassland

#### 6. Establishment Period

A two-year establishment maintenance period will be incorporated into the landscape implementation contract. This will ensure that all landscape works are suitably maintained by the contractor throughout the establishment phase. The contractor will be responsible for all horticultural operations required including replacement of plant material which has failed to establish due to defects in plant material or poor workmanship. On completion of the implementation and establishment phase, future maintenance responsibilities during the operational phase will be handed over to the landowner.

It is recommended that 'Any new landscape elements which, within a period of 5 years post implementation are removed, damaged, die, become diseased or otherwise defective to such an extent that in the opinion of the planning authority, the function of the landscape elements in relation to the planning approval is no longer delivered, shall be replaced in the next planting season with replacement elements of similar size and specification'.

#### **6.1 General Long Term Maintenance Objectives**

The following are the long-term maintenance objectives of the Landscape Management Plan:

- Application of good horticultural and environmental practice to all operations.
- Management of existing trees and boundary vegetation to ensure long term viability and contribution to the site.
- Establishment of new landscape proposals which will provide a setting which is attractive for those using the site and for those with views onto the site.
- Promotion of healthy growth for successful establishment of new planting and the long-term maintenance of existing vegetation on site.
- Manage the site in a manner which is beneficial and would encourage wildlife onto the site.
- Ensure consistent and thorough control of invasive plant material.
- Provide adequate protection against plant diseases and pests.
- To replace any plant material which fails to develop is damaged or dies.
- To maintain and manage the site according to the Landscape maintenance specifications as set out in this document.

#### 7. Landscape Establishment & Maintenance Specifications

To ensure successful establishment of the proposed scheme post implementation, it is recommended that a minimum of 20 site visits are undertaken per annum during the operational phase of the development. Site visits should be undertaken twice a week between March and October and once a month through the remainder of the year.

Adverse weather conditions or specific horticultural or arboricultural requirements may require additional site visits to take place if necessary. The establishment and maintenance specifications for each vegetation type is described below.

#### 7.1 Specimen Trees

#### Description

The scheme includes the establishment of specimen trees along the road verges, new and existing boundaries and within the public open space (POS). Tree selection includes hardy native species adapted to local climatic conditions. The trees will provide character to the park as well as soften the structures and provide year-round interest. Tree species include Sessile Oak (*Quercus petraea*), Rowan and Whitebeam (*Sorbus spp.*) and Silver Birch (*Betula pendula*).

#### **Specimen Tree Planting**

- Tree planting should be carried out between late September until to the end of March.
- ii) After fine grading of topsoil, holes must be dug for the planting of trees.
- Holes will be dug to be twice the size of the container from which the plant is transplanted. Place excavated soil material in a heap next to the hole.
- iv) If required, backfill the plant hole sufficiently with soil so that the top of the plant container, when placed in the hole, would match the surrounding ground level.
- v) Remove the plant from the container without loosening the soil. Remove any stones or ash from the roots at the bottom of the container. Only loosen the bottom 50mm of roots thoroughly and place plant in the prepared hole. Replace the soil so that the plant is 10mm deeper in the ground than it had been in the container. All roots must be thoroughly covered. The soil must be shaped so that a bowl 200mm high and at least 500mm in diameter is formed around the tree stem. Tramp the plant roots down to embed them securely, irrigate roots thoroughly.
- vi) All plants must be planted in moist soil and be well irrigated not later than one hour after planting.
- vii) During irrigation all air must be driven from the plant hole by carefully forking the loose ground.
- viii) Soil around plants must be tramped down well.
- ix) Roots must be spread thoroughly, and any damaged roots must be pruned. Roots must not be folded in or snapped.
- x) Remaining stones and soil from the plant holes must be removed.
- All trees are in danger of being snapped or damaged by the wind and should therefore be supported by fastening to wooden stakes (Refer to Tree Planting Diagram Proposed Planting Plan RS-230719-02-01). Stakes must be implanted into the ground on two sides of the tree and not driven through the root zone but driven far enough into the soil to firmly support the plant. The tree trunk should be fastened to the stakes with suitable rubber fasteners approximately ¾ of the way up the stem.

#### **Maintenance of Specimen Trees**

- i) During the first 24 months after planting all new trees should be closely monitored to ensure that they are in good health, stable, firm, and upright.
- ii) Stakes and ties should be checked and adjusted according to growth. The stakes and ties can be removed within 3-5 years once the root systems have fully established and the tree stands firmly in the ground.
- iii) Trees should be regularly watered within the first 3-5 years especially during periods of drought.
- iv) A 1-meter diameter circle of mulch should be laid around the base of the tree trunk. This ring should be kept free of weeds. Weed control should be undertaken within the first 3-5 years after planting.
- v) Any dead or damaged branches should be pruned using appropriate horticultural methods, wounds should be sealed with an approved wound sealer.

#### 7.2 Ornamental Planting - Raingardens

#### Description

Ornamental shrubs and several raingarden beds have been included in the landscape scheme. These will function as a mechanism of the SuDS strategy as well as improve amenity by providing visual interest and some informal screening between the road verge and the new units. A diverse selection of ornamental species has been chosen. These include *Brachyglottis greyii*, *Dierama pendula* and *Libertia grandiflora*. These plants will provide colour and interest for residents and visitors as well as provide wildlife opportunities.

#### **Establishment**

- i) Planting will be carried out between November and the end of March in accordance with the British Standard BS 4428 (1989).
- ii) All ornamental beds must be cultivated to a depth of 300mm and be free of any weeds, roots, or large stones.
- iii) Planting should be suspended during periods of frost, heavy rain, waterlogged conditions, and periods of drought. Any suspension of planting is to be immediately notified with reason(s) to the Client.
- iv) Soil should be loosened and broken into particles of 2-8mm. Soil surface should then be fine graded.
- v) Plants awaiting planting must not be left unattended and the full cost of replacing any plants damaged or lost before planting shall be met by the Contractor.
- vi) Place out plant material and excavate holes to approximately double the pot size.
- vii) Mix compost to excavated soil material from hole at a ratio of 1 part compost to 3 parts soil.
- viii) Remove plant from pot and position in hole, ensure plant is centrally positioned and top of root ball is level with existing graded soil.
- ix) Backfill hole with excavated soil and compost mixture. Compact soil and roots and water plants in well to a depth of 200mm immediately after planting.

- x) All Ornamental beds to be top dressed in a 50mm layer of bark mulch.
- xi) After planting the area is to be left clean and tidy with any rubbish, debris, packing materials and labels removed.

#### **Maintenance of Ornamental Planting**

- i) Allow for watering for the first 2-3 years after 7 continuous days of less than 20mm of rain.
- ii) All ornamental beds should be kept weed free.
- iii) Work should be undertaken manually with hand tools. Care should be taken to avoid damage to any adjacent planted material.
- iv) When required shrubs should be pruned to maintain form and vigour and to avoid overcrowding/overshadowing. Over pruning of shrubs should be avoided.
- v) Groundcovers should also be clipped or pruned to ensure upkeep of a neat shape and form.
- vi) Any dead or damaged plants should be removed and replaced. This work should preferably take place during the winter months.
- vii) If required, organic fertiliser may be applied once before or during spring growth.

#### 7.3 Hedgerows

#### Description

New native hedging will be established along new and existing site boundaries to the south-east and as rehabilitation to the existing site entrance. Native species will include Hawthorn (*Crataegus monogyna*), Hazel (*Corylus avellana*) and Holly (*Ilex aquifolia*) etc. The native hedgerows will provide habitat, food and serve as wildlife corridors along the site.

#### **Hedgerow Planting & Establishment**

- i) Planting will be carried out between November and the end of March.
- ii) Planting should be suspended during periods of frost, heavy rain, waterlogged conditions, and periods of drought. Any suspension of planting is to be immediately notified with reason(s) to the Client.
- iii) A cultivated strip approximately 600mm wide by 300mm deep should be prepared. Soil should be loosened and broken into particles of 2-8mm.Soil surface should then be fine graded.
- iv) Roots of open ground whips should be suspended in water before and during planting.
- v) Planting will be carried out and according to the Planting Plan.
- vi) Hedging plants are to be planted at 8 plants per linear meter. They should be planted in a staggered fashion, with random distribution of the different species through the hedge.
- vii) Use a post spade to create a hole/slit in the soil to accommodate the plant root system. Push roots carefully into slit ensuring that they are pointing downwards and that the stem base is on ground level.

- viii) Ensure each plant is straight and with the back of the heel press the soil down ensuring the root system is adequately compacted into the soil.
- ix) Each plant should be protected and supported using a 38mm spiral guard and bamboo cane, 600mm in height.
- x) All Hedgerow strips to be top dressed in a 50mm layer of bark mulch.
- xi) Allow for watering immediately after planting.

#### **Maintenance of Hedgerows**

- i) Allow for watering for the first 2-3 years after 7 continuous days of less than 20mm of rain.
- ii) Undertake weed control for the first 2-3 years.
- iii) Work should be undertaken manually with hand tools. Care should be taken to avoid damage to any adjacent planted material.
- iv) When the hedges have fully established 3-4 years, they should be lightly trimmed to encourage the stems to branch out in the following season.
- v) The hedges should be ultimately maintained at 1.8-2 meters in height.
- vi) Where the loss of hedge plants is over 0.5 meters, these gaps should be replaced in the following planting season.
- vii) Spiral guards and bamboo canes can be removed once the hedges have grown beyond the reach of browsing animals.

#### 7.4 Amenity Turf

#### Description

The scheme includes the establishment of general-purpose turf to the front and rear gardens of the new houses and along the road verges. This amenity turf should be maintained as attractive amenity areas. The establishment of turf should be carried out as specified below.

#### **Establishment Phase**

The Contractor will be required to prepare ground prior to the supply and sowing of grass seed.

- i) Any existing vegetation will be stripped off from the area to be seeded and disposed of by the Contractor.
- ii) The whole area will be cultivated to a depth of 100mm using a rotavator.
- iii) Cultivation by fork should be carried out alongside kerbs, tree bases, exposed roots etc where damage could occur.
- iv) Any stones or other debris greater than 25mm in any dimension will be removed.
- v) Following cultivation, a fine tilth shall be created with a hand rake.

#### **Grass Seeding**

- i) Seeding of lawn should take place from March-October.
- ii) Seed should not be sown when cold or drying winds are experienced, or if soil is excessively dry, waterlogged or frost bound.
- iii) Sow specified seed mix of 50g/m2in the areas indicated on the Landscape scheme.

- iv) On completion of sowing, gently rake seed into top 10mm of soil.
- v) Lightly compact the seedbed surface with a roller, leaving a uniform and smooth finish.
- vi) After seeding the area shall be well watered to a depth of 50mm.

#### Maintenance of Grassed areas

- i) Grass will be cut a minimum of 8 times per annum.
- ii) Maintain a grass height of between 30-60mm, Edges to be neatly trimmed.
- iii) Ensure lawn areas do not become compacted or waterlogged, aerate, if necessary, in the autumn.
- iv) Repair scalped, damaged or trampled lawn areas by re-seeding.
- v) Remove any litter, rubbish or debris from lawn areas before mowing.
- vi) No machinery should encroach within 500mm of a tree trunk at any time. Strimmer damage must be avoided.
- vii) Keep adjacent hard surfaces clear of lawn cuttings, sweep and remove clippings after mowing.

#### 7.5 Grassland / Meadow

#### Description

Areas of grassland and wildflower meadow will be established along the periphery of the site and as pockets or swards through areas of POS. They will provide green corridors along the new and existing boundaries. They should be maintained as rank grassland/meadow between the developed areas and existing boundaries. They will provide habitat for reptiles and amphibians as well as offer secluded areas for wildlife to travel, hunt and forage. Meadow planting will include a mix of wildflowers and grasses. Seed should preferably be locally sourced (Eg, Wyndrush Wild – Wildflower meadow mix) Plant species to include Red Fescue (Festuca rubra), Cuckoo flower (Cardamine pratensis) and Meadow buttercup (Rununculus acris) etc.

#### **Establishment Phase**

The Contractor will be required to prepare ground prior to the supply and sowing of meadow seed.

- i) Any unwanted weed material should be stripped off from the area to be seeded and disposed of by the Contractor.
- ii) The areas requiring seeding will be cultivated to a depth of 50mm using a hand fork or rotavator.
- iii) Cultivation by fork should be carried out alongside kerbs, tree bases, exposed roots etc where damage could occur.
- iv) Any stones or other debris greater than 25mm in any dimension will be removed.
- v) Following cultivation, a fine tilth shall be created with a hand rake.

#### **Meadow Seeding**

- i) Seeding of wild meadow should take place between August and November.
- ii) Seed should not be sown when cold or drying winds are experienced, or if soil is excessively dry, waterlogged or frost bound.
- iii) Sow specified seed mix of 8-10 g/m2 in the areas indicated on the Landscape scheme.
- iv) On completion of sowing, gently rake seed into top 10mm of soil.
- v) Lightly compact the seedbed surface with a roller, leaving a uniform and smooth finish.
- vi) After seeding the area shall be well watered to a depth of 50mm.

#### Maintenance of Grassland/Meadow areas

- i) Grassland will be allowed to grow from the New year through till August when it can be cut.
- ii) Grassland/Meadow areas should only be cut manually with a strimmer.
- iii) Cutting should take place in two stages.
- iv) Stage 1- Cut grassland to a height of 200-300mm remove all clippings from area.
- v) Stage 2- Within 2 days of 1<sup>st</sup> cut a 2<sup>nd</sup> cut should be undertaken further reducing the grass height to 50mm. Remove all clippings from the area.
- vi) Note: Grassland height should never be reduced to less than 50mm.
- vii) No machinery should encroach within 500mm of a tree trunk at any time. Strimmer damage must be avoided.
- viii) Keep adjacent hard surfaces clear of grassland cuttings, sweep and remove clippings after mowing.

#### 7.6 SuDS- Detention Basin

#### Description

SuDS features have been designed to assist in the management of surface water runoff. A large detention basin will be developed within the northwestern corner of the site. It will be seeded with native meadow grasses and plugged with native macrophytic vegetation adapted to moist soil conditions. In addition to stormwater management, these features will provide habitat for amphibians as well as increase biodiversity and amenity. Macrophytic plant species utilised would include soft rush (*Juncus effusus*) and Flafg Iris (*Iris pseudacorus*) Grass to include Tufted Hair Grass (*Deschampsia cespitosa*) and Meadow Fuscue (*Schedonorus pratensis*).

#### Plant Establishment

- i) Planting should be carried out directly after construction or ideally in May or June.
- ii) Fine grade area by hand raking.
- iii) Do not cultivate soils within basins as this may give rise to erosion.
- iv) Place macrophytic plant material sporadically throughout the basin
- v) Space according to species planting density.
- vi) Ensure plants are arranged in a natural stagged fashion avoid straight lines.
- vii) Use a pick to excavate a small hole to place plug into

- viii) Ensure plants are straight and roots are adequately compacted into soil.
- ix) Seed all bare soils in basin area and surrounds with grass mix- Emorsgate Seeds (EG8 Meadow Grass Mix for wet soils).
- x) Ensure plant material and grass seed is adequately watered immediately after planting and sowing.

#### **Maintenance of Detention Basin**

- i) Ponds should be managed to retain at least 35-60% of the surface area as open water when full, through manual removal and strimming of vegetation.
- ii) Vegetation control will be implemented during the autumn. Cutting or pulling will be undertaken by hand or strimming. Arisings will be placed onto protective membrane around the basin edge for 48 hours. The arisings will then be removed to a designated compost heap and the membrane will be removed from site.
- iii) Should water levels within the deepest area of the pond fall below 400mm in two consecutive years, de-silting will be required. These works will be undertaken within the period November to January inclusive. Desilting will be undertaken by a long-armed excavator and entry and access to the pond should be limited to one point or section of bank. Ground protection will be utilised to reduce damage to marginal habitats. The silt should be temporarily placed around the margins of the excavated basin onto protective membrane, to allow the invertebrate assemblage to repopulate the pond. After a period of 48hrs, the silt and the protective membrane will be removed from site.
- iv) The attenuation ponds will be kept free from litter and debris which may have a detrimental effect on biodiversity and affect public health and safety.
- v) No fertilisers or pesticides will be used within the ponds or within such proximity to that drift will affect the vegetation.

#### 7.7 Existing trees and Hedgerows

#### Description.

Most boundaries contain native trees and hedgerow species, these areas are to be retained as natural habitat and function as an ecological buffer zone. They will be protected by a temporary construction exclusion zone (CEZ) which would be erected prior to any construction activity taking place. (Refer to BS5837 Tree Survey 22 June 2023 – Tree Protect Plan - TPP). The trees and hedgerows add both ecological and amenity value to the site and therefore need to be maintained accordingly.

It is recommended that on the completion of construction and removal of the protective barrier fencing that the trees are reinspected every 3-5 years. As the site boundary zones will be publicly accessible during the operational phase, it is essential that any potentially dangerous limbs are felled into manageable sections and left in suitable wildlife heaps at the base of the hedgebanks.

It is also recommended that any existing or resulting gaps within the hedgebanks are filled with new planting of native woody hedge species (Refer to: Proposed Planting Plan – RS-230918-02-001, planting schedule-hedgerow species).

#### 7.8 Cleaning and Litter Removal

It is important to ensure that the public open spaces are clean and attractive with no litter build up. Cleaning of the highway will be the responsibility of the site owner. Litter removal in public open spaces will also be the responsibility of the site owner.

- Any fly tipping should be removed or reported to the Local Authority for removal.
- Litter picking should be done on a regular basis to maintain a clean environment.
- During Autumn, leaf clearance is to be conducted.

#### 8. Monitoring and Review

This Management Plan will be subject to an annual review. The site owner will consult with the landscape contractor to assess and review the management procedures. Any changes will be recorded. The assessment and review will consider the condition of the trees, hedgerows, meadows, and amenity grass areas. Additional measures may be considered and implemented to ensure the landscape elements are thriving.

Once the development has achieved Practical Completion, this Management Plan should be reviewed and updated if necessary.

9. Landscape Maintenance Schedule

9. Landscape Maintenance Sch	-uu		• •	•				•	•	_		_
0	J	F	M	Α	М	J	J	Α	S	0	N	D
General Operations												
Weeding			✓	<b>∨</b>	<b>∨</b>	<b>√</b>	<b>∨</b>	<b>∨</b>	<b>√</b>	<b>√</b>	+	+
Watering (if required)	_	_	_	-	-	+-	-	+-	-	-	_	_
Litter removal	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>	<b>√</b>	✓
Removal of fallen leaves			_							<b>√</b>	✓	
Re-firming plants (as required)			✓							✓	-	-
Pest and disease control (as required)						✓			-	-	-	-
Replacement planting	✓											
Amenity Grass Areas												
Mowing-amentity areas keep grass at a sward												
height of 30-60mm					✓	✓	✓	✓	✓	<b>✓</b>		
Rake mown lawns (as required to keep tidy)			✓	✓	✓	✓	✓	✓	✓	<b>√</b>		
Aerate and scarify lawn areas			✓						✓			
Apply fertiliser to lawn areas (as required)			✓						✓			
Form edges to lawn areas (as required)	✓						✓					
Over-seed sparsely germinated grass areas				✓	✓				✓	✓		
Specimen Tree Planting												
Check condition and treat (as required)											✓	
Pruning for good habit and safety (as required)											✓	
Check, adjust, repair trees stakes and ties		✓									✓	
Apply fertiliser and mulch to new trees			✓									
Annual monitoring									✓			
Ornamental Planting - Raingardens												
Pruning (timing dependant on species)	✓					✓						
Top up mulch (after first year and replanting)			✓									
Thin out planting										✓		
Hedgerows												
Check stakes and spiral guards	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remove weeds around base of hedge plants	✓	✓	✓						✓	1	1	✓
Replace failed hedge material	✓	✓				✓	✓	✓				✓
Re-firming new plants (as required)				1	✓	1	1	1				
Face up to both sides of hedge		✓	✓						1	1	1	✓
Top hedge at 2 meters (long term)				1	✓	✓	1	1				
Grassland /Meadow												
Strim 1st cut to height of 200-300mm								✓		т		
2nd cut to 50mm (Within 2 days of 1st cut)								1			1	
Rake mown grassland, remove clippings								1			+	
SuDs Ponds												
Strim 1/3 of bankside vegetation (Rotate PA)	✓	<b>√</b>	<b>√</b>							<b>✓</b>	<b>√</b>	<b>√</b>
Remove excess veg. to maintain open water	·	1	√	1	<b>√</b>	1	1	1		ļ.	+	Ť
Remove silt, stack within 10 meters of pond	Ť		Ť	Ť	Ť	1	1	1	1		+	
Hard Landscape Areas, Boundary Treatments,												
Lighting and Furniture												
Weeds in hard surfaces - spray with herbicide					1		1		<b>√</b>			
Clear litter, debris and fallen leaves	1	1	1	1	<b>'</b>	1	·	1	·	1	1	1
Gullies etc - keep clear (as required)	<b>∨</b>	4	-	-	4	4	1	•	-	1	<b>∨</b>	,
		./									<b>∨</b>	
Fencing and gates - check condition and repair		<b>√</b>									<b>✓</b>	
Check lighting - check condition and repair		V									•	
Specialist Surveys												
Existing tree condition survey (every 3-5 yrs)										1	$\perp$	

Note: This table lists the key routine operations required during both the defects and the long term maintenance periods together with an indication of when they should be undertaken throughout the year. It should be noted that the table should be used as a guide to times only. It does not include every operation listed in the specification but all checking and intermittent maintenance actions should occur during the routine visits. The contractor is responsible for the appearance and condition of the landscape areas and should be prepared to undertake specific maintenance tasks outside the above periods throughout the year to satisfy management or safety objectives.

#### 10. British Standards

All materials and works are to comply with the latest British Standard Specifications:

BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces)

BS3936 Part 1 1992 Specification for trees and shrubs

BS 3936 Part 10 Nursery stock specification for groundcovers and shrubs

BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations

BS 3936-1:1992 Nursery stock. Specification for trees and shrubs

BS 7370 Part 4 1993 Recommendations for maintenance of soft landscape (other than amenity turf)

BS 7370 Part 3 1991 Grounds maintenance recommendations for maintenance of amenity and functional turf (other than sports turf)

BS 3969:1998 Recommendations for turf for general purposes

# 11. Proposed Planting Schedule

POSED PLANTING SCHEDULE							
Latin Name	Common Name	Code	Sizes	Form	UK Prov.	Total	Other Info.
Specimen Trees							
Alnus glutinosa	Common alder	AG	Reg.Standard, 2.5-3m height	Feathered tree	γ	6	Staked
Acer campestre	Field maple	AC	Reg.Standard, 2.5-3m height	Feathered tree	Υ	8	Staked
Betula pendula	Silver birch	ВР	Reg.Standard, 2.5-3m height	Feathered tree	Υ	16	Staked
Malus sylvestris	Crab apple	MS	Reg.Standard, 2.5-3m height	Feathered tree	Υ	7	Staked
Prunus avium	Wild cherry	PA	Reg.Standard, 2.5-3m height	Feathered tree	Υ	10	Staked
Quercus petraea	Sessile oak	QP	Reg.Standard, 2.5-3m height	Feathered tree	Υ	21	Staked
Sorbus aria	Whitebeam	SR	Reg.Standard, 2.5-3m height	Feathered tree	Υ	10	Staked
Sorbus aucuparia	Rowan	SA	Reg.Standard, 2.5-3m height	Feathered tree	Υ	11	Staked
Sorbus torminalis	Wild service tree	ST	Reg.Standard, 2.5-3m height	Feathered tree	Υ	10	Staked
Tilia cordata	Small leaved lime	TC	Reg.Standard, 2.5-3m height	Feathered tree	Υ	7	Staked
Hedgerow Species							
Corylus avellana	Hazel		400-600mm height	Whip	Υ	242	Open grnd.
Crataegus monogyna	Common hawthorn		400-600mm height	Whip	Y	605	Open grnd.
Ilex aquifolium	Holly		400-600mm height	Pot	Υ	242	2l pot
Prunus spinosa	Black thorn		400-600mm height	Whip	Υ	605	Open grnd.
Sambucus nigra	Elderflower		400-600mm height	Whip	Υ	242	Open grnd.
Viburnum lantana	Wayfaring tree		400-600mm height	Whip	Υ	242	Open grnd.
Viburnum opulus	Guelder rose		400-600mm height	Whip	Y	242	Open grnd.
Ornamental gardens				. 1			
Agapanthus africanus	African Lily	AA	Pot 2-3L,30-40 cm height	4/m <sup>2</sup>	N	120	
Berginia cordifolia	Elephants ears	BC	Pot 2-3L,30-40 cm height	4/m <sup>2</sup>	N	68	
Bistorta amplexicaulis	Red bistort	ВА	Pot 2-3L,30-40 cm height	3/m <sup>1</sup>	N	90	
Brachyglottis greyi	Daisy bush	BG	Pot 2-3L,30-40 cm height	3/m <sup>1</sup>	N	111	
Deschampsia cepitosa	Tufted hair grass	DC	Pot 2-3L,30-40 cm height	5/m <sup>2</sup>	N	245	Refer to
Dierama pendulina	Fairy bells	DP	Pot 2-3L,30-40 cm height	4/m <sup>2</sup>	N	232	Planting
Escallonia rubra var.macrantha	Red escallonia	ER	Pot 2-3L,30-40 cm height	4/m <sup>1</sup>	N	196	Strategy
Heuchara sanguinea	Coral bells	HS	Pot 2-3L, 20-30cm height	4/m <sup>2</sup>	N	80	
Kniphofia caulescens	Red hot poker	KC	Pot 2-3L, 20-30cm height	4/m <sup>2</sup>	N	80	
Libertia grandiflora	Satin flower	LG	Pot 2-3L, 20-30cm height	6/m <sup>2</sup>	N	180	
Scabiosa caucasica	Pincushion Flower	SC	Pot 2-3L, 20-30cm height	4/m <sup>2</sup>	N	80	
SUDS-Detention Basin			, ,	,			
EM8-Meadow mix for wetlands	Emorsgate Seeds		Ratio-Flowers 70:30 Grasses	4g/m2	Υ	4Kg	
Caltha palustris	Marsh marigold		Pot 2I 200-400mm height	1 plant/m2	Υ	52	
Juncus effusus	Common Rush		Plug 200-400mm height	2 plants/m2	Υ	170	
Iris pseudoacorus	Flag Iris		Plug 200-400mm height	3 plants/m2	Υ	90	
Schoenoplectus lacustris	Common club rush		Plug 200-400mm height	2 plants/m2	Υ	60	
Amenity Turf							
A3 Embankments & Drought	Germinal		SEED MIX	50g/m2	N	N/A	
Grassland/Meadow Planting							
Welsh Meadow Mix	Wildflowers & Grasses		SEED MIX	8g/m2	Υ	N/A	

# 12. Appendix



# 12.1 Landscape Masterplan



12.2 Planting Plan