

Constables Close

B070998

Landscape Management and Maintenance Plan

P01

Cardo Group

November 2025

Document prepared by Tetra Tech Limited. Registered in England number: 01959704



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Document:	Landscape Management and Maintenance Plan
Project:	Constables Close
Client:	Cardo Group
Project Number:	B070998
File Origin:	Y:\Projects\784-B070998 Constable Close\60 Output\61 WIP\Documents

Revision:		Prepared by:	Donna Vinnels Senior Landscape Architect
Date:	18 th November 2025	Checked by:	Marcus Pinker Principal Landscape Architect
Status:	First issue	Approved By:	Emily Jones Director Landscape Architect
Description of Revision:	N/A		

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			

Table of Contents

1.0	Introduction.....	3
1.2	The site	3
1.3	Development proposals.....	4
2.0	Landscape design concepts	5
2.1	Key design concepts and constraints.....	5
2.2	Design objectives	5
3.0	Management, Maintenance and Monitoring	6
3.1	Outline objectives	6
3.2	Management objectives.....	6
	Short term objectives (0-5 years):	6
	Long term objectives (6-10 years):	6
3.3	Roles and responsibilities	7
3.4	Maintenance objectives	7
3.5	Monitoring objectives	8
4.0	Detailed objectives, protection, management and maintenance	9
4.2	Existing habitat.....	9
	Detailed objectives.....	9
	Protection	10
4.3	Existing trees	10
5.0	Proposed landscape features.....	12
5.1	Ornamental tree planting	12
	Detailed objectives.....	12
	Protection	12
	Management and maintenance.....	12
5.2	Ornamental shrub and herbaceous planting.....	13
	Detailed objectives.....	13
	Protection	14
	Management and maintenance.....	14
	Pruning of herbaceous planting	15

Protection	15
Management and maintenance.....	15
5.3 Hedge planting	16
Detailed objectives.....	16
Protection	16
Management and maintenance.....	16
5.4 Grass areas	17
Wildflower grass areas	17
Protection	18
Management and maintenance.....	18
5.5 Rain gardens.....	19
5.6 Hard Landscape Areas	20
Detailed objectives.....	20
Management Prescriptions.....	20
6.0 Annual maintenance programme	22
Appendix A: Maintenance Specification Q35	26
Q35 Landscape maintenance	26
Appendix B: Pruning Techniques	35
General.....	35
Appendix C: Pruning Schedules.....	37
Appendix D: Maintenance Schedule.....	41
Appendix E: Detailed Planting Plan	47

1.0 Introduction

- 1.1.1 This Landscape Management and Maintenance Plan (LMMP) has been prepared by Tetra Tech on behalf of Cardo Group for the re-development development of Constables Close and in response to the Notice of Decision on planning application 20/0140 and the non-material amendment 25/0071.
- 1.1.2 The application relates to the re-development on the site with residential dwellings and site access.
- 1.1.3 This report will address landscape design concepts, management, maintenance and monitoring objectives for a 5 year maintenance commitment for **existing** and **proposed** vegetation.
- 1.1.4 The scope of this report has been based on the Detailed Planting Plan drawings found in **Appendix E** of this report:
 - **B070998-TTE-00-XX-DR-L-0101: Landscape Planting Plan**

1.2 The site

- 1.2.1 The site is shown in **Appendix E, B070998-TTE-00-XX-DR-L-0101**. The overall site comprises an area of land of approximately 0.7ha located to the south of Newport City centre close to part of the River Usk. The site comprises of an existing residential scheme of two-storey properties and their curtilages, some of which are well vegetated, including several trees.
- 1.2.2 The site comprises of an existing housing area located between Commercial Street, Clarence Street and Potter Street. The houses face outwards to the surrounding roads with pavements on the north, south and western sides, forming the boundaries of the site. The eastern boundary of the site is formed by the back garden boundaries and access paths to the existing four properties aligned along the eastern edge. There is one access route into the close towards the northwestern corner of the site, from Clarence Street, which flows through the site and to a turning head to the southeast.

- 1.2.3 The surrounding streets all consist of terrace housing with one small area of green space located on the corner of Commercial Road and Courtybella Terrace. The linear open space consists of parking spaces, amenity grass and mature trees, and connects with a large public park of open green space to the west. There is otherwise very little green space across the area due to the high density of housing and commercial buildings.
- 1.2.4 The site does not contain any public landscaped space apart from one tree that is located to the northeastern corner of the turning head that will be removed as a result of the development. The rest of the space that will be developed currently consists of hard surfacing and existing buildings and residential gardens.

1.3 Development proposals

- 1.3.1 The development will result in the existing close being reconfigured to create a secondary access into the site also from Clarence Street through to the turning head area. This will entail the removal of two properties to enable this access to be made. A further two properties will be removed along the southern boundary.
- 1.3.2 The southern boundary will be enhanced through SuDS feature planting and shrub planting that will surround designated residential parking spaces. Within the centre of the site a small communal garden will be developed containing hard standing, seating and planting.
- 1.3.3 The western edge of the site will reduce the back gardens of properties to form further parking spaces and secondary pedestrian access route from Potter Street. Additional planting areas will be created with a further two areas utilised for SuDS features.
- 1.3.4 Additional planting areas will be located to the frontages of the existing properties aligned along the eastern edge of the site. This will also include a further rain garden.

2.0 Landscape design concepts

2.1 Key design concepts and constraints

2.1.1 The following list defines the key landscape design concepts and constraints which have guided the preparation of the landscape proposals:

- Retention of existing mature trees where possible within the proposed development to provide a sense of maturity within the development proposals and to maintain habitats and screening; and
- Provide tree and shrub planting across the site for amenity and biodiversity benefit.

2.2 Design objectives

2.2.1 Design objectives aim to establish planting to:

- Create managed planting areas that can be utilised as a beneficial asset to the surrounding character and wildlife;
- Develop the green infrastructure of the existing site with enhancements to improve connectivity;
- Inclusion of SuDS elements across the site to provide drainage and additional biodiverse habitats; and
- Enhance existing areas through additional planting to increase habitats.

3.0 Management, Maintenance and Monitoring

3.1 Outline objectives

- 3.1.1 The management and maintenance objectives have been formulated to achieve and fulfil the overall design concepts. The objectives are set out as: design, management, maintenance, and monitoring.

3.2 Management objectives

- 3.2.1 Management objectives will involve short term and long term commitments over a 5-10 year period to achieve and fulfil the overall design concepts.

Short term objectives (0-5 years):

- To undertake periodic maintenance as necessary including weeding and pruning to allow for the successful establishment of planted stock;
- Maintain planting to facilitate that the original intention of the landscape design strategy is achieved as the planting establishes and matures;
- Remove weeds and self-seeded tree species from planting areas to eliminate competition for nutrients and to support the original intention of the landscape design strategy is achieved;
- Planting areas kept free of litter to make sure that the grounds of the proposed housing scheme remain attractive for residents and surrounding community;
- Replace dead/dying plants where necessary to enable the original intention of the landscape design strategy to be achieved;
- Provide enough resources, including necessary labour, materials and machinery to make sure that maintenance is undertaken; and
- To undertake periodic maintenance as necessary.

Long term objectives (6-10 years):

- To undertake periodic maintenance as necessary including weeding and pruning to make sure that planting matures successfully and the landscaping achieves intended original design;

- To deliver a continuity of planting and tree cover to provide a food source and habitat for wildlife;
- To provide a high quality and attractive landscape setting to the proposed development; and
- To reassess the planting establishment and management to support the longevity of the landscape scheme.

3.3 Roles and responsibilities

- 3.3.1 The proposed management operations are to be carried out by registered management company appointed by the client.
- 3.3.2 Supervision and monitoring the implementation of management and maintenance of soft landscaping works will be undertaken by a landscape architect.
- 3.3.3 Tree works should be carried out by suitably experienced and competent arboricultural contractors and should comply with BS3998:2010 'Tree Work – Recommendations'. Contractors should hold appropriate certification of competence for tree climbing, chainsaw, stump-grinder and pesticide use, and work shall be carried out in accordance with HSE Arboriculture and Forestry Advisory Group (AFAG) Guidance (www.hse.gov.uk/treework/resources/afag).
- 3.3.4 Works in relation to bats should be carried out in line with the European Protected Species Mitigation Licence to be obtained for the site and be supervised by the named ecologist or an accredited agent.
- 3.3.5 Management principles are set out in Section 4 of this report and a maintenance schedule is included within **Appendix D**.

3.4 Maintenance objectives

- 3.4.1 The Tree, shrub and grassland planting will be an important feature of the proposed development in creating an attractive environment for future users of the site. The planting provides visual interest to increase amenity and habitat value. For plant list / pruning schedules, refer to **Appendix C**.

- 3.4.2 Maintenance objectives will include regular planting checks and maintenance to make sure that the planting is establishing and is consistent with the original design intentions. This will involve continuous / ongoing routine operations throughout the year, for which a detailed maintenance schedule is to be followed, refer to **Appendix D**.
- 3.4.3 The maintenance commitment for soft landscape areas is to achieve the design concepts and objectives. The management and maintenance operations are set out as they relate to the different landscape types which are as follows:
- Tree planting;
 - Shrub and herbaceous planting;
 - Meadow grassland; and
 - SuDS planted features.
- 3.4.4 For each category, management practices are defined, and ongoing maintenance requirements identified. Brief maintenance commitments for the different landscape types include the following operations (refer to **Appendix A** for the detailed maintenance specification Q35):
- Watering;
 - Weed control;
 - Pest and disease control;
 - Pruning; and
 - General - litter picking.

3.5 Monitoring objectives

- 3.5.1 Monitoring is an essential element of the plan to make sure that the results of any management work are measured and evaluated. Any lessons learnt from this monitoring can then be reflected in a review of the management plan, which should normally be made every five years. An annual review will be carried out by the maintenance company to make sure that specific management tasks have been carried out to a suitable standard.

4.0 Detailed objectives, protection, management and maintenance

- 4.1.1 The below details objectives and protection measures for the existing retained trees and scrub, and prescriptions for the creation of tree, shrub, hedgerows and herbaceous planting.
- 4.1.2 Trees and shrubs/herbaceous species shall be implemented during the first planting season after the hard landscape has been constructed to prevent damage to the new vegetation and to avoid compaction of soils. Avoid planting if the ground is waterlogged or if the ground is frozen.
- 4.1.3 Climatic conditions need to be observed with no planting/maintenance to be carried out in extremes of temperature $<3^{\circ}\text{C}$ or $>24^{\circ}\text{C}$ (without suitable provision for irrigation). If the water supply is, or is likely to be, restricted by emergency legislation then planting/maintenance should be suspended.
- 4.1.4 Planting times:
- Deciduous trees and shrubs: Late October to late March; and
 - Container grown plants: At any time of the year subject to weather conditions.

4.2 Existing habitat

Detailed objectives

- 4.2.1 Low intensity management of the existing vegetation, particularly within the curtilages of the properties that will be affected by the works, and where boundaries will be altered, will aim to promote structural and botanical diversity across the site. The detailed objectives are to:
- Maintain and provide management to existing vegetation;
 - Remove diseased or dangerous trees and replant trees if appropriate; and
 - Support the replanting and encourage growth of new planting.

Protection

- 4.2.2 Existing trees will be protected during the construction phase in accordance with BS 5837:2014 “Trees in Relation to Design, Demolition and Construction – Recommendations” due to encroaching Root Protection Areas.
- 4.2.3 Root Protection Areas (RPAs) will indicate constraints. No machinery digging will be permitted within these RPAs during the construction phase. The RPAs around individual trees to be retained will be marked out using fence posts / signage / fluorescent sprays in advance of any works on site commencing to prevent machinery and site operatives from working / entering the protection areas.

4.3 Existing trees

- 4.3.1 The construction of the development will result in removal of 1 tree within the public space of the site and a number of others within the garden spaces of the properties to be demolished to allow for the development proposals.
- 4.3.2 Tree work may also need to be carried out on retained trees. Tree growth and form will need to be monitored annually. Tree work should be undertaken in accordance with BS 3998:2010 Recommendations for Tree Work, including:
- Removal of any dead, diseased or damaged wood;
 - Crown reduction to maintain clearance from structures;
 - Crown raising to maintain sufficient clearance for vehicular and pedestrian routes;
 - Removal of any crossing branches;
 - Tree replacements if necessary; and
 - Litter removal.
- 4.3.3 Where tree works are necessary, an assessment of the tree’s features will be carried out by a suitably qualified arboriculturist in advance of the works. Where removal works to tree features capable of supporting protected species are necessary, then further surveys following recommended survey guidelines, and where necessary mitigation, will be carried out prior to works commencing. If a bat roost is identified in any tree to

be impacted, a licence from Natural Resources Wales will be sought prior to any works that impacts the tree, and works will proceed as per the approved mitigation.

- 4.3.4 Prior to any tree work that may be required, if the works are scheduled during the bird nesting season (March - September inclusive), a nesting bird check will be carried out by a suitably qualified ecologist prior to any works affecting vegetation. If an active nest is found during pruning operations, an appropriate buffer (usually considered to be a minimum of 5.0m) will be established around the nest in which no works will occur until any young have fledged. The period that nests are active for varies between species of birds but can be several months.
- 4.3.5 Any dead or dying trees and branches should be removed and allow for replacement. Dead wood shall be removed off site. Trees will not be cut / pruned during the breeding bird season, which generally occurs between March and September.

5.0 Proposed landscape features

5.1 Ornamental tree planting

Detailed objectives

5.1.1 Ornamental trees will be planted to provide additional diversity and seasonal interest and will be planted as extra heavy standards, with underground guys. Each tree to receive bark mulch to 1m diameter around the tree stem. Ornamental tree species proposed include Betula, Gleditsia and Liquidamber. Ornamental tree planting is to provide:

- Height, balance, form and scale; and
- Seasonal interest.

Protection

5.1.2 Rootballed tree planting should be undertaken during the dormant season, between late October and early March, to ensure that the trees will establish. Tree planting is to be in accordance with BS 8545:2014 Trees from nursery to independence in the landscape.

5.1.3 New tree stock, sourced from nurseries, will need to be protected from becoming damaged during transporting to site and during any subsequent construction activities which may arise following implementation of the landscape scheme. Trees are to be planted and secured with underground guys which are to be monitored and adjusted accordingly during the growing season if the trees show signs of misalignment.

Management and maintenance

5.1.4 Management is to be more intense within the first 5 years after the trees have been planted to enable successful establishment. This will involve making sure that adequate resources, tools, machinery and staff are available for irrigation, weed control, mulching, pruning and replacing failed trees. In the long-term, 5-10 years, management is to be less intense with maintenance operations being undertaken

periodically as necessary including potential crown/canopy thinning and treatment of pest and diseases.

5.1.5 Management and maintenance commitments are to be more intense during the initial establishment period 0-5 years after planting. This would involve:

- Selective pruning to improve health, tree form and longevity;
- Inspections, including adjusting tree stakes and ties (if utilised) when necessary and after strong winds;
- Mulching;
- Additional watering;
- General - litter picking; and
- Pest and disease control.

5.2 Ornamental shrub and herbaceous planting

Detailed objectives

5.2.1 Shrub planting will be important features within the development, designed to provide habitat, visual interest, colour and texture throughout the year. It will be necessary to undertake occasional formative pruning of certain shrubs (refer to **Appendix B and C**); this should be done with respect to the overall form and shape of the shrub. Species selection and the location of planting should make sure that shrubs will not require constant pruning. It is not intended that the shrub planting will be cut back on a frequent basis.

5.2.2 Design objectives aim to establish planting which will create a softening contrast to the architecture and form a naturalised setting for the development and specifically:

- Provide planting which enhances the environment and supports and increases biodiversity;
- Establishes a type and pattern of planting which can be easily managed and maintained to a consistent standard;
- To make sure of early establishment and healthy growth; and
- To maintain year round appearance and visual interest.

- 5.2.3 Shrubs will consist of a variety of evergreen and deciduous species of mixed sizes with a range of seasonal interest. Shrub species within the site include Hebe, Lavender, Rosa, Salix and Skimmia.
- 5.2.4 Herbaceous planting is also included and will consist of a mix of flowering plants including Iris, Lobelia, and Nepeta and ornamental grass species include, Carex, Deschampsia and Miscanthus.
- 5.2.5 Climbing plants will also be included across the scheme to provide softening of wall and fence structures. Climbers will be supported via wire frames on walling. Stems and canes to be tied to wire supports using twine to avoid damage to stems and leaves and will include Hedera and Parthenocissus.

Protection

- 5.2.6 New planting will require protection during construction if construction is still being carried out and also during any removal of material obtained from pruning and other maintenance activities.

Management and maintenance

- 5.2.7 All planting beds shall be maintained substantially free of weeds. Work shall be done either manually or with appropriate selective weed killer in accordance with manufacturer's recommendations. If weed killer is used the dead weeds shall be removed at the next maintenance visit. Care must be taken to avoid damage to adjacent planting and grass and replaced immediately if affected by weed killer.
- 5.2.8 Once established, shrubs shall be selectively thinned or reduced in height as appropriate by removal or pruning to allow room for growth and avoid overcrowding/overshadowing and create a natural form rather than cube or cloud shapes. Care shall be taken to avoid over pruning and so creating obvious gaps in the shrub beds.
- 5.2.9 Ground cover plants shall be clipped or pruned if necessary to give a neat and tidy finish and contained within the planting bed. Work to remove dead vegetation shall be carried out during the winter months.

- 5.2.10 For most herbaceous species, a single cut can be carried out in early spring after the risk of frost has passed (generally March onwards). Leaving dried flowers heads over winter provides visual interest and provides a food source for seed eating birds and insects. Shelter is also found for wildlife in dead foliage over winter.

Pruning of herbaceous planting

- In spring cut stems close to the 'crown' or 'dormant' top of the plant, avoiding the removal of new shoots;
 - Tidy up the base of the plant, removing dead foliage and debris;
 - Remove all material from site;
 - Apply a 50mm layer of fine horticultural mulch. This will help moisture retention in the soil, contribute to weed suppression and allow delicate stems to grow; and
 - Leave dried flower head over winter for relevant species e.g. ornamental grasses.
- 5.2.11 The addition of mycorrhizal fungi fertiliser promotes a healthier soil whilst also being of benefit to the planting allowing for the increased uptake of water and nutrients which creates better growth, reduced plant stress and more disease resistant plants which also creates more sustainable planted areas.
- 5.2.12 Application:
- One application should be added to planting pits at time of planting; and
 - Secondary applications can be given, if required, in spring in subsequent years.

Protection

- 5.2.13 New shrub planting will require protection during construction if construction is still being carried out and also during any removal of material obtained from pruning and other maintenance activities.

Management and maintenance

- 5.2.14 As with tree planting (above), management and maintenance commitments are to be intense during the initial establishment period 0-5 years after planting. This would involve:

- Watering;
- Weed control;
- Pest and disease control;
- Pruning;
- Tying in of climbing stems;
- Mulching; and
- General - litter picking.

5.3 Hedge planting

Detailed objectives

- 5.3.1 Single species hedgerows are proposed to form the boundary of the community garden space within the centre of the site.
- 5.3.2 On-going management of the hedge will aim to maintain and promote the establishment of the green boundary and support habitats and provide green links.

Protection

- 5.3.3 New hedgerow planting will require protection during construction if construction is still being carried out and also during establishment. Care must also be taken during any removal of material obtained from pruning and other maintenance activities.
- 5.3.4 All shrubs planted as part of the hedgerow are planted as 60-80cm transplant sized stock in double staggered rows at 0.3m between rows and 0.5m between plants. Stock will be planted in appropriately sized pits within planting areas. Base to be mulched during initial establishment period.

Management and maintenance

- 5.3.5 Formative pruning will be carried out in the initial years of establishment. Lateral branches will be trimmed back by fifty percent. A minimal trim of the hedge should then be carried out every second or third year allowing for the hedge to increase in size, after which only maintenance trimming will be necessary.

- 5.3.6 The first cut to newly planted hedgerows is recommended within years 2 to 3 (dependant on growth) and will consist of 'facing up' either side of the hedge. All hedge cuts must be undertaken using appropriate hand or power tools.
- 5.3.7 If possible, only one side of hedgerows will be cut annually. Cutting every 2 years rather than annually will create a bushier hedge.
- 5.3.8 Hedgerows can be cut between September to February to avoid bird nesting season. The later hedges are cut the greater the advantage they provide to foraging wildlife.
- 5.3.9 All hedgerow management is to be carried out outside of the bird nesting season (between March and August). Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologist before any works commence.
- 5.3.10 Additional hedgerow cutting may be required from a health and safety perspective should there be a good growing season (although this is unlikely within the first few years of establishment of new hedgerows, it is to be monitored).
- 5.3.11 Hedges located around the community garden are to be maintained at a height of 1.0m and trimmed along exposed sides when growth becomes extended.
- 5.3.12 Following pruning operations all significant arisings (cuttings), such as branches should be removed from the site.

5.4 Grass areas

Wildflower grass areas

- 5.4.1 Establishment of species-rich grassland will be formed by removal of topsoil and replacement with subsoil of low nutrient status. The grassland planting will be planted with a suitable mix such as Emorsgate Seeds - EM2 Standard General Purpose Meadow Mixture (or similar and approved by the local planning authority) which will enhance the floral species and biodiversity and provide suitable habitat for a range of species.

- 5.4.2 On-going management of the grassland will aim to maintain and promote the establishment of grasses and wildflowers associated with less intensive grassland habitats and the wildlife these support.

Protection

- 5.4.3 Protection of grass areas is to be undertaken during the construction phase to make sure that any grass seed which may have been sown prior to completion of the development is not walked on, that any machinery is not laid on the grass, or it is not driven over by vehicles.

Management and maintenance

- 5.4.4 Following sowing, management will continue to maintain a short grassland (30- 50mm) through regular mowing in winter and early spring as necessary. Mowing will be stopped in April before growth of wildflowers takes place and then managed in line with below.
- 5.4.5 Following establishment, grass areas will be cut after flowering in late September to 50-75mm, after plants have shed seed. The cuttings will be removed after 1-7 days. Scrub will be removed annually where necessary.
- 5.4.6 Grass areas will be mown infrequently to allow for a longer sward and wildflower development which will create microhabitats and benefit certain species, increase biodiversity for invertebrates and will be suitable for the edges of community use areas. Other operations will be as follows:
- Any scrub or trees invading the grass areas should be removed by pulling or cutting at the base to leave the soil and surrounding flora undisturbed. This will be undertaken annually;
 - No fertilisers will be used as this will promote the proliferation of competitive species at the expense of botanical diversity;
 - Maintenance period: this shall be in effect until the end of the defects' liability period (as for planting maintenance);
 - Cuttings will be removed from site after a duration of 1-7 days for seed drop; and

- All grassed areas will be kept free of litter.

5.4.7 Refer to **Appendix A** for detailed Q35 NBS specification.

- Inspections;
- Watering;
- Pest and disease control;
- Litter removal;
- Weed control;
- Grass cutting; and
- Edge trimming.

5.5 Rain gardens

- 5.5.1 The rain garden will be located in the south of the site, aligned with the pedestrian access route into the site. It will be developed to assist in reducing run off rates by intercepting flows. These will be designed as a relatively shallow feature with filtration medium and perforated pipes to manage and slow the flow of water.
- 5.5.2 The rain garden will be created and utilised for conveyance during storm events and high rainfall periods and will be a planted feature aligned along the main access route through the site.
- 5.5.3 Planting within the rain garden will consist of a mix of native and non-native herbaceous and grass species that will be tolerant of both wet and dry conditions that will enable establishment of the planting. It will also aim to provide another form of habitat within the site providing ecological benefit and establishing an attractive SuDS feature.
- 5.5.4 Additional to these elements the rain garden will be planted which will add to its amenity value by creating an attractive landscape feature which also provide increased habitat opportunities.

Protection

- 5.5.5 Protection of the planting would relate to making sure that the soil is adequately covered with a stone-based mulch rather than bark to make sure that the soil content does not float when water levels are high.

Management and maintenance

- 5.5.6 Regular management and monitoring inspections of rain gardens should be undertaken in order to maintain SuDS performance and planting. Management and maintenance commitments would be more intense during the initial establishment period 1-2 years after planting. Maintenance is to be avoided if rain gardens are holding standing water. This would involve:

- Regular inspection;
- Litter/ debris removal;
- Replacement of stone mulch layer;
- Check after any excessive rainfall or flooding events;
- Vegetation management, particularly around the inlets and outlets;
- Soil spiking;
- Watering (if necessary);
- Weed control;
- Pest and disease control; and
- Pruning.

5.6 Hard Landscape Areas

Detailed objectives

- 5.6.1 Hard landscape areas provide definition between the primary road access route, car park and access to properties of the development providing delineation.

Management Prescriptions

- 5.6.2 General maintenance operations will include:

- Regular checks to surfacing;
- Monitoring: Initial Inspection – Monthly for 3 months after installation;
- Monitoring – Inspection for evidence of poor operation and/or weed growth, if required; take remedial action – three monthly – 48hrs after large storm in first six months; particularly at junctions between different surfacing materials;
- Removal of litter; and
- Cleaning when necessary, as per manufacturers' instructions.

6.0 Annual maintenance programme

6.1.1 The following annual maintenance programme is suggested for the soft landscape areas at the site, to make sure that the maintenance work is carried out at the most beneficial time. For all seasons, the following will need to be undertaken:

- Inspections, including when necessary after strong winds;
- Watering - water when necessary and through periods of drought to make sure that planting / grass areas continue to thrive;
- Pest and disease control; and
- Litter removal.

Table 1 Detailed Maintenance Schedules
Tree planting

Action	Details	Timing	Standard
Watering	Water to establish trees and thereafter during periods of drought. Water should be applied slowly to avoid soil erosion.	When necessary	As a general guide to provide an adequate soaking of dry soil, the following are minimum quantities required: • 1.5 - 2.0m high: 10 litres • 3.0 - 5.0m high: 20 litres • 6.0 – 8.0m high: 40 litres • 9.0 – 10.0m high: 100 litres Refer to Appendix A : Q35/ 110; 155; 160
Weed control	Control weeds in planting area by hand weeding or spot application of a translocated herbicide	February; April; May; July	Refer to Appendix A : Q35/ 645; 650
Pruning	At the appropriate season for the species, pruning to be carried out to remove all damaged diseased or dead wood	Autumn, avoiding the bird nesting season	Refer to Appendix A : Q35/ 540 - 570 and Appendix C for pruning schedule
Pest and disease control	To be carried out if necessary and in accordance with best practice	When required	To eradicate all pests and disease to a high standard
Litter removal	Collect and remove all extraneous rubbish	Through-out the year.	Refer to Appendix A : Q35/ 190

Shrub planting

Action	Details	Timing	Standard
Watering	Watering shall be carried out to maintain vigorous plant growth	When necessary	Water is to soak into the ground, it is not sufficient to dampen the surface. Water must be applied slowly to avoid damage to plants. Refer to Appendix A : Q35/ 110; 155; 160
Weed control	Hand weed a minimum of 4 times per year.	February; April;	Refer to Appendix A : Q35/ 645; 650
Pest and disease control	to be carried out if necessary and in accordance with best practice	When required	To eradicate all pests and disease to a high standard
Pruning	At the appropriate season for the species, pruning to be carried out to remove all damaged diseased or dead wood.	February - October	Shrubs : Prune to ensure the plant is kept well balanced and in good shape. (Refer to Appendix B for pruning techniques and Appendix C for pruning schedule). Refer to Appendix A : Q35/ 540 - 570
Litter removal	Collect and remove all extraneous rubbish	Through-out the year.	Refer to Appendix A : Q35/ 190

Hedge

Action	Details	Timing	Standard
Watering	Watering shall be carried out to maintain vigorous plant growth	When necessary	Water is to soak into the ground, it is not sufficient to dampen the surface. Water must be applied slowly to avoid damage to plants. Refer to Appendix A : Q35/ 110; 155; 160
Weed control	Hand weed a minimum of 4 times per year.	February; April;	Refer to Appendix A : Q35/ 645; 650
Pest and disease control	to be carried out if necessary and in accordance with best practice	When required	To eradicate all pests and disease to a high standard

Action	Details	Timing	Standard
Pruning	At the appropriate season for the species, pruning to be carried out to remove all damaged diseased or dead wood.	February - October	Shrubs: Prune to ensure the plant is kept well balanced and in good shape. (Refer to Appendix B for pruning techniques and Appendix C for pruning schedule). Refer to Appendix A: Q35/ 540 - 570
Emergent vegetation clearance after year 3	To follow a 5-year rotation to open up an equivalent of 20% of the perimeter area	October to February	

Wildflower areas

Action	Details	Timing	Standard
Weed control	Hand weed a minimum of 4 times per year.	February - September	Refer to Appendix C for maintenance schedule
Raking	Removal of dead material 1-7 days after cutting and seed dispersal.	September	Refer to Appendix C for maintenance schedule
Pest and disease control	To be carried out if necessary and in accordance with best practice	When required	To eradicate all pests and disease to a high standard
General	If surface is disturbed by overuse, restore by firming or lifting with a fork	When required	Refer to Appendix C for maintenance schedule
Litter removal	Collect and remove all extraneous rubbish	Through-out the year.	Refer to Appendix C for maintenance schedule

Rain gardens

Action	Details	Timing	Standard
Watering	Watering shall be carried out to establish and maintain vigorous plant growth	When necessary during growing season	Water is to soak into the ground, it is not sufficient to dampen the surface. Water must be applied slowly to avoid damage to plants. Refer to Appendix A: Q35/ 110; 155; 160

Action	Details	Timing	Standard
Weed control	Control weeds in planting area by hand weeding or spot application of a translocated herbicide	March to October	Refer to Appendix A: Q35/ 645; 650
Pest and disease control	to be carried out if necessary and in accordance with best practice	When required	To eradicate all pests and disease to a high standard
Pruning	At the appropriate season for the species, pruning to be carried out to remove all damaged diseased or dead material	February - October	Herbaceous planting: Prune to ensure the plant is kept well balanced and in good shape. (Refer to Appendix B for pruning techniques and Appendix C for pruning schedule). Refer to Appendix A: Q35/ 540
Litter removal	Collect and remove all extraneous rubbish	Through-out the year.	Refer to Appendix A: Q35/ 190

Appendices

APPENDIX A: MAINTENANCE SPECIFICATION Q35

Q35 Landscape maintenance

Generally

105 Maintenance objectives

1. Location: All soft landscaped areas as shown on Landscape planting plans
 - 1.1. Duration: 5 years
2. Aims: Improved landscape amenity and increase biodiversity
3. Restrictions: Restrictions relating to operational use of the site.
4. Results: Establishment of planting areas to design objectives.

110 Notice

1. Give notice before
 - 1.1. Application of herbicide.
 - 1.2. Application of fertilizer.
 - 1.3. Watering.
 - 1.4. Each site maintenance visit.
2. Period of notice: Two weeks

130 Reinstatement

1. Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstate to original condition.

140 Control of mammalian pests

1. Specialist firms: Submit proposals
 - 1.1. Method: Submit proposals

155 Watering

1. Supply: Potable mains water
2. Quantity: Wet full depth of topsoil
3. Application: Do not damage or loosen plants.
4. Compacted soil: Loosen or scoop out, to direct water to rootzone.
5. Frequency: As schedule and when instructed

160 Water restrictions

1. General: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

170 Disposal of arisings

1. General: Unless specified otherwise, dispose of arisings as follows:
 - 1.1. Biodegradable arisings: Remove to recycling facility
 - 1.2. Grass cuttings: Remove to recycling facility
 - 1.3. Tree roots and stumps: Remove from site
 - 1.4. Shrub and tree prunings: Remove to recycling facility
 - 1.5. Litter and nonbiodegradable arisings: Remove from site

181 Mechanical equipment

1. General: Minimize.
2. Prohibited equipment: None unless otherwise stated
3. Timing: Use of mechanical equipment allowed between the hours of 10:00 am and 4:00 pm only

190 Litter

1. Extraneous rubbish not arising from the contract work: Collect and remove from site.

195 Protection of existing grass

1. General: Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass.

197 Cleanliness

1. Soil and arisings: Remove from hard surfaces.
2. General: Leave the works in a clean, tidy condition at completion and after any maintenance operations.

Grassed areas

220 Grass cutting generally

1. Before mowing: Remove litter, rubbish and debris.
2. Finish: Neat and even, without surface rutting, compaction or damage to grass.
3. Edges: Leave neat and well defined. Neatly trim around obstructions.
4. Adjoining hard areas: Sweep clear and remove arisings.
5. Drought or wet conditions: Obtain instructions.

225 Tree stems

1. Precautions: Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree. Complete operations close to stems using hand tools

235 Bulbs and corms in grassed areas

1. Before flowering: Do not cut.
2. Interval between end of flowering and start of grass cutting (minimum): 6 weeks

250 Leaf removal

1. Operations: Collect fallen leaves.
2. Special requirements: None
3. Disposal: Remove from site for recycling

255 First cut of Amenity Grass Areas

1. Description: Amenity Grass Areas
2. Height of initial growth: 75 mm
3. Preparation
 - 3.1. Debris and litter: Remove.
 - 3.2. Stones and earth clods larger than 25 mm in any dimension: Remove
4. Height of first cut: 50 mm
5. Mower type: Contractor's choice
6. Arisings: Remove

272 Maintaining Meadow Grassland

1. Preparation: Before each cut remove litter and debris.
2. Height and frequency of cut in first growing season
 - 2.1. Time of first cut: February
 - 2.2. Height of first cut: 50 mm
 - 2.3. Frequency of subsequent cutting (minimum): After cut in February, cut again in late September
 - 2.4. Height of growth permitted (maximum): 1000mm
3. Height and frequency of cut in second growing season
 - 3.1. Time of cut: February and September
 - 3.2. Height of cut: 100 mm
4. Trimming: All edges.
 - 4.1. Arisings: Remove.
5. Watering: As schedule

295 Spiking

1. Location: Amenity grass areas
2. Timing: Autumn before overseeding, if required
3. Operations: Aerate the soil and improve surface water penetration.
4. Depth (minimum): 75 mm

300 Scarifying

1. Location: Amenity Grass areas
2. Timing: October or November, before top dressing
3. Operations: Relieve thatch conditions and remove dead grass.
4. Depth (maximum): 25 mm
5. Arisings: Remove

309 Edges to seeded areas

1. Location: All edges
2. Timing: After seeded areas are well established.

3. Method: Cut to clean, straight lines or smooth curves. Draw back soil to permit edging.
4. Arisings: Remove.

311 Re-forming grass edges

1. Location: All edges
2. Method: Draw back soil and re-form edges to clean, straight lines or smooth-flowing curves, sloping slightly back from vertical
3. Finishing: Damaged parts of turned turf top dressed with suitable soil and seed mix matching the sward
 - 3.1. Support: Not required

320 Levelling hollows and bumps in turf

1. Standard: To BS 7370-3, clauses 12.4 and 12.5.

325 Relieving surface compaction in turf

1. Standard: To BS 7370-3.
2. Method: Spiking
3. Top dressing: Fine sand
 - 3.1. Depth: 2-3 mm

380 Reinstatement of damaged grass areas

1. Damaged grass: Remove to a depth of 30 mm.
2. Preparation: Cultivate substrate to a fine tilth.
3. Reinstatement: Contractor's choice of topsoiling and reseeding:
 - 3.1. Returfing: Quality and appearance to match existing.
 - 3.2. Reseeding: Fill with fine topsoil to BS 3882 multipurpose class, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.
4. Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

Shrubs / hedges / trees

500 Establishment of new planting

1. Duration: Two years
2. Weed control
 - 2.1. Method: Keep planting beds clear of weeds by Maintaining full thickness of mulch.
 - 2.2. Area: Maintain a weed-free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
4. Watering: As schedule and when instructed

502 Establishment of new planting – Mycorrhizae

1. Time of year: During planting
2. Type: Arbuscular mycorrhizae granules

3. Spreading: Spread evenly into excavated planting space at time of planting

- 3.1. Application rate: As manufacturer's recommendations

520 Refirming of trees, hedges and shrubs

1. Timing: After strong winds, frost heave and other disturbances.
2. Refirming: Tread around the base until firmly bedded.
3. Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

537 Nesting wild birds

1. Survey: Before starting hedge or tree work during the period of February to August (inclusive), carry out a survey by a qualified ecologist and submit report
2. Accidental disturbance: Report immediately.

540 Pruning generally

1. Pruning: In accordance with good horticultural and arboricultural practice.
 - 1.1. Removing branches: Do not damage or tear the stem or bark.
 - 1.2. Wounds: Keep as small as possible and cut cleanly back to sound wood.
 - 1.3. Cutting: Make cuts above and sloping away from an outward-facing healthy bud, angled so that water will not collect on cut area.
 - 1.4. Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
2. Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.
3. Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
4. Disease or infection: Give notice if detected.
5. Growth retardants, fungicide or pruning sealant: Do not use unless instructed.

545 Pruning of excessive overhang

1. Timing: As schedule in Autumn
2. Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
3. Special requirements: None

555 Pruning trees and shrubs

1. Standard: To BS 7370-4.
2. Special requirements: None

575 Pruning ornamental shrubs

1. General: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
2. Suckers: Remove by cutting back level with the source stem or root.

580 Pruning flowering species of shrubs and roses

1. Time of year

- 1.1. Winter flowering shrubs: Spring.
- 1.2. Shrubs flowering between March and July: Immediately after the flowering period.
- 1.3. Shrubs flowering between July and October: Back to old wood in winter.
- 1.4. Rose bushes: Early spring to encourage basal growths and a balanced, compact habit.

605 Trimming slowly establishing hedges

1. Operations
 - 1.1. Timing: Cut back hard in June and September to encourage bushy growth down to ground level.
 - 1.2. Form: Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.

620 Removal of dead plant material

1. Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

630 Dead and diseased plants

1. Removal: As soon as possible
2. Replacement: Within two weeks

635 Reinstatement of shrub/ herbaceous areas

1. Dead and damaged plants: Remove.
2. Mulch/ matting materials
 - 2.1. Carefully move to one side and dig over the soil, leaving it fit for replanting.
3. Do not disturb roots of adjacent plants.
4. Replacement plants
 - 4.1. Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.

645 Weed control generally

1. Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 100 mm high
2. Adjacent plants, trees and grass: Do not damage.

650 Hand-weeding

1. General: Remove weeds entirely, including roots.
2. Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
3. Completion: Rake area to a neat, clean condition.
4. Mulch: Reinstall to original depth.

655 Weed cutting by hand or machine

1. Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 25 mm.
2. Herbicides: Do not use

680 Soil aeration

1. Compacted soil surfaces
 - 1.1. Prick up: To aerate the soil of root areas and break surface crust.
 - 1.2. Size of lumps: Reduce to crumb and level off.
 - 1.3. Damage: Do not damage plants and their roots.

685 Soil level adjustment

1. Level of soil/mulch at edges of beds: Reduce to 50 mm below adjacent grass or hard surface.
 - 1.1. Arisings (if any): Spread evenly over the bed.

690 Maintenance of loose mulch

1. Thickness (minimum): 75 mm
 - 1.1. Top up: Annually
2. Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.
3. Weeding: Remove weeds growing on or in mulch by Hand-weeding.

700 Snow removal from shrubs/ trees

1. Standard: To BS 7370-4.
2. Plants subject to snow removal: Small trees and vulnerable shrubs
3. Timing: Within 24 hours of heavy snowfall

705 Winter leaf removal

1. Operations: Collect accumulations of drifted leaves from the vicinity and from planting beds.
2. Arisings: Remove to recycling facility

Tree work

810 Tree work generally

1. Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
2. Protection: Avoid damage to neighbouring trees, plants and property
3. Standard: To BS 3998.
4. Removing branches: Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
5. Appearance: Leave trees with a well-balanced natural appearance.
6. Chain saw work: Operatives must hold a certificate of competence.
7. Tree work: To be carried out by an approved member of the Arboricultural Association.

815 Additional work

1. Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.

820 Prevention of wound bleeding

Standard: To BS 3998.

825 Prevention of disease transmission

Standard: To BS 3998.

830 Cleaning out and deadwooding

1. Remove
 - 1.1. Dead, dying or diseased wood, broken branches and stubs.
 - 1.2. Fungal growths and fruiting bodies.
 - 1.3. Rubbish, windblown or accumulated in branch forks.
 - 1.4. Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
 - 1.5. Other unwanted objects, e.g. tree houses, swings.

835 Cutting and pruning generally

1. Tools: Appropriate, well maintained and sharp.
2. Final pruning cuts
 - 2.1. Chainsaws: Do not use on branches of less than 50 mm diameter.
 - 2.2. Hand saws: Form a smooth cut surface.
 - 2.3. Anvil type secateurs: Do not use.
3. Removing branches: Do not damage or tear the stem.
4. Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
5. Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
6. Large branches: Remove only if unavoidable
 - 6.1. Remove in small sections and lower to ground with ropes and slings.
7. Dead branches and stubs: When removing, do not cut into live wood.
8. Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
9. Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

840 Crown reduction/ shaping

1. General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.
2. Operations: As schedule, if required

845 Crown lifting

1. Clearances: Remove branch systems to give clearance.
 - 1.1. Height: 2.5 m above footpaths if required
2. Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

850 Crown thinning

1. Removing branches: Remove inward-growing, crossing, rubbing, dead and damaged branches.

2. Thinning: Selectively remove secondary and small live branch growth evenly throughout the crown.
 - 2.1. Quantity: 10 %
3. Cutting: Make no cuts of more than 25 mm diameter.
 - 3.1. Branches: Cut back to lateral or sublateral buds or branches without leaving stumps.
4. Appearance: Leave a uniform and well-balanced structure of branches and foliage.

865 Bark damage

1. Wounds
 - 1.1. Do not attempt to stop sap bleeding.
 - 1.2. Bark: Remove ragged edges using a sharp knife.
 - 1.3. Wood: Remove splintered wood from deep wounds.
 - 1.4. Size: Keep wounds as small as possible.
2. Liquid or flux oozing from apparently healthy bark: Give notice.

870 Cavities in trees

1. Investigation: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
2. Water-filled cavities: Do not drain.
3. Sound wood inside cavities: Do not remove.
4. Cavity openings: Do not cover

Hard landscape areas/ fencing

900 Snow clearance

1. Clearance: When instructed
2. De-icing: To roads and footpaths
 - 2.1. Material: Rock salt to BS 3247
 - 2.2. Timing: When freezing precipitation is forecast
 - 2.3. Application rate: Spread evenly at a rate of As manufacturer's recommendations.

910 Hard surfaces and gravel areas

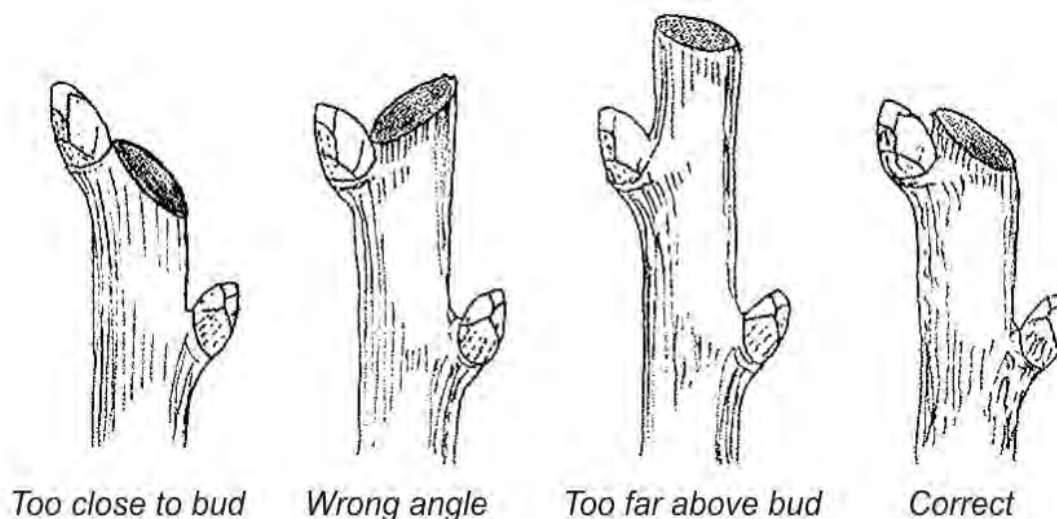
1. Herbicide: Apply a suitable foliar-acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
2. Hard surfaces: Remove litter, leaves and other debris.
3. Surface gutters and channels: Remove mud, silt and debris.
4. Drainage gullies: Empty traps and flush clean.
5. Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
6. Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
7. Stain removal: In accordance with BS 7370-2, Table 4.

APPENDIX B: PRUNING TECHNIQUES

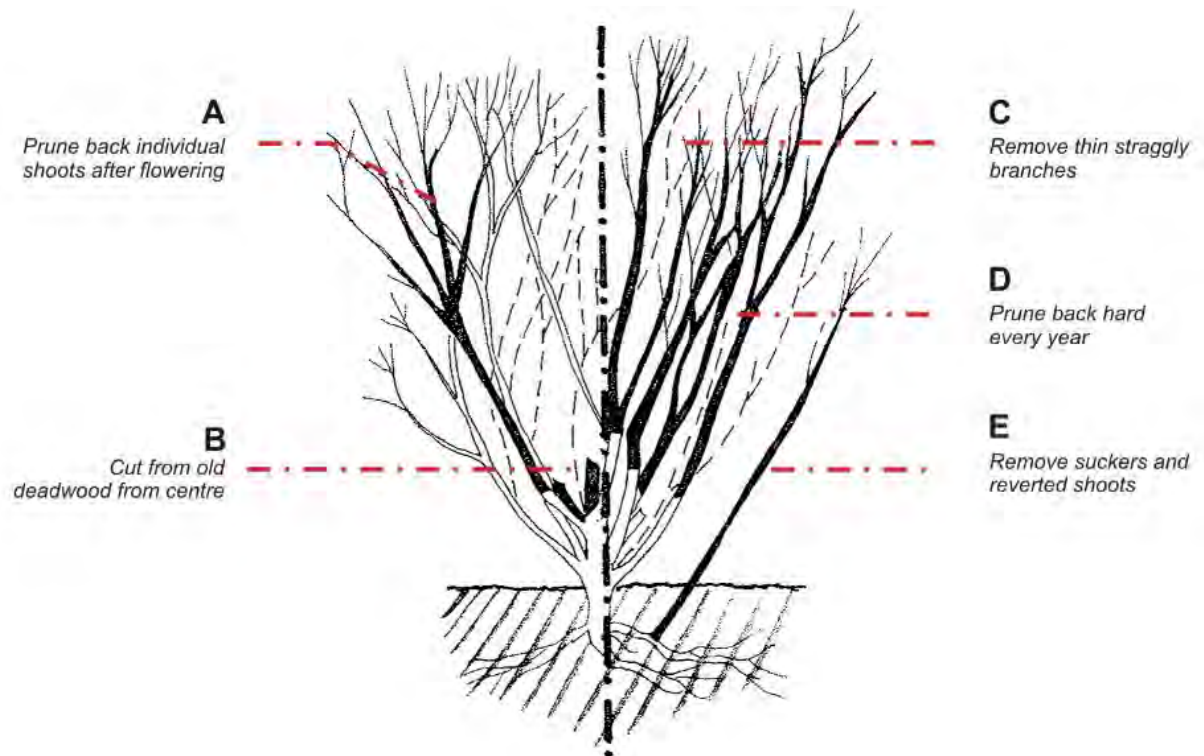
General

- All pruning cuts shall be made in accordance with BS 7370;
- Pruning shall be undertaken to promote flowering and fruiting in accordance with the species and age of the plant;
- Stems shall only be removed to retain the natural appearance of the individual plant species;
- All damage, diseased or deadwood material shall be removed from trees/shrubs;
- Any crossing or rubbing branches are to be removed from trees/shrubs;
- Plants may be permitted to overlap hard areas e.g. paving. If growth restricts the use of the paving, it will be necessary to trim by shortening long growths NOT by cutting indiscriminately along the edge; and
- Ground cover plants should not overhang grass areas because of the difficulty in keeping edges trimmed, prune back encroaching.

Pruning cuts



Pruning techniques



Taken from Landscape Management & Maintenance Handbook, Jones, Hing P (1990)

APPENDIX C: PRUNING SCHEDULES

Table 3 Pruning Schedules

Tree planting

Plant name	Pruning requirements	When to prune
Betula nigra	Pruning Group 1: No routine pruning necessary. Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out. Ref: https://www.rhs.org.uk/advice/profile?pid=549	Late winter or early spring
Gleditsia triacanthos 'Draves Street Keeper'	Pruning Group 1 No routine pruning necessary. Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out. Ref: https://www.rhs.org.uk/advice/profile?pid=549	Late winter or early spring
Liquidamber styraciflua	Pruning Group 1 No routine pruning necessary. Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out. Ref: https://www.rhs.org.uk/advice/profile?pid=549	Late winter or early spring

Shrub planting

Plant name	Pruning requirements	When to prune
Aucuba japonica 'Crotonifolia'	Pruning Group 1 No routine pruning necessary. Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out. Ref: https://www.rhs.org.uk/advice/profile?pid=549	Late winter or early spring
Choisya ternata	Pruning Group 8: Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late summer or early autumn after flowering
Cistus corbariensis	Pruning Group 8 or 9 Do not hard prune. Ref: https://www.rhs.org.uk/plants/89899/cistus-argenteus-silver-pink-ambig-/details Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late summer
Cornus stolonifera 'Flaviramea'	Pruning Group 7: before the leaves begin to appear on the stems Ref: https://www.rhs.org.uk/plants/types/shrubs/colourful-stems-large-foliage	Late winter or early spring. Every two years to produce vigorous colourful young shoots will help to keep the shrub compact

Plant name	Pruning requirements	When to prune
Escallonia 'Donard Seedling'	Pruning Group 9: Little need for pruning. Prune lightly removing unsightly shoots as required Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn
Garrya elliptica	Pruning Group 8: Leave unpruned except for removal of unsightly shoots unless some shaping is required. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn
Hamamelis intermedia 'Feuerzauber'	Pruning Group 1 No routine pruning necessary. Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out. Ref: https://www.rhs.org.uk/plants/114521/hamamelis-intermedia-feuerzauber/details	Late winter or early spring
Hebe rakaiensis	Pruning Group 9: Little need for pruning. Prune lightly removing unsightly shoots as required Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn
Hypericum calycinum	Pruning Group 8: best sheared over in spring.. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Early spring
Lavandula angustifolia 'Hidcote'	Pruning Group 10: Prune immediately after flowering where flowering Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late summer
Lonicera nitida 'Maygreen'	Pruning Group 2: Clip between spring and autumn Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn
Mahonia aquifolium	Pruning Group 8: Prune immediately after flowering. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late winter, early spring
Nandina domestica 'Firepower'	Pruning Group 9: Little need for pruning. Prune lightly removing unsightly shoots as required Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn
Pachysandra terminalis	No Pruning required	
Pieris japonica 'Purity'	Pruning Group 8: Best left unpruned except for removal of unsightly shoots Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn if required
Prunus laurocerasus 'Otto Luyken'	Pruning Group 8: Best left unpruned except for removal of unsightly shoots Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Autumn

Plant name	Pruning requirements	When to prune
Rosa 'Fru Dagmar Hastrup'	Pruning Group 20: Prune in late summer once flowering is completed. Avoid excessive build-up of older, unproductive wood. Ref: https://www.rhs.org.uk/plants/roses/shrub/pruning-guide	Late summer
Rubus 'Betty Ashburner'	Pruning Group 7: before the leaves begin to appear on the stems. Ref: https://www.rhs.org.uk/plants/types/shrubs/colourful-stems-large-foliage	Early spring
Salix lanata	Pruning Group 1: Prune in late winter or early spring. Ref: https://www.rhs.org.uk/plants/types/trees/trees-shrubs-light-pruning	Late winter or early spring
Sambucus nigra 'Black Lace'	Pruning group 1. Will tolerate hard pruning to restrict the size; can be maintained as small shrub if desired. Ref: https://www.rhs.org.uk/plants/types/trees/trees-shrubs-light-pruning	Late winter or early spring
Skimmia japonica	Pruning Group 8: Prune immediately after flowering. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late winter, early spring
Viburnum davidii	Pruning Group 8: Lightly prune after flowering. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late Spring, early summer
Viburnum tinus 'Eve Price'	Pruning Group 8: Lightly prune after flowering. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late Spring, early summer
Viburnum x bodnantense 'Dawn'	Pruning Group 8: Lightly prune after flowering. Ref: https://www.rhs.org.uk/plants/types/shrubs/evergreen-pruning-guide	Late Spring, early summer

Herbaceous planting

Plant name	Pruning requirements	When to prune
Lobelia cardinalis	Cut back after flowering	Late autumn
Nepeta 'Six Hills Giant'	Trim after flowering to keep plants compact and to encourage a second flowering	Autumn
Schizostylis coccinea 'Major'	Deadhead to prolong flowering, cut down stems after flowering. https://www.rhs.org.uk/plants/16817/schizostylis-coccinea/details	Late autumn

Climbers

Plant name	Pruning requirements	When to prune
Hedera helix 'Glacier'	Pruning Group 11: No regular pruning needed. However trimming may be required to keep them to the space available, removing as much from the longer shoots as necessary. Ref: https://www.rhs.org.uk/plants/types/climbers/established-pruning-guide	In early winter or summer to control growth

Plant name	Pruning requirements	When to prune
Parthenocissus henryana	Pruning Group 11: No regular pruning needed. However trimming may be required to keep them to the space available, removing as much from the longer shoots as necessary. Ref: https://www.rhs.org.uk/plants/types/climbers/established-pruning-guide	In early winter or summer to control growth

Marginal/Aquatics

Plant name	Pruning requirements	When to prune
Iris pseudacorus	Remove any dying foliage in autumn, old flower stems can be cut down after flowering Ref: https://www.rhs.org.uk/plants/9334/iris-pseudacorus/details	October

Grasses

Plant name	Pruning requirements	When to prune
Acorus gramineus 'Ogon'	Tidy old or damaged foliage in early spring if necessary	Early spring
Carex pendula	No pruning required	
Deschampsia cespitosa 'Goldtau'	Cut back old stems to the ground in early spring before growth resumes Ref: https://www.rhs.org.uk/plants/5638/deschampsia-cespitosa/details	Early spring
Miscanthus sinensis 'Morning Light'	No pruning required. Deadhead faded spikes	Early spring

Hedge

Plant name	Pruning requirements	When to prune
Fagus Sylvatica	Pruning Group 1: Prune twice or three times during growing season if growth is excessive only after nesting bird check Remove diseased, damaged, congested or crossing shoots. Shoots that are growing in unwanted directions can also be pruned out. Ref: https://www.rhs.org.uk/advice/profile?pid=549	Autumn and early spring

APPENDIX D: MAINTENANCE SCHEDULE

Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6 Onwards
Retained landscape features and habitats																		
Retained broadleaved trees. Arboriculturist to undertake annual inspection of the trees and remedial works undertaken (if any) as advised following inspection										x	x		x	x	x	x	x	x
Proposed landscape features – tree planting																		
Straighten and re-firm trees during each maintenance visit as necessary, and after strong winds.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Maintain a weed free area to 1m diameter at the base of each tree by applying translocated herbicide (in windless weather conditions and using a shield to protect drift on to plants) or by hand weeding.				x	x	x	x	x	x	x			x	x	x	x	x	
Top up mulch at base of tree to 1m diameter to maintain initial depth of 75mm.				x	x		x						x	x	x	x	x	
Undertake formative pruning to create a well-shaped canopy of branches with a single strong leader.											x	x	x	x	x	x	x	
Undertake selective pruning in the longer term to improve health, tree form and longevity.											x	x						x
Prune dead, damaged and diseased plant material as required using secateurs and handsaws without leaving a stub and retaining the branch collar. Arisings will be removed off-site and diseased material disposed of in accordance with HSE Arboriculture and Forestry Advisory Group (AFAG) Guidance (www.hse.gov.uk/treework/resources/afag).											x	x	x	x	x	x	x	x

Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6 Onwards
Monitor the health and condition of the trees and undertake remedial works as instructed by a competent arboricultural contractor.	x	x	x	x	x	x	x	x	x	x	x	x						x
Proposed landscape features – shrub planting																		
Control weeds by hand weeding or spot application of a translocated herbicide (in windless weather conditions and using a shield to protect the plants from spray drift) for pernicious weeds.				x	x	x	x	x	x	x			x	x	x	x	x	x
Prune shrubs to encourage healthy and bushy growth and dispose of arisings by disposing off site.																		
- Winter flowering shrubs				X after flowering									x	x	x	x	x	x
- Shrubs flowering between March - July			X after flowering										x	x	x	x	x	x
- Shrubs flowering between July - October	x	x									x	x	x	x	x	x	x	x
Retain flowerheads or structural interest in winter, for food source for wildlife, and habitat for invertebrates. Prune back dead growth in spring when new green growth appears.				x	x								x	x	x	x	x	x
All damaged, diseased, or dead wood will be removed off site in accordance with local authority guidance.											x	x	x	x	x	x	x	x
Top up mulch at base of shrubs on all plant beds to maintain initial depth of 75mm.				x	x								x	x	x	x	x	x
Additional mycorrhizae granules to be applied on top of soil and watered in where necessary to improve plant growth with application rate in accordance with manufacturer’s recommendations													x		x		x	x

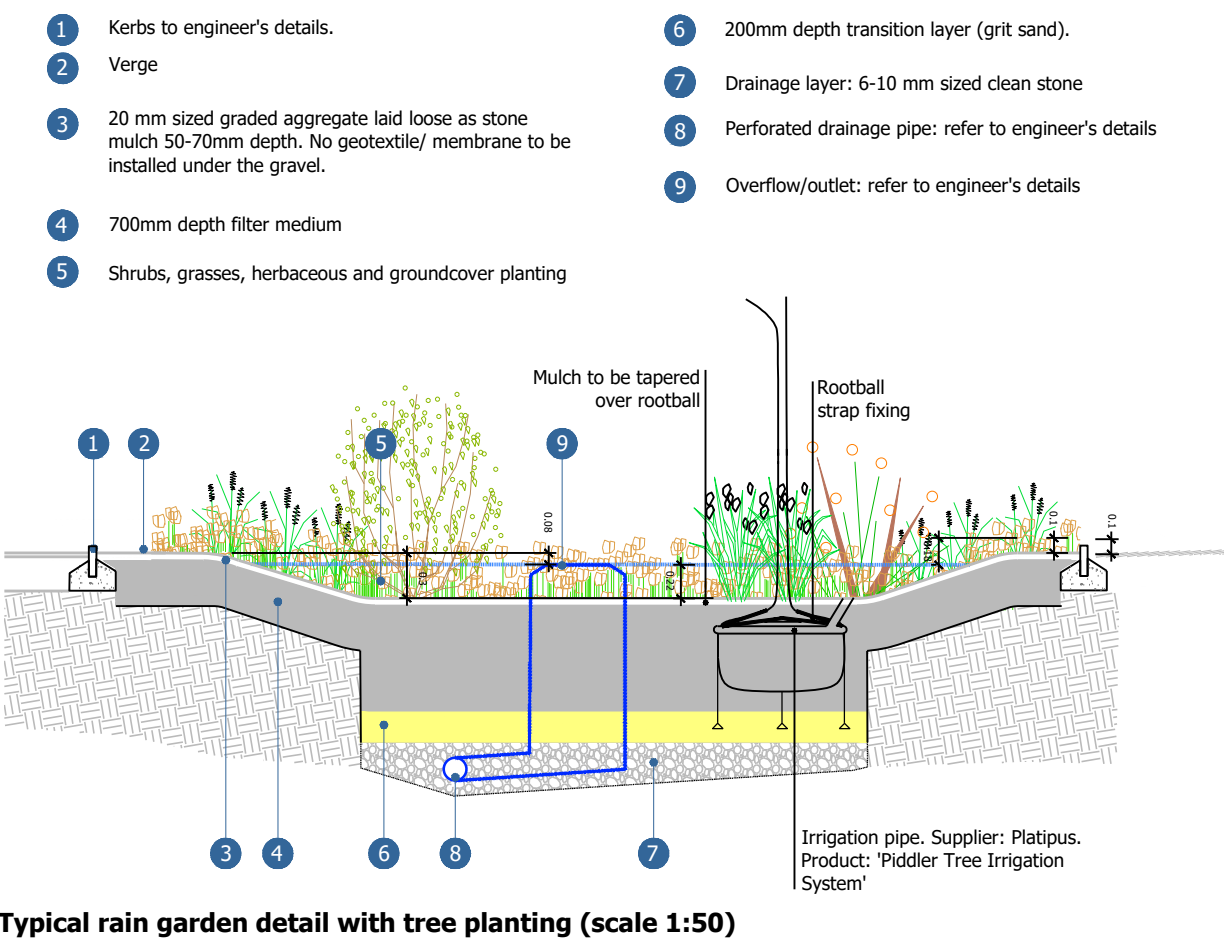
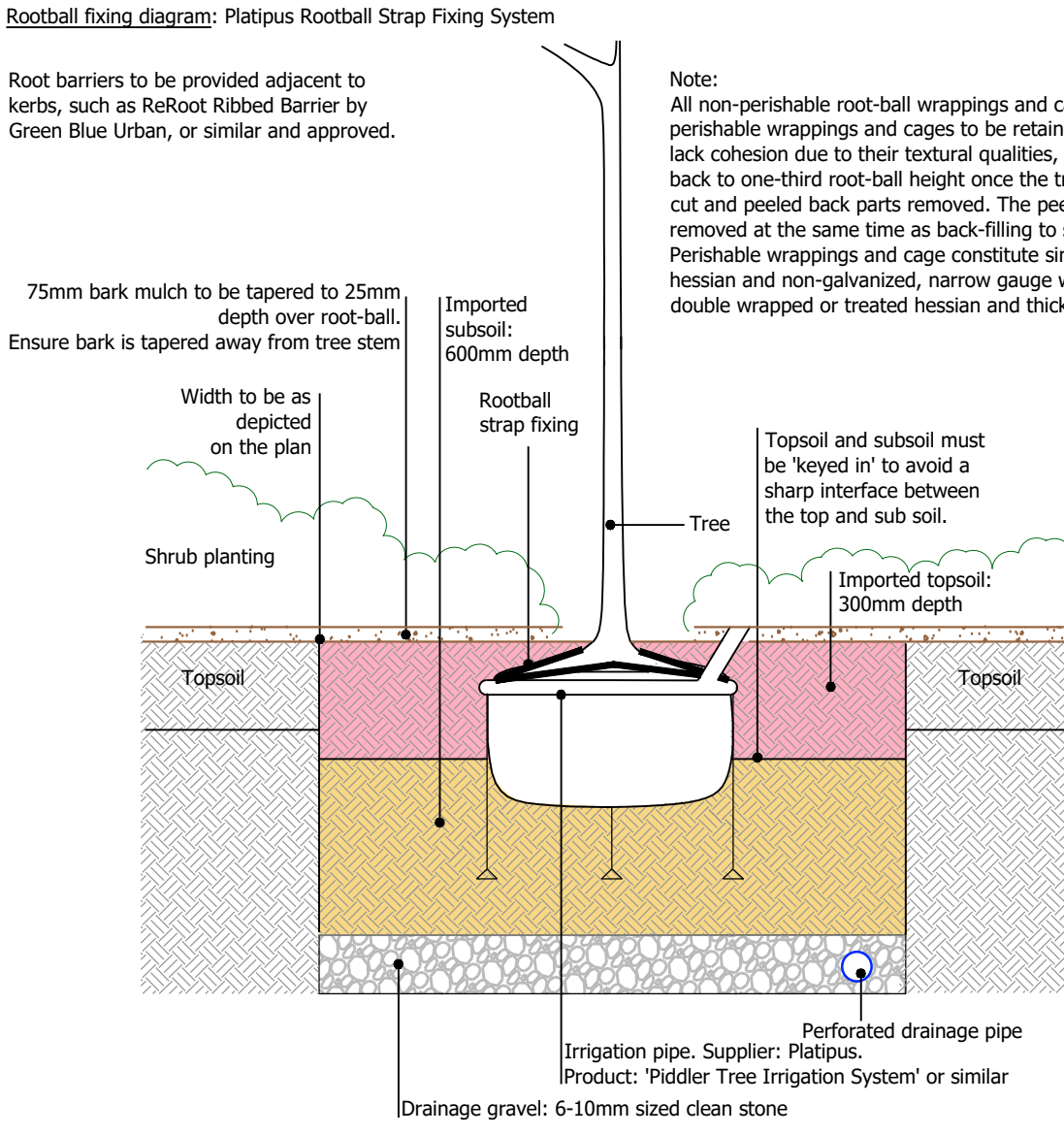
Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6 Onwards
Proposed landscape features – hedge planting																		
Maintain a weed free area 1m wide along the base the hedge by hand weeding or spot application of translocated herbicide (in windless weather conditions and using a shield to protect drift on to plants) for pernicious weeds.				x	x	x	x	x	x	x			x	x	x	x	x	x
Top up mulch at base of hedge to maintain initial depth of 75mm.				x	x								x	x	x	x	x	x
Straighten and re-firm hedge plants during each maintenance visit as necessary.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Prune all damaged, diseased or dead wood and remove off site in accordance with local authority guidance.												x	x	x	x	x	x	x
Prune Privet hedge in years 1-3 to form bushy framework, followed by light trimming in subsequent years to maintain required height	x	x	x								x	x	x	x	x	x	x	x
Additional mycorrhizae granules to be applied on top of soil and watered in where necessary to improve plant growth with application rate in accordance with manufacturer's recommendations					x	x							x	x	x	x	x	x
Proposed landscape features – meadow grassland																		
Undertake grass cut with no cutting to be undertaken within 500mm of an individual tree or shrub. Cut grass no shorter than 70mm. Remove arisings off after 2-3 days				x					x				x	x	x	x	x	x
Reinstate eroded or damaged areas to original specification. Occasional over seeding may be required following grass cutting.				x	x	x	x	x	x	x			x	x	x	x	x	x
Control unwanted emerging scrub or weeds by hand or by spot herbicide treatment if necessary.				x	x	x	x	x	x	x			x	x	x	x	x	x

Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6 Onwards
Proposed landscape features – ornamental climbers																		
Control weeds at base of plants by hand weeding or spot application of a translocated herbicide (in windless weather conditions and using a shield to protect the plants from spray drift) for pernicious weeds				x	x	x	x	x	x	x			x	x	x	x	x	x
Undertake initial pruning to encourage growth. Tie in strong growth horizontally along climber support to form main branch framework.				x	x	x	x	x	x				x	x	x	x		
Top up mulch at base of each plant to maintain initial depth of 75mm.				x	x								x	x	x	x	x	
Apply general fertiliser as necessary in spring in accordance with manufacturer's recommendations.			x	x									x	x	x	x	x	x
Prune all damaged, diseased or dead plant material and remove off site in accordance with local authority guidance.				x	x	x	x	x	x	x				x	x	x	x	x
Proposed landscape features in SuDS – herbaceous perennial and ornamental grass planting																		
Control weeds in planting area by hand weeding or spot application of a translocated herbicide (in windless weather conditions and using a shield to protect the plants from spray drift) for pernicious weeds.				x	x	x	x	x	x	x			x	x	x	x	x	x
Cut back herbaceous perennials that die back in winter (if winter structure and seed heads are not desired).	x	x									x	x	x	x	x	x	x	x
Where stalks, seeds heads and foliage is retained for winter interest and wildlife, cut back dead growth of herbaceous perennials and ornamental grasses when new growth appears at soil level.			x	x									x	x	x	x	x	x
Cut back and remove dead and untidy growth of evergreen perennials and ferns in spring.			x	x									x	x	x	x	x	x

Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6 Onwards
Thin, lift and divide, or control unwanted spread of herbaceous perennials in spring as necessary.					x										x	x	x	x
Additional mycorrhizae granules to be applied on top of soil and watered in where necessary to improve plant growth with application rate in accordance with manufacturer's recommendations				x										x		x		x
Prune all damaged, diseased or dead plant material and remove off site in accordance with local authority guidance.											x	x	x	x	x	x	x	x
Proposed SuDS features																		
Periodic removal of any invasive growth. Do not leave debris to compost to avoid nutrient run off.	x	x										x	x	x	x	x	x	x
Reduce overshadowing by adjacent trees by selective pruning of close canopies. Only a quarter of overhanging tree branches should be pruned at any one time	x	x									x	x					x	x
Check and clean inlets and outlets 3 monthly in year 1 and 2, 6 monthly in year 3 onwards	x			x			x			x			x	x	x	x	x	x
Stone Mulch check and top up										x			x	x	x	x	x	x
Every 10-15 years remove silt build up and re-plant if necessary																		x
General (site wide)																		
Remove litter/extraneous rubbish from all areas during each maintenance visit.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Water all plants as necessary to ensure establishment and subsequent healthy growth.				x	x	x	x	x	x	x			x	x	x	x	x	x
Aerate compacted soil by perforating soil with a garden fork in spring as necessary before topping up plant beds with mulch.				x	x								x	x	x	x	x	x

Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6 Onwards
Trees and plants which are missing, have died or have failed to make satisfactory growth extension will be replaced during the next available planting season; plants will be replaced with stock of size to original specification.	x	x								x	x	x		x	x	x	x	x

APPENDIX E: DETAILED PLANTING PLAN



Outline growing medium conditions for rain gardens

The proposed rain garden areas would require sandy and free-draining soils to be imported.

Filter medium (4): The soil would need to comprise a manufactured product formed from a blend of an appropriately graded mineral component and a suitable organic amendment, such as Bioerotic Soil by Green-tech (product code: 10007353-PRC). This product has been developed around the CEN SAU2 manual guidelines for filter medium in a SAU2 application, using sands and green composts.

Transition layer (6): grit sand to be used as a transition layer, 200mm depth. It shall be washed, non-calcareous, be coarse sand/ fine gravel with particles not coarser than 4.75mm.

Drainage gravel (7): the gravel shall be a washed, non-calcareous, sub-rounded to rounded gravel with nominal particle size of 6-10mm.

Outline implementation specification

Ground Preparation:
Excavations to B.S. 8000 part 1:1989. Excavated material removed off-site: good quality subsoil/subsoil stored on-site for re-use.

Landscape planting areas to have a minimum depth of soil of 500mm and grass areas will have 300mm.

Loosen formation level with single tree ripper, driven 450mm deep at 1m centres, when ground conditions are dry.

Supply approved imported subsoil to B.S. 8001:2013 Specification for subsoil and requirements for use - Multipurpose subsoil to make up any deficiency in on-site subsoil. Spread and level to depth of:

- 200mm for planting areas without trees
- 200mm for grass areas

Supply approved imported topsoil to B.S. 3883:2015 Specification for topsoil - Multipurpose topsoil to make up for any deficiency in on-site topsoil. Spread and level to depth of:

- 300mm for shrub and hedge planting areas
- 100mm for grass areas

Excavate planting pits to the following dimensions:

- Extra Heavy Standard Trees: 1200 x 1200 x 900mm depth
- Shrubs: 300 x 300 x 300mm depth

Backfill tree pits with 100/700mm depth subsoil and 300mm topsoil including Mekout Topgrove peat free planting compost or similar approved at a rate of 0.125m³/pit.

Backfill shrub pits with topsoil including Mekout Topgrove peat free planting compost or similar approved at a rate of 0.125m³/pit.

Cultivate all landscape areas to a loose and friable tilth suitable for grass seeding or planting.

Collect and remove from site all stones, builders' rubble and other deleterious material over 50mm in any dimension.

Meadow Grass Areas:
Grass areas to be sown at a rate of 40g/m² with a suitable grass seed mix such as Emorsgate Seeds EM2 - Standard Purpose Meadow Mixture. Initial grass cutting and edge trimming down to 50mm.

Planting Areas:
Plant specifications to be in accordance with the HTA National Plant Specification: 03/02

TREES	Number	Abbreviation	Species	Specification	Girth	Height	Density
2 No.	BETNI	Betula nigra	3x; Extra Heavy Standard; clear stem minimum 200cm; RB	18-20cm	450-500cm	Counted	
4 No.	GledDSK	Gleditsia triacanthos 'Draves Street Keeper'	3x; Extra Heavy Standard; clear stem minimum 200cm; RB	16-18cm	400-450cm	Counted	
1 No.	LIQ STY	Liquidambar styraciflua	3x; Extra Heavy Standard; clear stem minimum 200cm; RB	18-20cm	450-500cm	Counted	

General Notes:
Substitutions, if made, should be similar in size, form and water demand.
Plants shall be arranged to avoid straight lines and geometric patterns.

Tree anchoring: Rootball fixing strap system to be provided by Platipus or similar approved to secure the trees.
Supplier: Platipus. Product: Tree Anchoring With Strap. Product Code: RF1a/RF2a (depending on tree size). Ref: www.platipus-anchors.com/applications/tree-and-irrigation/rootball-fixing-system-strap/

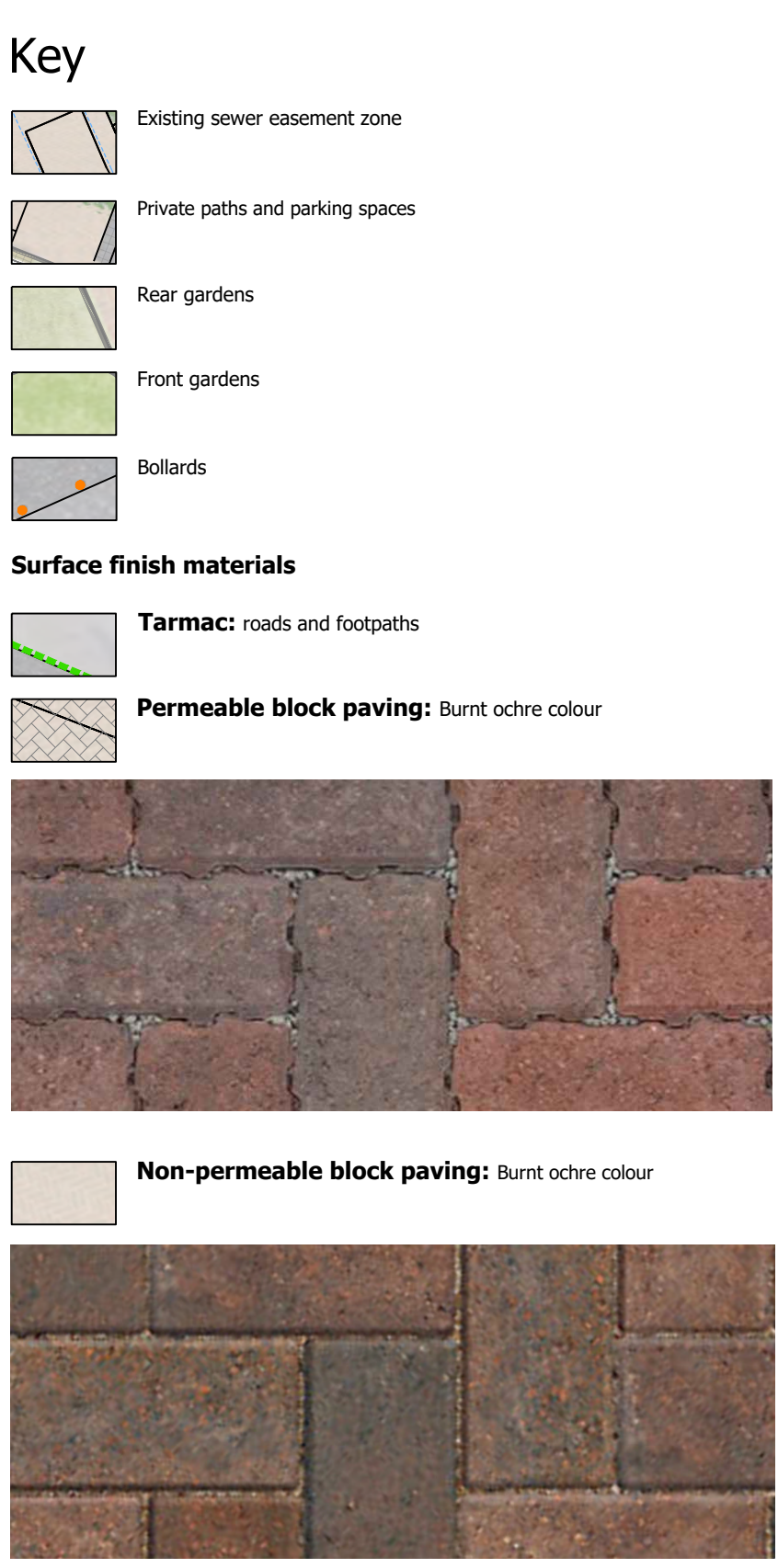
Root barriers:
Root barriers shall be installed (Greenline Urban Rootbar 2000 or similar and approved).
As a suitable depth to protect buried services. It shall be installed approximately 250mm parallel to the buried service within 3m of the proposed trees. Proposed trees to be offset at a minimum of 1m from the position of the root barrier.

Hedge planting:
Planting to be carried out in accordance with the following conditions:
Shrub species: double staggered row at 0.5m centres at 0.3m offset.

Bark mulch: Mulch and spread evenly over planting areas, except SAU2 rain gardens, an original graded bark mulch or similar approved bark mulch to a depth of 50mm. For trees, and in particular those planted in grass, apply a 20mm depth of mulch tapered to 20mm depth over rootballs. Mulch to be tapered so that the root flare of tree is clearly visible. Mulching shall be free from twigs, pathogens and other deleterious substances harmful to plant, animal or human life. Ensure that all weeds have been cleared and that the soil has been watered thoroughly prior to mulching.

Maintenance:
All landscape areas to be maintained in accordance with B.S. 7370 Part 3:1991 and Part 4:1993. Refer to Landscape Management and Maintenance Plan.

Watering:
Watering of planting beds shall ensure that the full depth of topsoil is wet, without causing damage to plants. Any composted soil shall be leached or leached out, to direct water to the rootzone. Frequency of watering shall be as necessary for the continued thriving of all plants.



Soft landscape

1 **Large shrubs / small trees:** such as Amelanchier grandiflora 'Robin Hill' - a shrub / small tree with bronze-tinged young leaves turning orange and red in autumn, and Sambucus nigra 'Black Lace' to be positioned within the rain garden.

2 **Small sized tree:** Betula nigra. The tree grows to approximately 15m, with peeling bark, at first reddish-brown, later almost black; glossy dark green leaves turn yellow in autumn.

3 **Medium sized tree:** Liquidambar styraciflua - positioned as a focal point tree within the courtyard and to provide interest when entering the courtyard from the north from Clarence Street. The tree grows to 20m tall, is broadly conical in outline, with leaves which turn to shades of orange, crimson and purple in autumn.

4 **Medium sized tree:** Gleditsia triacanthos 'Draves Street Keeper' - a narrow pyramidal crown which grows up to about 13m. A tough tree that can tolerate urban conditions.

5 **Evergreen specimen shrub:** Garrya elliptica - to provide structure and interest within the space all year, which can reach up to 4m high. (See drawing TTE-00-00-DR-L-101 for planting schedule details)

Planting areas

Shrub planting: species selected to provide texture, colour and visual interest throughout the year

Hedge planting: Single species native hedging to be maintained at the same height of surrounding fencing.

Attenuation basin and swales: designed with 1:3 gradient slopes. The basin/pond will be planted appropriately with species that will thrive in both damp and dry conditions.

Climbing plants

Grass to be seeded with grass seed mix: Area of grassland to be seeded with Emorsgate Seeds EM2 - Standard Purpose Meadow Mixture. (See drawing TTE-00-00-DR-L-101 for planting schedule details)

Tree root barrier

Communal Garden: Plants and hedges to be maintained at 1.1m high to maintain visibility throughout the site

Landscape furniture

6 **Bollards:** Glenwood 150 Posts, Everwood Material, width 150m x 850mm height above ground. Supplied by Glasdon UK or similar approved.

*** Note:**
Communal Garden: Design and installation of street furniture to be carried out by specialists.

FIRST ISSUE

PO6	Updated to revise hedge planting	18.11.2025	DV	MD
PO7	Updated to match revised P12 drainage layout by Cambria	15.04.2025	DC	NP
PO8	Updated landscape layout to match updated site layout	04.02.2025	DC	SS
PO5	Updated landscape layout to match updated site layout	16.01.2025	DC	DV
PO1	PRELIMINARY FIRST ISSUE	11.03.2021	DC	LB
Rev		001	001	001

Issued Office: Document Control

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Client:

CARDO GROUP

Project Name:

CONSTABLES CLOSE, NEWPORT

Sheet Title:

LANDSCAPE STRATEGY

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale	@ A0	Suitability
8070598	DC	Mar '21	LB	Mar '21	LB	Mar '21	1:200	@ A0	S3

Client Project Number: - TTE - 00 - XX - DR - L - 0100 P08

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TREES						
Number	Abbreviation	Species	Specification	Girth	Height	Density
2 No.	BETNI	<i>Betula nigra</i>	3x; Extra Heavy Standard; clear stem minimum 200cm; RB	18-20cm	450-500cm	Counted
4 No.	GledsDSK	<i>Gleditsia triacanthos</i> 'Draves Street Keeper'	3x; Extra Heavy Standard; clear stem minimum 200cm; RB	16-18cm	400-450cm	Counted
1 No.	LIQ STY	<i>Liquidambar styraciflua</i>	3x; Extra Heavy Standard; clear stem minimum 200cm; RB	18-20cm	450-500cm	Counted

HEDGE					
Number	Abbreviation	Species	Specification	Height	Density
109 No.	Fs	Fagus sylvatica	1+2 :Transplant - seed raised :3 brks :BR	60-80cm	0.5Ctr Double Staggered at 0.3m offset

SHRUBS	Number	Abbreviation	Species	Specification	Height	Pot Size	Density
	2 No.	AJC	<i>Aucuba japonica</i> 'Crotonifolia'	Branched :5 brks :C	60-80cm	10L	Counted
	74 No.	CHOTE	<i>Choisya ternata</i>	Bushy :5 brks :C	40-60cm	5L	0.7Ctr
	105 No.	Cc	<i>Cistus corbariensis</i>	Bushy :6 brks :C	40-60cm	5-7.5L	0.7Ctr
	5 No.	C s 'F'	<i>Cornus stolonifera</i> 'Flaviramea'	Branched :5 brks :C	80-100cm	10L	Counted
	23 No.	EDS	<i>Escallonia</i> 'Donard Seedling'	Bushy :5 brks :C	40-60cm	5L	0.7Ctr
	2 No.	GAREL	<i>Garrya elliptica</i>	Leader With Laterals :5 brks :C	60-80cm	10L	Counted
	2 No.	Hamf	<i>Hamamelis intermedia</i> 'Feuerzauber'	Branched; 5 breaks; C	100-125cm	15L	Counted
	90 No.	HEBRA	<i>Hebe rakaiensis</i>	Bushy :7 brks :C	5-7.5L	0.7Ctr	
	136 No.	Hca	<i>Hypericum calycinum</i>	Bushy :6 brks :C	20-30cm	2L	0.5Ctr
	67 No.	L an 'H'	<i>Lavandula angustifolia</i> 'Hidcote'	Bushy :9 brks	30-40cm	7.5L	0.7Ctr
	51 No.	LONNING	<i>Loniceria nitida</i> 'May Green'	Bushy :8 brks :C	30-40cm	5L	0.7Ctr
	50 No.	LONNING	<i>Mahonia aquifolium</i>	Branched :3 brks :C	30-40cm	5-7.5L	0.7Ctr
	20 No.	NANDOF	<i>Nandina domestica</i> 'Firepower'	Bushy :6 brks :C	5L	0.5Ctr	
	35 No.	PACTE	<i>Pachysandra terminalis</i>	Several shoots :7 brks :C	2L	0.5Ctr	
	9 No.	PHOTE	<i>Phormium tenax</i>	Triple crown; C	60-80cm	15L	Counted
	43 No.	PIEJAPU	<i>Pieris japonica</i> 'Purity'	Bushy :6 brks :C	40-60cm	7.5L	0.7Ctr
	135 No.	P lau 'O L'	<i>Prunus laurocerasus</i> 'Otto Luyken'	Bushy :5 brks :C	40-60cm	5-7.5L	0.7Ctr
	91 No.	RFDH	<i>Rosa</i> 'Fru Dagmar Hastrup'	Cutting :Bush :3 brks	30-40cm	3L	0.7Ctr
	16 No.	RBA	<i>Rubus</i> 'Betty Ashburner'	Branched :3 brks :C	2L	0.6Ctr	
	67 No.	SALLA	<i>Salix lanata</i>	Branched :2 brks :C	20-30cm	2L	0.6Ctr
	1 No.	SnBL	<i>Sambucus nigra</i> 'Black Lace'	Branched :4 brks :C	60-80cm	10L	Counted
	39 No.	Sj	<i>Skimmia japonica</i>	Bushy :4 brks :C	30-40cm	5L	0.6Ctr
	93 No.	V d	<i>Viburnum davidii</i>	Bushy :4 brks :C	30-40cm	5-7.5L	0.7Ctr
	37 No.	VIB PRI	<i>Viburnum tinus</i> 'Eve Price'	Bushy :6 brks :C	40-60cm	7.5L	1Ctr
	5 No.	VbD	<i>Viburnum x bodnantense</i> 'Dawn'	Branched; 6 breaks; C	100-125cm	15L	Counted

HERBACEOUS					
Number	Abbreviation	Species	Specification	Pot Size	Density
93 No.	L ca	<i>Lobelia cardinalis</i>	Full Pot	2L	0.4Ctr
115 No.	NEPGIAA	<i>Nepeta 'Six Hills Giant'</i>	Full Pot	2L	0.45Ctr
72 No.	SCHCOM	<i>Schizostylis coccinea 'Major'</i>	Full Pot	2L	0.45Ctr

CLIMBERS						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
1 No.	HEDGLAA	Hedera helix 'Glacier'	Several Shoots :3 brks :Caned	60-80cm	3L	Counted
1 No.	PARHE	Parthenocissus henryana	Several Shoots :2 brks :Caned	80-100cm	3L	Counted

MARGINAL/AQUATICS					
Number	Abbreviation	Species	Specification	Pot Size	Density
49 No.	IRIPS	<i>Iris pseudacorus</i>	Full Pot	2L	0.6Ctr

GRASSES					
Number	Abbreviation	Species	Specification	Pot Size	Density
68 No.	ACO OGO	<i>Acorus gramineus</i> 'Ogon'	Full Pot	2L	0.45Ctr
40 No.	C pe	<i>Carex pendula</i>	Full Pot	2L	0.6Ctr
82 No.	DcG	<i>Deschampsia cespitosa</i> 'Goldtau'	Full Pot	2L	0.6Ctr
149 No.	MISSIML	<i>Miscanthus sinensis</i> 'Morning Light'	Full Pot	2L	0.6Ctr

Grass Seed Mix	
Emorsgate Seeds - EM2 Standard General Purpose Meadow Mixture	
Sowing rate - 4g/m ² - refer to Emorsgate Seeds for full details of seed mixture	

FIRST ISSUE

P08	Updated to revise hedge planting numbers	18.11.2025	DV	DV	MP
P07	Updated to match revised P12 drainage layout by Cambria	15.04.2025	DC	MP	SS
P06	Updated landscape layout to match updated site layout	04.02.2025	DC	SS	MP
P05	Updated landscape layout to match updated site layout	16.01.2025	DC	DV	MP
P01	PRELIMINARY FIRST ISSUE	11.03.2021	DC	LB	LB
Rev	Description	Date	Dm	Chk	App

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Client

CARDO GROUP

Project Name
CONSTABLES CLOSE, NEWPORT

LANDSCAPE PLANTING PLAN

File Project Number	Drawn by	Date	Checked by	Date	Approved by	Date	Scale & NJ	Sustainability
B070998	DC	Mar '21	LB	Mar '21	LB	Mar '21	1:200 @ A0	S3

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