Outline Specifications

Elmridge Farm, Elmridge Lane, Chipping, PR3 2NY

To be viewed in conjunction with the associated Landscape Plan and Planting Plans

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Outline Hard & Soft Landscape Specification for Elmridge Farm, Elmridge Lane, Chipping, PR3 2NY.

General Information

More comprehensive specifications will be required prior to work commencing based on information from engineers and more detailed surveys of areas such as the silage clamp.
All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

Health and Safety Information

Safe working practices should be employed at all times during the construction process and all necessary Personal Protective Equipment (PPE) should be worn. Risk assessments and method statements should be completed as appropriate in accordance with the CDM regulations (2015).

1. Site Preparation

1.1 Concrete Removal from courtyards and driveway

Any breakup and removal of existing concrete from areas to be resurfaced should be carried out by specialist contractors. Concrete to be crushed and re-used. Any contaminated run-off water should be contained and treated to remove particles, heavy metals and to lower the pH back to safe levels.

1.2 Silage Clamp

Specialist contractors to break up and remove 1/3 of the silage clamp, recycling concrete and treating run-off and arisings as in 1.1 above. See Section A-B on Landscape Plan 1.

This area should have a full levels survey completed once the clamp has been removed to ascertain the new height of the retaining wall, new levels and potential for drainage into existing land drains/sump.

1.3 Scrub clearance

Vegetation should be removed prior to construction of new access track outside of the breeding season (early March until August). If any birds are still nesting at this time, work must cease until nestlings have fledged in line with the Wildlife and Countryside Act (1981).

1.3.1 Stumps should be removed, pulled or ground out where necessary by trained operatives using appropriate plant.

1.3.2 Arisings should be chipped (unless too large) and either composted or recycled away from site.

1.3.3.Removing trees, shrubs and hedges

To BS 3998, Appendix A Health & Safety Executive (HSE), and Arboricultural and Forestry Advisory Group Safety Leaflets. Check for below and above ground services. Give notice if they may be affected. Shrubs and smaller trees should be cut down and roots grubbed up. Remove tree stumps mechanically to a minimum depth of 300 mm below ground level. Give notice if winching is to be used. Do not use other trees as supports or anchors. Avoid damage to neighbouring trees, plants and property. Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained. Fill any holes using as-dug material and/ or imported soil as required. Consolidate and grade area to marry in with surrounding ground level.

1.4 Protection of existing trees

To BS 5837: 2012. Trees to be retained that are within the construction area are to be protected from construction damage by the erection and enforcement of a root protection zone. Under no circumstances are materials to be stored in the rootzone area (as shown on the tree survey) of any existing trees. No diesel, oil or cement should be stored where it may leak or pass into the route zone.

2.0 Hard Landscape

2.1 Courtyard Areas and Driveways

Areas to be surfaced using CoreDrive 50-35HD gravel retention system (or similar to be approved by the client) as per the manufacturer's instructions: http://www.corelp.co.uk/core-drive/#1445512677173-47fb9af0-46ed

2.2 Patios and Pathways

2.2.1 Excavation

To allow the new paving to be installed correctly, excavation to the correct depth is needed. The depth of this excavation depends on the thickness of the required sub-base plus the sand and/or mortar, and the paving flag thickness as well as the required finished level of the buildings.

Finished surface level of the paving, when being laid up to an existing structure, must be a minimum of 150mm below the DPC to prevent problems with rising damp in the structure.

2.2.2 Edge Restraints

Edge restraints should be sufficiently robust to resist the lateral displacement from imposed loadings placed upon the pavement and are installed prior to the installation of the sub-base. The restraint must provide a consistent vertical face to a level below the laying course material.

2.2.3 Sub-base Material Selection

Granular sub-base material should be well graded (40mm to dust) Type 1 quality material. Recycled materials such as crushed masonry or concrete can be used, provided it is well graded and compacts to give a close textured finish. Materials containing organic matter should not be used.

2.2.4 Construction

Sub-base material should be placed in layers not exceeding 75mm in thickness or twice the nominal maximum aggregate size. Each layer should be fully compacted before the next layer is placed. Sub-base tolerance to be +5 -10mm from specified levels. The surface should be clean and suitably close textured to prevent migration of finer material through the construction. A minimum longitudinal fall of 1.25% (1 in 80) and crossfall of 2.5% (1 in 40) should be incorporated in the sub-layer construction to provide adequate surface water runoff from the wearing course.

2.2.5 Laying

Sandstone paving to be laid to falls as per BS 7533-4:2006 on a rigid bed using individual bedding technique. Paving units should be cleaned by washing the units with a sponge and clean water. Stack the units on timber battens with spacers between them. The backs of the units should be primed using a proprietary priming product or fine mortar slurry prior to placement upon the bedding mortar. Flags should be supported on a full 'wet' workable mix mortar bed of 1 part cement to 3 or 4 parts building sand. The mortar bedding should be laid to give a thickness between 15mm and 30mm; (some adjustment may be necessary). A PVA, SBR or equivalent bonding agent can be added to the mortar to assist bonding. An appropriate plasticiser can also be considered to be added to the mix. Keep checking levels and gradient across the units. For most paving units Marshalls' Weatherpoint 365 Jointing Compound (or similar) can be used where a minimum of 10mm joint and minimum 22mm thick paving units are being utilised. Alternatively use a damp mortar mix of 1 part cement to 4 parts building sand. If mortar gets onto the surface of the units, clean off immediately using a damp sponge frequently rinsed in clean water. Under no circumstances should dry or semi dry sand/cement mixes be brushed into the joints. If a narrow 5mm joint is desired then a gun applied mortar compound may be used to fill the joints or a good quality external grout should be considered.

2.2.5.1 Manholes

Manhole inspection chambers All manhole inspection covers in patio areas to be recessed manhole covers using stone as above flush with the rest of the paving. In gravel areas such as driveways, recessed manhole covers filled with gravel.

2.2.6 Cutting

Cutting may be carried out using a diamond tipped power saw, or hammer and bolster. If more than 25% of a flag or slab requires cutting then the remaining piece should be cut from the internal corner of the cut to the external corner of the flag or slab, at an angle of preferably 45^{o} .

2.2.7 Inclement Weather

Laying operations should be discontinued (and any open work face covered) if weather conditions are such that the performance of the paving may be jeopardised. Laying operations should not be undertaken when the temperature is below $3^{o}C$ on a falling thermometer and below $1^{o}C$ on a rising thermometer. All unfinished areas and stockpiles of materials should be covered in the advent of inclement weather to prevent saturation.

Any topsoil to be removed. Areas to be graded and levelled to falls.

2.3 Retaining Wall

2.3.1 The existing wall of the silage clamp is to be reduced to approximately 1/3 of its original height, dependant on existing levels. A french drain should be added to the rear and then the land is to be graded back to the rear and either turfed or reseeded as appropriate.

2.3.2 A small, stone retaining edge is to be constructed to retain the lawn where the current silage clamp is. See Section A-B on Landscape Plan 1. Height and further details for this to be confirmed after site excavations and detailed survey are carried out.

2.4 Wooden fences (2)

1.65 m high wooden feather board fences shall be erected as per the Landscape Plan using 1.5m high featherboard panels on a 150mm high concrete gravel board fitted at ground level between the posts. Posts should be a minimum of 100x100mm in section and concreted into the ground at a depth of approx 760mm. 2 equidistant rails to be fixed horizontally across the face of the posts. Posts no further than 3m apart. The feather edge fence panels are to be fitted vertically on to the front of the rails with a minimum of 25mm (1 inch) overlap as per BS1722 - 11: 2006.

2.5 Stock Fencing

2.5.1 Erecting posts and stakes

Fencing will be constructed in straight lines and be strained between strainer posts. Strainer posts used at each end of the fence and at least every 100m (2 nets), also at all changes of direction and sudden changes of gradient (especially at the bottom of dips/hollows). Straining posts are to be dug in to a depth of at least 90cm, properly rammed, firmed (using stones where necessary) and strutted in the line of the fence. Two struts per post should be used on changes of direction except on acute corners of under 90 degrees where a single strut bisecting the angle of turn may be used. The point end of the strut should be housed approximately 7.5-10cm deep into the straining post at a height of 75cm above ground level. The bottom end should be dug into the ground and rest tight on a half stake driven into the ground or a large stone well bedded below ground level. Intermediate stakes are to be driven into the ground to a minimum depth of 55cm at 2.7m intervals, in line with the posts.

2.5.2 Erecting wire

Netting should be properly strained and stapled. Staples to be placed on top, 3rd, 5th and bottom wires of the netting on each post. If required, barbed wire should be properly strained and stapled to the outside of the posts and stakes 12.5cm above the top of the netting. Adjoining a public right of way plain wire should be used instead of barbed wire if the barbed wire may injure people or animals using the right of way. Staples must not be driven fully home on the intermediate posts in order to allow future repair and retensioning work. They are to be positioned diagonally to the grain of the wood. If necessary an additional line of barbed wire or piece of netting should be added to the bottom of the fence in hollows or dips. Alternatively gaps below the fence should be filled with stone or soil to ensure that it is fully stock proof. Fencing should not be strained or attached to gate

posts, trees, shrubs or other structures. Gaps between the end straining posts and other structures should be stock proofed with tanalised fence rails.

2.5.3 Materials

Timber must be round peeled softwood (not spruce) and pressure tanalised to BS 4072, or timber of equivalent quality and durability. Straining posts 2m x 120mm top diameter. Struts 2m x 100mm top diameter. Intermediate stakes 1.7m x 65mm top diameter, pointed. Note - longer stakes may be needed in soft or uneven ground conditions. Wire: must comply to BS 4102 and be galvanised to BS 443. Line wire: 4mm (8 swg) plain mild galvanised wire. Barbed wire: Two strand 2.5mm (12½ swg) mild steel galvanised 4 point barbed wire. Staples: 40mm x 4mm galvanised wire staples. In situations where horses are present HT 13/122/8 horse netting may be used.

3.0 Soft Landscape

3.1 Ground preparation prior to planting

3.1.1 Topsoil for planting areas if existing topsoil on site is deficient and requires topping up.

Topsoil: Imported topsoil to BS 3882 to be provided as necessary to top up new planting areas. It should be free of pests, disease, and fungus. On visual inspection it should be free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like. Do not use topsoil contaminated with subsoil, rubbish or other materials that are corrosive, explosive or flammable, hazardous to human or animal life or detrimental to healthy plant growth.

3.1.2 Restrictions

Do not use within 100 mm of existing tree and plant stems.

3.1.3 Grading subsoil

Grade to smooth flowing contours to achieve specified finished levels of topsoil. Areas of thicker topsoil: Excavate and/ or place fill to required profiles and levels. Clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm. Immediately before spreading topsoil, remove stones larger than 50 mm. Contaminants, debris and Builders' rubble should be removed from site. Do not raise soil level within root spread of trees that are to be retained.

3.1.4 Topsoil storage heaps

If needed, topsoil may be stored onsite in heaps no higher than 1.0 m, width (maximum): 2.0m. Location to be confirmed with site manager and away from existing trees and other planted areas. Do not place any other material on top of storage heaps. Do not allow construction plant to pass over storage heaps. Prevent compaction and contamination, by fencing and covering as appropriate.

3.1.5 Cultivation

Compacted topsoil: A few days before planting break up to full depth. Create tilth by loosening, aerating and breaking up topsoil to a tilth suitable for grading.

Depth of cultivation 150mm. Particle size (maximum): 2-8 mm.. Weather and ground conditions should be suitably dry. Leave a regular and even surface. Levels: 25 mm above adjoining paving or kerbs and 50 mm above adjoining lawns. Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate soil around existing trees and shrubs.

3.1.5.1 Undesirable Material

Remove visible weeds, roots and large stones with any dimension exceeding 50 mm.

3.1.6 Grading topsoil

Topsoil condition: Reasonably dry and workable. Contours: Smooth and flowing, with falls for adequate drainage. Hollows and ridges: Not permitted. Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.

Select and use plant to minimize disturbance, trafficking and compaction. Do not mix topsoil with subsoil, stone, hardcore, rubbish or material from demolition work or other grades of topsoil. Keep handling to a minimum. Use or stockpile topsoil immediately after stripping. Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit less 3%, to BS 1377-2.

3.1.7 Spreading topsoil

Depth of each layer (maximum) 150 mm. Gently firm each layer before spreading the next. Depths after firming and settlement (minimum) 150 mm for grass areas, 450mm for ornamental planting areas and 800mm for trees. Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible. Soil to be 25 mm above adjoining paving or kerbs and not less than 150 mm below dpc of adjoining buildings. Shrub areas: Soil to be higher than adjoining grass areas by 50 mm. Within root spread of existing trees depth to be unchanged. Marry-in adjoining soil areas. Thickness of turf or mulch to be included in level.

3.2 Turf

3.2.1 Turf Quality

Areas shown as lawn on the Landscape Plan should be turfed with healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease. Lawn turf standard seed mix to BS 3969 with herbicide applied 1 to 3 months before lifting. Turves 900 x 300 minimum size x 25mm minimum even thickness. Supply a representative sample to site for inspection by Consultant before delivery. Turf should be a closely knit, continuous ground cover of even density, height and colour.

3.2.2 Delivery to be phased to ensure laying within 48 hours of lifting. Stacks not to exceed 1.4m high.

3.2.3.Gradients and levels

Conform to the spot heights or contours on drawings and ensure that falls are even without humps or hollows. Unless otherwise specified final levels after settlement are to be 20mm above any adjacent paving.

3.2.4 Preparation for turfing

Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted. Remove surface stones/earth clods exceeding 10 mm. Cultivate topsoil to a minimum depth of 100mm. Reduce top 30mm to a fine tilth and on clay or heavy loam soils work in 50% of coarse sharp sand to produce a 60mm layer.

3.2.5 Fertiliser

Dress areas to be turfed with N7:P7:K7 fertiliser at a rate of 50g/m². Work into the top 30mm of tilth 7 days before turfing and water in well.

3.2.6 Laying turf

Transport turf over close butted timber planks. Lay turf in consecutive rows. Lay turf from timber planks protecting previously laid turf. Lay turf close butted breaking the joint in alternate rows. Use only whole turves at margins. Consolidate lightly with wooden beaters. Brush in finely sieved topsoil to fill all joints. Ensure final surface is 20mm above any adjacent hard surface.

3.2.7 Turfing adjacent to obstructions

Unless otherwise shown on the drawing, turf right up to existing established trees, walls, fences and similar obstructions, leaving no soil uncovered.

3.2.8 Maintenance of new turf: Spread and brush in a top dressing of fine sieved topsoil and sand 50:50 to fill cracks and depressions. Irrigate turf after planting to the full depth of the topsoil and then as necessary to ensure the establishment and continued thriving of all turfing.

3.2.1 Climatic Conditions

Lay turf when soil and weather conditions are suitable.

3.3 Planting shrubs and perennials

3.3.1 Plants supplied should be materially undamaged, sturdy, healthy and vigorous. Appearance: Of good shape and without elongated shoots. Hardiness: Grown in a suitable environment and hardened off. Free from pests, diseases, discoloration, weeds and physiological disorders. Budded or grafted plants: Bottom worked. Root system and condition: Balanced with branch system to BS3936 Nursery Stock (1992) and BS8545 Trees from Nursery to Independence (2014) and the National Plant Specification (http://www.csdhub.com/national-plant-specification/).

Species: True to name. Origin/ Provenance: British grown.

3.3.2. Container grown plants/ trees

Growing medium: With adequate nutrients for plants to thrive until permanently planted. Plants: Centred in containers, firmed and well watered. Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting. Hardiness: Grown in the open for at least two months before being supplied. Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

3.3.3 Plant/ tree substitution

Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering: Nursery to submit alternatives, stating: Price, difference from specified plants/ trees. Obtain approval before making any substitution.

3.3.4.Use of containerised stock

Planting may take place outside of the dormant period but only using container grown stock. This will be at the written discretion of the Client only.

3.3.5 Plant handling, storage transport and planting

Standard: To Horticultural Trades Association 'Handling and establishing landscape plants'. Protect plants from frost. Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle. Plant packaging: Coextruded polyethylene bags with black interior and white exterior. All bare roots plants to be supplied in bags containing and enclosing the whole root system. Transplants should be supplied with shoots and roots fully enclosed in the bag, whereas larger shrubs and trees should have only the root system enclosed. All plants shall be adequately packaged and protected during transportation from source to planting on site. To minimise storage of plant stock, operations are to be arranged so that trees and shrubs are planted immediately after each planting pit is prepared. Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped. Plants and trees to be stored in a secure place, protected from site operations and over exposure to adverse weather conditions.

3.3.6 Preparation for planting

Rotovate ground to a minimum of 250mm deep and remove stones over 50mm in any dimension. Remove existing unwanted plants including their roots. Apply and lightly dig into the surface of planting well rotted farmyard manure at a rate of 5kg/m².

3.3.7 Soil conditions

Soil for cultivating and planting should be moist, friable and not waterlogged.

3.3.8 Weather

Carry out the work while soil and weather conditions are suitable. Do not plant in strong winds.

3.3.9 Times of year for planting

Deciduous trees and shrubs: Late October to late March. Conifers and evergreens: September/ October or April/ May. Herbaceous plants (including marginal): September/ October or March/ April.

Container grown plants: At any time if ground and weather conditions are favourable.

3.3.10 Services

Check for below and above ground services, including land drainage, in the vicinity prior to any planting work or excavations. Give notice if they may be affected and obtain instructions before proceeding.

3.4 Planting

In previously prepared pits and planting areas in position shown on the drawings or in the absence of drawings space evenly, avoiding regimented rows unless specifically shown; in holes large enough to allow adequate root spread and tease out congested root balls of container grown plants. Excavate holes at least 75mm below the root system. Set plants so that their original soil level matches the new surrounding ground and with their best side displayed. Topsoil should be placed around the plant to the previous planted depth, firming in as necessary and ensuring that there are no air spaces around the roots. 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. The plants should be mulched with bark mulch to a depth of 100mm. Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings should be disposed of appropriately.

3.4.1 Hedges

Planting: Through mypex or other landscape fabric in holes large enough to take full spread of roots. Set out plants evenly 6 per m in a zigzag, alternate row pattern. Mulch with bark mulch. Rabbit guards should be used on all hedging plants until successfully established unless rabbit proof fencing is erected.

3.4.1.2 Stock Fencing

A stock fence should be erected on the field side of the native harlequin hedge as per section 2.5.

3.5 Planting trees

3.5.1 Tree pits

Sizes: 75 mm deeper than root system and wide enough to accommodate roots when fully spread. On sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout. Break up soil to a depth of 200 mm. Pit bottoms should have a slightly raised centre. Test completed pits for free drainage before planting.

3.5.2 Staking generally

Stakes: Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.

Trees shall be secured, where specified, to untreated, peeled softwood stakes, 2m to 3m in length, minimum 100mm top diameter. Stakes shall be installed so as to present a uniform appearance, i.e., all stakes shall be approximately the same height above grade. Stakes and ties shall be removed 12 months after planting.

Drive stakes vertically at least 400 mm into bottom of pit on either side of tree position before planting. Backfill and consolidate material around stakes to ensure stability. Cut stakes to approximately 600 mm above ground level. Secure the tree to the stakes using a biodegradable hessian tree tie wound around the stakes in a figure of eight around both posts (see Planting Plans Sheet 2).

3.5.4 Tree backfilling material

Use a previously prepared mixture of topsoil excavated from pit and additional topsoil as required.

3.5.5 Mulching trees

Medium grade bark mulch should be used that is free of pests, disease, fungus and weeds. Ensure the ground is free from weeds and the soil is thoroughly watered before mulching. Coverage: Over an area of 1.2 x.1.2 m with the tree in the centre. Finished level of mulch: 50 mm below adjacent grassed or paved areas.

3.5.6 Tree protection

Transparent, photodegradable tree spirals made from recycled PVC, size: 0.6 m high x 150 mm diameter should be wrapped around the base of each tree trunk immediately after planting. Comply with Arboriculture and Forestry Advisory Group Safety leaflets.

4.0 Protecting/ maintaining/ making good defects

4.1 Maintenance

The landscape contractor shall carry out the operations in the following clauses from completion of planting until the end of the rectification period/as agreed with clients.

Frequency of maintenance visits: In accordance with the agreed maintenance schedule.

4.2 Plant Failures

Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive shall be made good. *Exclusions include theft or malicious damage after completion.* Replace with equivalent plants/ trees/ shrubs to match size of adjacent or nearby plants of same species or match original specification, whichever is the greater during the next suitable planting season.

4.3 Cleanliness

Remove soil and arisings from hard surfaces and grassed areas. Leave the works in a clean tidy condition at completion and after any maintenance operations.

4.4 Plant maintenance

4.4.1 Weeding

Maintain a weed-free area around each tree and shrub equal to the surface of original planting pit. Keep planting beds clear of weeds by hand/hoe. Remove weeds entirely, including roots.. 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. Keep planting beds clear of weeds by maintaining full thickness of mulch. At all times, weed cover less than 5% and no weed to exceed 100 mm high. Adjacent plants, trees and grass should not be damaged.

4.4.2 Precautions

Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools. Check condition of stakes, ties, guys and guards. Replace broken or missing items. Prevent rubbing and adjust tree ties to accommodate growth. At any sign of damage to bark, cut back neatly with sharp knife and prevent further damage. Check status of planted areas at each scheduled maintenance visit. Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs. Contractor's choice of irrigation method to maintain and establish planting.

4.4.3 Fertiliser

Apply slow release fertiliser once during March or April to all shrub beds and borders. Evenly spread, carefully incorporating fertiliser below mulch materials. Application rate to manufacturer's recommendations.

4.4.4 Pruning

Prune to BS 7370-4 to promote healthy growth and natural shape. Dead, dying, diseased wood and suckers should be removed at a time permitted by the agreed maintenance schedule. Carry out pruning annually in the dormant season. Plants and trees should be assessed for the necessity of pruning and be left to grow naturally if deemed attractive and non-symptomatic of the issues above. Growth retardants are not permitted. At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems. Any dead or diseased plants should be removed and replaced during the next growing season.

4.4.4.1 Tree and Shrub Pruning

All pruning to be carried out by a trained horticulturalist using well maintained, clean, sharp tools. Do not damage or tear the stem or bark. Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area. Prune larger branches neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide. Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance. Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife. Disease or infection: Give notice if detected. Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting. Remove excessive height as instructed by the owner or their representative.

4.4.5 Tree stakes and ties

Check ties regularly and immediately after strong winds. Replace loose, broken or decayed stakes to original specification. Adjust, re-fix or replace loose or defective ties, allowing for growth and to prevent chafing. Where chafing has occurred, reposition or replace ties to prevent further chafing. Stakes to be removed when trees are well rooted and established, not more than two years after planting. Fill stake holes with lightly compacted soil. 520

4.4.6 Re-firming of trees and shrubs

After strong winds, frost heave and other disturbances tread around the base until firmly bedded. Where collars have formed in soil at base of tree stems, break up by fork, avoiding damage to roots. Backfill with topsoil and re-firm.

4.4.7 Tree guards

Adjust, re-fix or replace to original specification and to prevent chafing.

4.4.8 Maintenance of loose mulch Minimum thickness 75 mm. Top up mulch twice per year. If mulch has spilled onto adjacent areas, remove weeds and rubbish and return mulch to planted area. Remove weeds growing on or in mulch by hand weeding.

4.4.9 Tree work

Before work commences agree which trees, shrubs and hedges are to be removed or pruned by referring to the Landscape Plan and the Tree Survey and take advice from a trained and fully

qualified arboriculturalist. Avoid damage to neighbouring trees, plants and property. Tree work should be carried out to BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'. Tree work: To be carried out by an approved member of the Arboricultural Association. Leave trees with a well balanced natural appearance. Chain saw work: Operatives must hold a Certificate of Competence.

4.4.9.1 Additional work

Give notice if defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention are detected.

4.4.10 Cutting and pruning generally

Where bark has been damaged, do not attempt to stop sap bleeding. Remove ragged edges using a sharp knife and splintered wood from deep wounds. Keep wounds as small as possible. If liquid or flux oozing from apparently healthy bark, give notice.

4.4.11 Cavities in trees

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