

SOFT LANDSCAPE SPECIFICATION

Land to the south of Heron Orchard Holiday Park, Holbeach Fen,
Spalding

Land to the south of Heron
Orchard Holiday Park,
Holbeach Fen, Spalding
JSL4642
Soft Landscape Specification
A
18 July 2025

Quality Management

Version	Status	Authored by	Reviewed by	Approved by	Review date
A	Planning	JN	CL	CL	July 2025

Approval for issue

[Name]	[Signature]	[Date]
--------	-------------	--------

File/Model Location

Document location:	P:\4600 Series\JSL4642 - Land South of Heron Orchard Holiday Park\Report
Model / Appendices location:	P:\4600 Series\JSL4642 - Land South of Heron Orchard Holiday Park\Tech\ACAD\Current

© Copyright RPS Group Plc. All rights reserved.

The report has been prepared for the exclusive use of our client and unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS'), no other party may use, make use of, or rely on the contents of this report. The report has been compiled using the resources agreed with the client and in accordance with the scope of work agreed with the client. No liability is accepted by RPS for any use of this report, other than the purpose for which it was prepared. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report.

RPS accepts no responsibility for any documents or information supplied to RPS by others and no legal liability arising from the use by others of opinions or data contained in this report. It is expressly stated that no independent verification of any documents or information supplied by others has been made. RPS has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report's accuracy. No part of this report may be copied or reproduced, by any means, without the prior written consent of RPS.

Prepared by:

RPS

Jakir Noor

Assistant Landscape Architect

Lakesbury House, Hiltingbury Road
Hampshire SO53 5SS

T +44 2380 810 440

E Jakir.noor@rps.tetratech.com

Prepared for:

South Holland District Council

South Holland District Council, Council Offices, Priory
Road, Spalding, Lincolnshire, United Kingdom PE11 2XE

T 01775 764725

E planningadvice@sholland.gov.uk

Contents

1	LANDSCAPE SUB-CONTRACTOR.....	4
2	SCOPE OF WORKS	5
3	SUB-SOIL AND TOPSOIL.....	7
4	PLANTING	9
5	SEEDING/TURFING	11
6	TREES AND SHRUBS	15
7	PROTECTING/MAINTAINING/MAKING GOOD DEFECTS	19

1 LANDSCAPE SUB-CONTRACTOR

- 1.1 The works described in this specification shall be carried out by a suitable Landscape Contractor employed as a domestic sub-contractor by the Main Contractor.
- 1.2 The proposed Landscape Contractor shall (unless otherwise agreed) be agreed with the client / Landscape Architect.
- 1.3 The works described in this specification shall be carried out under the supervision of a suitably qualified Chartered Member of the Landscape Institute (CMLI) or other approved supervisor.
- 1.4 The Contract Administer (CA) shall be a suitably qualified professional person and may be the Landscape Architect or similar appointed person by the client.

2 SCOPE OF WORKS

2.1 The Main Contractor, as part of the preliminary and base external site works, will:

- Carry out the initial site clearance
- Clear existing vegetation to be removed
- Erect protective fencing for existing vegetation to be retained
- Strip soil, store soil and/or remove soil from site
- Prepare sub-grade, and excavate to depths stated

Additional elements:

- *Provide and install formal tree surround guards & grilles, root barriers and any below ground root systems.*

2.2 The soft Landscape Contractor will carry out the following works as listed within the Soft Landscape Specification:

- Supply, deliver and install specified plants, as listed in the Plant Schedule.
- Prepare and grade subsoil to planting beds and tree pits.
- Import / spread and cultivate topsoil including required soil analysis and any amelioration.
- Provide drainage medium to tree pits (unless otherwise completed by the groundworker)
- Carry out all planting works including associated works.
- Carry out all grass seeding or turf laying works.
- Provide maintenance up to Practical Completion.
- Provide 12 months maintenance and defects period post Practical Completion for shrubs and trees.

2.3 Protect against the following:

2.1.1 Existing Topsoil / Subsoil

Protect existing topsoil and subsoil from over-compaction, contamination by chemicals, spills or other foreign materials in areas which may be damaged by construction activity and which will require reinstatement prior to completion of the works. Agree extent of reinstatement with the CA and programme of works.

2.1.2 Retained Trees/Hedges/Shrubs/Grassed Areas

- Adequately protect and preserve, except those which are to be removed.
- Replace to approval or treat as instructed any species or areas damaged or removed without approval.
- Trees and shrubs which, due to the Contractor's negligence, are uprooted, destroyed, or in the opinion of the CA, damaged beyond reasonable chance of survival in their original shape, must be replaced with those of a similar type and age at the Contractor's expense.

2.1.3 Trees to be Retained

Unless agreed otherwise by the CA, **do not**:

- Remove or cut existing trees or vegetation without specific instructions.

- Dump spoil or rubbish, excavate or disturb topsoil, park vehicles or plant, store materials or place temporary accommodation within the branch spread.
- Sever roots exceeding 50 mm in diameter or branches from growing trees, without express prior permission.
- Change level of ground within an area 3m beyond the branch spread.

2.1.4 Protection of Existing Trees

- The contractor shall maintain existing protective fencing or where necessary erect a temporary protective barrier in accordance with Figure 2 of BS 5837:2012 'Trees in relation to construction'. The barrier shall consist of a 2.3m high vertical and horizontal scaffold framework, well braced to resist impacts with vertical tubes driven into the ground at a maximum interval of 3m. Secure weldmesh panels onto framework and apply sign stating 'NO ENTRY: TREE PROTECTION FENCE'. The contractor shall take all necessary precautions to protect in the course of his work all existing trees or vegetation from malicious or accidental damage.
- The temporary fence will be retained intact for the whole duration of the works unless otherwise instructed by the Contract Administrator. On issue of the practical completion certificate the protective fencing shall be removed and the ground made good and post holes filled with soil and lightly compacted.

3 SUB-SOIL AND TOPSOIL

- 3.1 All excavations, cultivations and grading required beneath the canopy of retained trees or within 3m of a hedge line shall be carried out by hand using hand tools taking extreme care not to damage or disturb any tree roots.

3.2 Subsoil

- 3.1.1 Subsoil grading of the site shall leave landscape areas with smooth flowing contours to achieve the specified finished levels when topsoiled.
- Prior to placing topsoil subsoil formation should be loosened and/or ripped to a depth of 300mm. Check for presence of underground services prior to commencing any ripping. The contractor shall satisfy himself as to the presence of any services prior to any ripping or cultivation operations – if in doubt advise CA and seek further instruction.
 - Any areas heavily compacted during construction activity shall be ripped and de-compacted to ensure they are free draining.
 - Any areas found to be wet or waterlogged shall be alleviated by positive land and/or tree pit drainage as necessary to ensure all tree and shrub planting areas are free draining.
 - Subsoils shall be sampled and handled in accordance with the requirements of BS 8601:2013 'Specification for subsoil and requirements of use'.

3.3 Topsoil

- 3.1.1 Topsoil Analysis for existing topsoil to be re-used on site.
- Collect a sample in accordance with BS 3882:2015 'Specification for Topsoil', Annex A from locations throughout the site.
 - Provide the following:
 - pH level
 - Organic matter
 - Confirmation of soil grade as defined by BS 3882
 - Recommendations for making good any deficiencies and fertiliser treatment
 - Confirmation as to whether the soil is suitable for general amenity planting and lawn establishment
 - A report detailing the soil analyst's recommendations
 - Carry out any recommendations outlined from the soil analysis for amelioration and/or soil handling to the approval of the CA.
- 3.1.2 Imported Topsoil
- It is anticipated that the landscape contractor will need to import topsoil to make up deficiencies on site. However if the main contractor so chooses any existing topsoil may be removed from the site and either returned or replaced in accordance with the specification, at no additional cost.
- Provide as necessary to make up any deficiency of existing topsoil available on site to complete the work.
 - Soils to BS 3882:2015 'Specification for Topsoil', grade: General Amenity.
 - Free from aggressive weeds, debris or other potentially hazardous foreign matter.
- 3.1.3 Handling Topsoil

IN ALL CASES THE CONTRACTOR SHALL ENSURE THAT THE SUBSOIL / FORMATION LAYER IS FREE DRAINING PRIOR TO PLACING TOPSOIL. ADVISE THE CA IF THIS CANNOT BE ACHIEVED AND SEEK INSTRUCTION BEFORE PROCEEDING.

- All soils to be stripped, handled and stored in accordance with the requirements of BS 3882:2015 'Specification for Topsoil' and BS8601:2013 ' Specification for subsoil and requirements for use'.
- Remove temporary surfaces before spreading topsoil.
- Spread over prepared subsoil in layers not exceeding 150mm and gently firm each layer before spreading the next.
- Overall minimum depths after firming and settlement to be:

Seeded areas	150mm
Hedgerows	300mm
Meadow seeded areas	n/a (use existing subsoil only)
Tree pits as specified	varies (see below)

- Do not compact topsoil. Preserve a friable texture of separate visible crumbs whenever possible.

3.1.4 Finished levels of topsoil after settlement, unless otherwise stated, to be:

- 50mm below adjoining paving or kerbs,
- Unchanged within the root spread of existing trees,
- Not less than 150mm below dpc of adjoining buildings,
- Where mulch is specified, topsoil is to be neatly pulled back at edges minimum 75mm deep to allow retention of mulch.
- Married in with adjoining soil areas.

4 PLANTING

4.1 Generally planting should be carried out in accordance with the following British Standards

- BS 4043:1989 'Recommendation for Transplanting Root Balled Trees'
- BS 4428:1989 'Code of Practice for General Landscape Operations'
- BS 8545:2014 'Trees from nursery to independence in the landscape. Recommendations'

4.1.1 Times of Year for Planting

- Seeding: mid March to the end of April or late August to mid October.
- Root balled/Bare root deciduous trees and Shrubs: late November to late March.
- Root balled conifers and evergreens: September - November or March - May.
- Turf, container grown shrubs and trees (including spring ringed): At any time if ground and weather conditions are favourable. Ensure that adequate watering, drainage and weed control is provided. Do not plant into frozen ground.
- Waterlogging shall be avoided through proper ground preparation and tree pit excavation.

4.1.2 Watering

- Quantity: where required to field capacity.
- Application: Even and without displacing seeds, seedlings or soil.
- Frequency: As necessary to ensure the establishment and continued thriving of all seeding/ turfing and planting.

4.1.3 Setting Out

- Clearly mark boundaries of seeding / turfing and planting areas and location of trees and obtain approval before starting work.
- All hedging to be evenly spaced to specified densities and in neat consistent lines.
- Areas of amenity planting to be planted in random pattern (not lines) and in groups of 3, 5, 7 of same species where a planting mix is applied.
- Check for overhead and underground services prior to starting any excavation works. Seek approval for any conflicts or possible future conflicts between planting and service restrictions.

4.1.4 Tree Surgery to Existing Trees

- Where scheduled, or as instructed, existing trees shall have all dead, dangerous or damaged branches removed. Lower branches shall be removed to a clear stem height of 2.0m. Ivy shall be severed at the base and removed to a minimum height of 1.5m.
- All tree surgery shall be carried out by an approved tree surgeon in accordance with BS 3998: 2010 'Tree work recommendations'.
- Branches to be removed should be cut in accordance with BS 3889:2010, where suitable "target" prune, without exaggerating the size of the wound. This will usually coincide with the limit of branch buttressing. The size of the wound shall be as small as practicable, therefore flush pruning should be avoided; pruning which leaves a small collar at the base of the branch is preferred.
- All pruning works should seek to maintain an even, balanced crown form.
- Timing: All works to be completed outside of bird nesting season, generally March – August inclusive, unless otherwise agreed following inspection by a suitably qualified Ecologist.

4.2 Preparation Generally

4.1.1 Peat

Do not use peat or products containing peat.

4.1.2 Cultivation

- Compacted topsoil: Break up to full depth.
- Incorporate specified compost and fertiliser.
- Tilth: Within a few days before seeding / turfing or planting cultivate topsoil using a suitable mechanical cultivator until a fine tilth is achieved to a depth of:
 - 350mm – Shrub planting areas
 - 300mm – Hedgerow areas
 - 150mm – Turf / grass seeded areas
- Remove from site undesirable material brought to the surface including stones and clay balls larger than 50 mm in any dimension, roots, tufts of grass, rubbish and debris and foreign matter.
- Any areas which remain waterlogged after cultivation, shall receive additional remediation or positive drainage to maintain suitable aerobic growing conditions.

5 SEEDING/TURFING

5.1 Grass Areas

5.1.1 Fertiliser for Amenity Grass Areas ONLY

- Type: Fisons PS5 pre-seeding fertiliser.
- Application: Before final cultivation and three to five days before seeding.
- Coverage: Spread evenly at 70 g/m².
- FERTILIZER IS NOT TO BE USED ON MEADOW GRASS AREAS

5.1.2 Final Cultivation

- Timing: After grading and fertilising.
- Seed bed: Lightly rake/harrow to present a true, even tilth no greater than 75mm in depth. Remove surface stones/earth clods exceeding 50 mm.
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
- The contractor should allow for all cultivation operations to achieve a good seedbed, including hand raking and hand digging on slopes and banks inaccessible to machinery, and against the backs of kerbs and paths.
- Soils to be free of any weeds

5.1.3 Seed Quality

- Freshness: Produced for the current growing season.
- Certification: Blue label certified varieties.
- Standard: EC purity and germination regulations.
- Official Seed Testing Station certificate of germination, purity and composition:

5.1.4 Seed sowing

- General: Establish good seed contact with the root zone.
- Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
- Distribution: Seed shall be evenly distributed at the rates specified and shall be immediately followed by lightly raking the soil surface to cover the seeds, by use of a chain harrow or other suitable plant.
- Site should be lightly rolled following seeding to ensure good contact between the seed and topsoil.

5.1.5 Seedbed Germination

- Seeding shall be repeated as necessary until an evenly distributed dense sward is established over the seeded area to the satisfaction of the CA. The contractor / supplier shall allow for maintenance of all grass areas (as specified below) until this is achieved.

5.1.6 Turf for all areas

- Timing: After final cultivation fertilising.
- Rolawn Medallion® turf to BS3936 as supplied by www.rolawn.co.uk or similar and approved.

5.1.7 Grass Seed for Amenity Grass and Meadow Areas

Amenity grass areas

- Supplier: Germinal www.germinal.com or similar and approved.
- Type: Mixture reference: A19 – Low maintenance grass mix
- Application rate: 35g/m2.

General Meadow areas

- Supplier: Germinal www.germinal.com or similar and approved
- Type: RE2 Lowland Meadow (MG9 Grassland)
- Application rate: 4g/m2.

Wild Flowers for Hedgerows

- Supplier: Emorsgate Seeds www.wildseed.co.uk or similar and approved.
- Type: EH1F Wild Flowers for Hedgerows
- Application rate: 1.5g/m2.

5.2 Protecting / Cutting

5.1.1 Management

- Protect newly turfed/seeded areas with 1.5m high chestnut pale fencing.
- Maintain fencing until grass is well established then remove and reinstate ground.
- Allow for management of grass during establishment either by cutting or spot treatment, to control competition from undesirable species and suppressing of the sown sward. Any cuttings should be removed.

5.1.2 Watering

During establishment of grass areas ensure that sufficient water is applied using a fine rose sprinkler to maintain healthy growth.

5.1.3 First Cut of Amenity Grass

- Timing: When grass reaches 75 mm high and is reasonably dry.
- Before cutting, remove debris, litter, and stones and earth clods larger than 25 mm in any dimension and roll with a light roller.
- Method: 48 hours later cut with a suitable cylinder box mower, or suitable rotary mower on slopes and banks.
- Arisings: Remove and dispose of all arisings.

5.1.4 First Cut of General Meadow Grass

- Timing: - First cut should be at least eight weeks after sowing. If Autumn sown cut;
 1. March if sufficient material to 40-70mm then;
 2. Early May to 40-70mm then;
 3. September to 40mm after flowering, remove excess grass.
- Before cutting, remove debris, litter, and stones and earth clods larger than 25 mm in any dimension and roll with a light roller.

- Arisings: Leave in situ for 1-7 days turning occasionally to dry and allow seeds to shed before removing off site.

5.1.5 First Cut of Wild Flowers for Hedgerows

- Timing: - First cut should be at least eight weeks after sowing. If Autumn sown cut;
 4. September - March if sufficient material to 30-50mm then;
 5. July/August until March 30-50mm;
- Before cutting, remove debris, litter, and stones and earth clods larger than 25 mm in any dimension and roll with a light roller.
- Arisings: Leave in situ for 1-7 days turning occasionally to dry and allow seeds to shed before removing off site.

5.3 Maintenance

Between the first cut and Practical Completion the height of growth for amenity grass areas must not exceed the maximum height prior to first cutting. Cut as many times necessary with machinery and to heights as specified for the first cut.

5.1.1 Failures of Turf

Bare areas and areas of dead grass which become apparent before the end of the Defects Liability Period will be regarded as defects due to materials or workmanship not in accordance with the contract.

5.1.2 Maintaining Grassed Areas

Maximum height of growth at any time: 60mm

5.1.3 Preparation: Before each cut remove all litter and debris.

- Cutting: Cut at two weekly intervals as required through the growing season.
- Arisings: Remove and dispose of all arisings.
- Trimming: At the time of each cut, trim all grass edges, including round the base of trees, manholes, etc and remove arisings.
- Weed control: Keep the sward substantially free of broad-leaved weeds by applying an approved selective herbicide.
 - Where excessive annual weed growth threatens to smother new grass areas, cut back growth to a height of 50mm with a scythe or rotary cutter and carefully rake off cuttings. Spot treat coarse perennial weeds with a suitable herbicide such as Glyphosate gel.
 - Watering: To be undertaken at the frequency necessary to ensure establishment and survival of the grass sward.

5.1.4 Maintaining Meadow Areas

- Preparation: Before each cut remove all litter and debris. Do not apply fertilisers at any time to areas of Meadow Grassland.
- Cutting: As follows:
 - After initial establishment cut annually during July / August to a height of 100mm following flowering. Cut using suitable machinery such as a sickle-bar mower, motor scythe or a two-wheel strimmer.

- Arisings: Leave on the ground for a couple of days to allow seed dispersal, removing thereafter. If this cannot be accommodated remove at time of cutting.
- Weed control: Substantially free of broadleaved weeds.
 - Method: Spot treat any persistent / aggressive weeds with a Glyphosate based herbicide as approved with the CA.
- Stones brought to the surface: Remove regularly.
- Watering: To be undertaken at the frequency necessary to ensure establishment and survival of the meadow grassland sward.

5.1.5 Fertiliser for Turfed & Amenity Grass Areas **ONLY**

- March application: 11:6:9 Spring/summer turf fertiliser at 35-50 g/m² or equivalent.

6 TREES AND SHRUBS

6.1 Supply and Storage

6.1.1 Trees and Plants generally;

To BS 8545:2014 'Trees from nursery to independence in the landscape. Recommendations'

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Root system and condition: To requirements of the relevant parts of BS 3936 and balanced with branch system and healthy root growth filling the specified pot size.
- Species: True to name.
- Provenance: Provide details of local provenance where specified for UK native species.

6.1.2 Plant / Tree Substitution

- Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering: Submit alternatives stating proposed substitutions.
- Obtain approval before making any substitution.

6.1.3 Plant / Tree Handling, Storage and Transport

To CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.

6.1.4 Planting Generally

To CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part III, paragraphs 6.2 to 6.6. Plant upright or well balanced with best side to front.

6.2 Preparation of Planting Beds / Planting Materials

6.1.1 Soil Ameliorant / Conditioner

- Locations: Planting Beds.
- Type: Well composted organic matter
- Supplier/ Source: To approval.
- Coverage: 1m³ of material per 60m².
- Timing: Apply prior to cultivation.
- Cultivation: work into the top 100mm depth of soils

6.3 Planting Hedges

6.1.1 Plant Layout

- Spacing: Evenly
- Density: As scheduled.
- Ornamental hedgerows to be laid out in planted border 800mm wide, planted as double staggered for deciduous species as specified.

6.1.2 Planting Pits – Hedgerow mixes

To BS 3936: Part 1: 1980 (1992)

- Timing: Excavate immediately prior to planting.
- Sizes: 150 mm wider than roots when fully spread and 400 mm deep.
- Additional requirements: Increase dimensions where necessary to ensure that pits are at least 75 mm deeper than root system and wide enough to accommodate roots when fully spread.
- Break up bottom of planting pit to ensure free draining.
- Finished level to be at original soil mark on shrubs

6.1.3 Antidesiccant for Conifers/ Evergreens

- Dip in or thoroughly spray with approved antidesiccant.
- Application: Dip before delivering to site. Spray again soon after planting. Do not apply in wet or frosty weather.
- Ensure full coverage of underside of foliage.

6.1.4 Planting containerised, bagged and weighted bunched aquatic plants

- Preparation: Remove coarse weeds, debris, etc.
- Planting sites: Form level, stepped or gently sloping areas as scheduled and/ or appropriate to planting water depths and container/ bag sizes and shapes. Planting: Lower containers/ bags/ bunches gently into place, keeping plants upright. Firm plant roost/base into stream base if required to anchor their position.
- Ballast requirement: Where containers / bags are not pre weighted, cover with sufficient ballast to prevent flotation and keep plants secure against likely maximum water flow.
- Free floating plants: Place carefully into areas standing water. Avoid plants from floating downstream by tying with garden string if required.

6.1.5 Backfilling Material

- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required.
- Fertiliser: Enmag slow release fertiliser or similar and approved at a rate of 100 g/m².

6.1.6 After Planting

- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
- Immediately after planting shrubs carefully cut back any damaged, dead or diseased branches and remove any weak, thin or malformed growth.
- When directed and to the extent appropriate for the species cut back to encourage growth.

6.1.7 Mulching Planting Beds

- Bark Nuggets (15-65mm) as supplied by Melcourt Industries Ltd www.melcourt.co.uk or similar and approved from FSC Mixed Source.
- Fire resistance to BS 4790: 1987

- Coverage: settled depth of 75mm
- Application: Apply when ground is moist, do not apply when ground is frozen or dry.

6.1.8 Plant Protection

- Bareroot plants within native hedge planting mixes to be protected from rabbit damage with the installation of 1No. shrub shelter and 25mm softwood stake per shrub / tree. Type 'Shelterguard', colour GREEN as supplied by Tubex www.tubex.com or similar and approved. Shrub species to receive 110mm diameter x 60cm high shelter, hedgerow tree species to receive a clear spiral guard.

6.4 Planting Trees

6.1.1 Antidesiccant for Conifers/ Evergreens

- Dip in or thoroughly spray with approved antidesiccant.
- Application: Dip before delivering to site. Spray again soon after planting. Do not apply in wet or frosty weather.

6.1.2 Tree Pits

Sizes as scheduled below:

- Extra Heavy and Heavy standard trees = 1100 x 1100 x 750mm deep
 - Standard and Multi-stemmed trees = 900 x 900 x 750mm
- All pit sizes include specified drainage layers.

6.1.3 Tree Pit Aeration/Irrigation Pipe

- Locations: All trees 8cm girth and above.
- Type: RootRain metro system with associated end cap as supplied by GreenBlue Urban www.greenblue.com or similar and approved to be coiled around top of rootball.
- Insert during backfill around the rootball; the top to be cut off at a height of not more than 25mm above finished ground level and secured in place and capped.

6.1.4 Tree Pit Drainage

- Aggregate layer: Clean gravel or broken stone, with no fines, graded 50 to 20 mm. Depth: 200mm.
- Cover drainage layer with 200mm of clean horticultural sand.

6.1.5 Deciduous and Coniferous Advanced Nursery Stock Trees

Rootballed stock shall be supported by straps, frames or wire mesh baskets and shall be protected against drying out by wrapping firmly with hessian, plastic film or other recommended material. Wrapping shall be firmly tied over the top of the rootball.

Air pot / spring ringed stock shall be suitably protected with hessian to prevent damage and drying out as soon as the air pot has been removed.

6.1.6 Tree Support

- Extra Heavy, Heavy standard and standard trees: Short double staking
- Staking: Drive stakes vertically at least 400 mm into bottom of pit on either side of tree position before planting. Fix half circle timber cross brace with 2 galvanised nails. Consolidate material around stakes during backfilling.
 - Height of stakes: Cut to approximately 600mm above ground level or 1/3 the height of the tree whichever is the lowest. Treat cut ends with clear timber preservative.

- iv. Feathered and Multi stemmed trees: Short single staking or underground guying as specified.

6.1.7 Staking: Drive stake diagonally at least 400 mm into bottom of pit on before planting. Consolidate material around stake during backfilling.

- Height of stake: Cut to approximately 600mm above ground level or 1/3 whichever is the lowest. Treat cut ends with clear timber preservative.
- Tree ties: Biodegradable webbing 100% natural hessian from sustainable sources; 50mm wide x 1.5mm deep such as 'Nature Tie' as supplied by GreenBlue Urban www.greenblue.com or similar and approved.
- Webbing to be used to secure the tree to stake as well as form the spacers. Tie in a figure of eight, twice around the tree and stake and secure end of hessian to stake using 2 galvanised nails. Form spacer by repeatedly twisting the hessian in the centre of the tie between tree and stake; finish by cutting to the hessian to length and secure to the stake with 2 galvanised nails as above.

6.1.8 Backfilling Material

- Ensure that all tree pits are free draining prior to backfilling. Do not back fill pits that are not free draining – notify CA of any pits retaining water.
- Topsoil shall NOT be used at a depth greater than 500mm unless agreed with the landscape architect.
- Backfill remainder of pit with previously prepared mixture of topsoil excavated from pit and additional topsoil as required, together with:

6.1.9 Ameliorant/ Conditioner: Planting Compost at the following rates:

- Extra Heavy & Heavy Standard trees: 50 litres
- Multi-stemmed, Standard and Feathered trees: 35 litres
- Fertiliser: Enmag slow release fertiliser or similar and approved at a rate of 100 g/m².
- Broadleaf P4 water storing granules at manufacturers recommendations (typically 4gms per litre of compost)

6.1.10 Mulching Trees

- Material: Generally as planting beds.
- Trees in grass: Bark Nuggets (15-65mm) as supplied by Melcourt Industries Ltd www.melcourt.co.uk or similar and approved from FSC Mixed Source.
- Fire resistance to BS 4790: 1987.
- Preparation: Clear all weeds. Apply pre-emergent herbicide.
- Coverage: 75mm depth, in a circular area of 500mm radius measured from the tree stem.
- Application: Apply when ground is moist, do not apply when ground is frozen or dry.

7 PROTECTING/MAINTAINING/MAKING GOOD DEFECTS

7.1 Maintenance Works

7.1.1 Maintenance

- Duration: Carry out the operations in the following clauses from completion of planting until the end of the defects liability period.
- Frequency of maintenance visits: fortnightly during growing season.

7.1.2 Failures of Planting

- General: Hedge planting that have failed to thrive (unless due to theft or malicious damage after completion) during period stated, will be regarded as defects due to materials or workmanship not in accordance with the Contract. Replace with equivalent plants/ trees/ shrubs.
- Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- Timing of making good: In the earliest appropriate planting season.
- Landscape contractor shall seek approval of any substitutions with CA / LPA prior to implementation.

7.1.3 Planting Maintenance Generally

- Weed control: Maintain weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of original planting pit.
- Keep planting beds clear of weeds, by cultivation, use of approved herbicides and maintaining full thickness of mulch.
- Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
- Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
- Staking: Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Cut back any damaged bark.
- Frequency of checks: 3 months.
- Standard Trees: Maintain the clear stem of standard trees by pruning away any new growth which may appear along the trunk or basal areas of the tree.
- Maintain specified balance of species, in particular control the establishment of invasive species to prevent supressing of other species.

7.1.4 Re-firm Planting

Re-firm plants that have been disturbed by wind rock or frost, particularly after heavy winds or storms.

7.1.5 Pest Control

Allow for pest control by spaying with a suitable approved pesticide in cases of severe insect and pest infestation. All spraying must be carried out in accordance with manufacturers written recommendations.

All damage that occurs, as a result of spraying, shall be made good at the Contractor's own cost.

7.1.6 Planting Maintenance – Pruning

- General: Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape.
- Prune trees to favour a single central leading shoot.

7.1.7 Planting Maintenance – Watering

- Ensure that sufficient water is applied to maintain healthy growth. Carry out as and when necessary using a fine rose or sprinkler until full depth of topsoil is saturated. Regularly water plants in shadow of roof overhangs.
- Water trees from above ensuring root ball is sufficiently saturated to maintain healthy growth – do not rely on watering pipe alone.
- Where applicable carry out regular inspections of the 'vertical inspection pipe' to monitor conditions within the pits. Should standing water appear and not dissipate quickly allow for pumping out as necessary to the satisfaction of the landscape architect.

7.1.8 Final Mulching

- Timing: At end of the maintenance period stated.
- Watering: Ensure that soil is thoroughly moistened prior to remulching
- Planting beds: Re-mulch as specified. Coverage: minimum compacted 50mm depth
- Trees: Re-mulch as specified

7.1.9 Use of Chemicals

The contractor must comply with 'The Control of Pesticides Regulations COPR' as amended, 'EU Biocides Regulation 2012' and 'The Control of Substances Hazardous to Health Regulations 2002'

8 5-YEAR MAINTENANCE SCHEDULE

Item	Maintenance Requirements	Year 1	Year 2	Years 3- 5
1	NEW TREE PLANTING			
1.1	Maintain a well-balanced crown, shape and character typical of the species, clear of any crossing or rubbing growth allowing a clear stem, 2m above ground level (retain if field / orchard tree feathered to ground)	Annually Oct-Dec	-	Annually Oct-Dec
1.2	Remove any dead, dying and damaged branches or growth obstructing pedestrian or vehicular routes	As required	As required	As required
1.3	Check condition of stakes, ties, guys and guards and replace broken or missing items until such a time as they become redundant. Adjust if necessary to allow for growth and prevent damage to bark.	Monthly	Monthly	Remove if redundant
1.4	Under take Pest and Disease Control using suitable pesticides or fungicides as advised, only if severe infestation occurs.	Quarterly On inspection	Quarterly On inspection	Quarterly On inspection
1.5	Maintain a weed free area at the base of all trees, 1m diameter mulch area for trees in grass or planting	Annually March	Annually March	Annually March
1.6	Remove any litter, debris or other detritus from within the guard/ shelters and dispose off site	Each visit	Each visit	Each visit
3	NATIVE MIXED HEDGEROW			
3.1	Clip to form a neat, compact hedgerow with a tapering top every 2-3 years (on rotation) to allow flowering and fruiting and the development of a structure of benefit to wildlife, outside the bird breeding season (March to August inclusive) Maintain at approx height of 1.2 - 1.8m to maintain vigour and form with all arisings removed off site.	Annually Oct	-	3 Year rotation
3.2	Hedgerows that adjoin footpaths therefore likely to cause obstruction if growth is left unchecked should be trimmed	Bi-annually March & Oct	Bi-annually March & Oct	Bi-annually March & Oct
3.3	Remove any dead, dying and damaged growth or growth obstructing pedestrian or vehicular routes outside of bird breeding season (March to August inclusive).	As required	As required	As required
3.4	Check condition of stakes, ties, guys and shelters and replace broken or missing items until such a time as they become redundant. Adjust if necessary to allow for growth and prevent damage to bark.	Monthly	Monthly	Remove if redundant
3.5	Re-firm any plants that have been disturbed by adverse weather or interference.	Annually March	Annually March	-
3.6	Apply selective herbicide and/or hand pick weeds from base of hedgerow as required	Bi-annually April-Sept.	Bi-annually April-Sept.	Bi-annually April-Sept.
3.7	Remove any litter, debris or other detritus from within the hedgerow and dispose off site	Each visit	Each visit	Each visit

LANDSCAPE MANAGEMENT SCHEDULE

Item	Maintenance Requirements	Year 1	Year 2	Years 3- 5
7	AMENITY GRASS			
7.1	Maintain all areas to a height of 50-75mm throughout the growing season. Remove all arisings off site or to an approved tip.	May-Sept	May-Sept	May-Sept
7.2	Cut a neat and consistent finish including edges, without rutting or scalping, ensuring adjacent areas of hard standing free are kept free of arisings. Exercise extreme care when working in close proximity to existing/new trees and prevent damage to stems/trunks.	May-Sept	May-Sept	May-Sept
7.3	Remove fallen leaves as required	Annually Oct	Annually Oct	Annually Oct
7.5	Remove litter, rubbish and other debris from grassed areas prior to cutting and dispose off site	Each visit	Each visit	Each visit
8	MEADOW GRASS			
8.1	Cut grass annually by scythe or strimmer to a height of 50-75mm after flowering. Carry out additional cuts in Autumn or Spring as required to maintain grass at below 100mm in height. Exercise extreme care when working in close proximity to existing/new trees and prevent damage to stems/trunks. Exercise extreme care when working in close proximity to water's edge.	Annually Aug/Sept	Annually Aug/Sept	Annually Aug/Sept
8.2	Leave cut hay <i>in situ</i> for 1-7 days, turning occasionally to dry and allowing seeds to be shed, before removing all arisings off site or to approved tip.	Annually Aug/Sept	Annually Aug/Sept	Annually Aug/Sept
8.3	Remove litter, rubbish and other debris from grassed areas prior to cutting and dispose off site	Each visit	Each visit	Each visit
8.4	Apply selective herbicide or hand weed broadleaf and pernicious weeds as required to maintain species balance	Annually April-Sept.	Annually April-Sept.	Annually April-Sept.
14	EXISTING RETAINED TREES			
14.1	Monitor health and condition of trees on a regular basis to identify any health and safety issues.	Quarterly	Quarterly	Quarterly
14.2	Periodically inspect all existing trees, surveying them for general health, vigour and structural stability.	Annually	Annually	Annually
14.3	Remove any dead, dying and damaged branches or growth obstructing pedestrian or vehicular routes	On inspection	On inspection	On inspection
14.4	Under take pest control with approved pesticides in accordance with manufacturer's instructions in approved locations only.	Bi-annually April-Sept.	Bi-annually April-Sept.	Bi-annually April-Sept.
14.5	Carry out replacement tree planting inline with the management and ecological objectives of the site favouring native species to maintain canopy cover and green links.	As required	As required	As required
14.5	NOTE; Prior to any works taking place presence of breeding birds, bats and bat roosting potential shall be reviewed by a suitably qualified and experienced person. Seek written approval from the LPA prior to carrying out any work			

LANDSCAPE MANAGEMENT SCHEDULE

Item	Maintenance Requirements	Year 1	Year 2	Years 3- 5
	to trees covered any Tree Preservation Orders. Leave areas of large cut lumber on site in piles in managed locations for habitat creation and biodiversity.			

Note: *Bi-annually* refers to a task that is carried out twice a year