



Landscape Management Plan

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REV	DATE	COMMENTS

Landscape Management Plan

1.0 Background and Purpose

- Summary

Hampstead Secondary School is maintained by the London Borough of Camden. The school is a constrained site accessed from Westbere Road and lies within a residential area. There is a large playfield of University College School Sports to the east of the site.

A number of existing buildings are spread over the site and the group of three school buildings fronting the site are included in Camden Council's Draft Local List. There are two main access points to the site. Whilst the staff and pupil use the main entrance to access the school, the sixth form pupils share the same entrance as the staff and the car park.

The site slopes from north to south as well as from east to west with an overall level difference of around 4 meters. The site does not provide a suitable habitat for a number of species. However, there are a number of mature trees on site, none of which are TPO protected but provide habitat to a number of nesting birds.

The proposals centre around the construction of a new teaching block with a much smaller building footprint than the existing area, providing better opportunities for sports and landscape amenity areas.

The purpose of this document is to provide high level guidance into the sustained management of the landscape. It does so by setting out the guiding principles, aims and objectives. This allows the stakeholder(s) to gain an understanding into the implications for the ongoing management of the site.

Landscape proposals are unique in the fact that they contain growing elements that change significantly through time. These need to be managed appropriately to fulfil the objectives of the design.

- Structure

The landscape proposals for the site are illustrated in section 1.3 of this report.

This management plan covers both hard and soft landscape proposals shown within the red line boundary of the Landscape Masterplan. It begins by stating the overall design vision of the scheme by setting out the design intent.

It then states the maintenance objectives for common elements such as street furniture and fencing which will be found throughout the scheme. The design includes special areas which will have specific maintenance requirements. These requirements are tabulated on an area by area basis within this report.

- Planning

This landscape management plan has been specifically prepared for inclusion within the planning submission and provides an outline of the recommended management regime in line with current regulations and HSE guidance.

It also provides the following information needed to provide full discharge of any landscape management planning requirement:

- Sets out management in demonstrating compliance with the overall site strategy.
- Outlines long term design objectives.
- Provides detailed specification for landscape maintenance.
-

1.1 Vision

- Design Intent

The site master plan vision is a response to the Education Funding Authorities (EFA) and school's brief which can be summarised by the following key site design ambitions:

- To rationalise design of a parking and on site traffic system which segregates pedestrians safely and accommodates the parking and drop-off facilities specifically for this SEN school
- To concentrate sports facilities by grouping Sports Hall with MUGA and AWP.
- To provide interesting and varied learning environment at different levels by following the natural topography on site and the level difference on site.
- To segregate the informal social area by providing a dedicated Year 7 social area.
- To provide additional levels of security (fencing) to allow the school to manage pupil access around and off the site, with particular reference to SEN pupil requirements.
- Retention of, as far as possible, existing boundaries and trees.

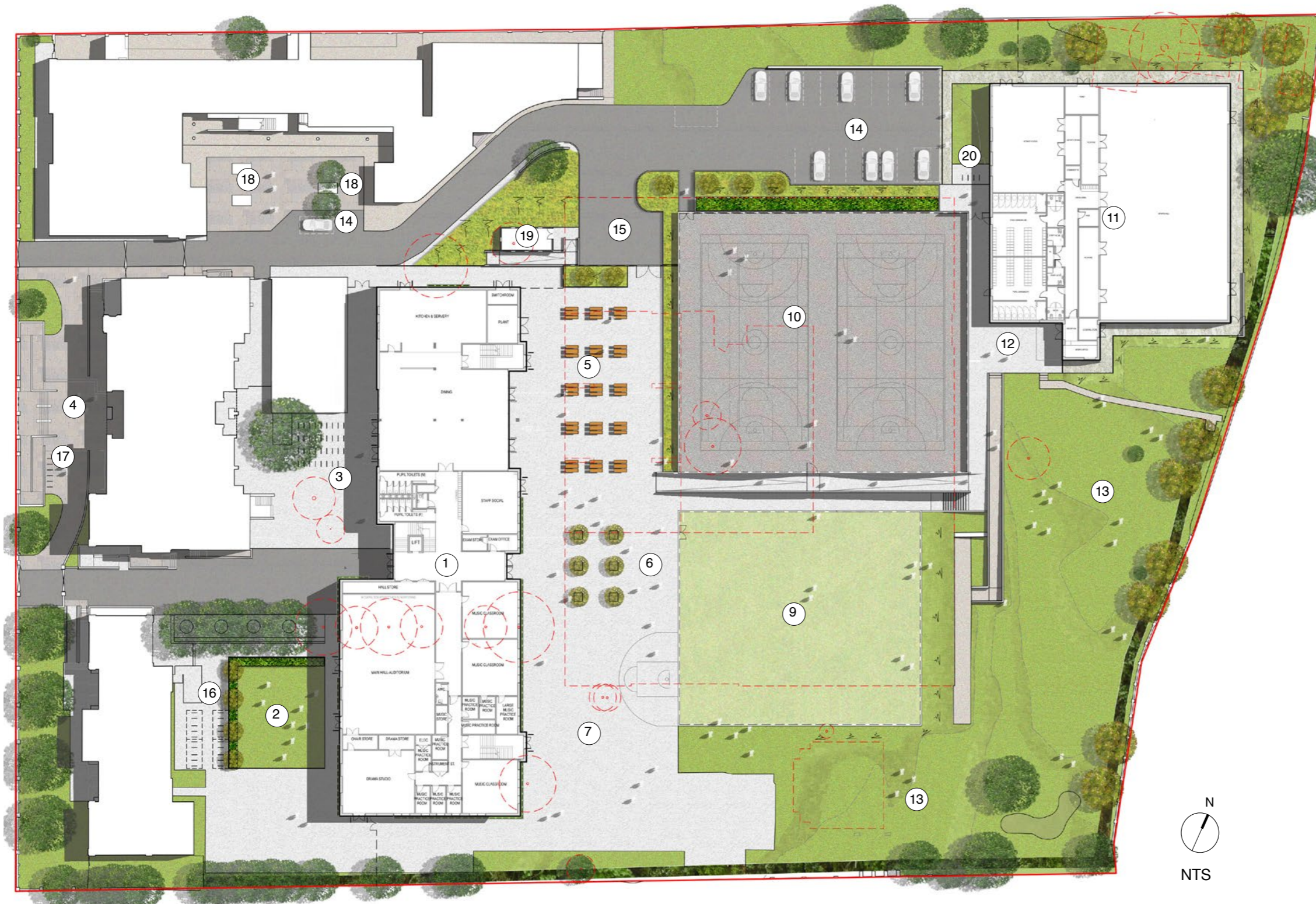
- Legal Obligations

During the ongoing management and maintenance of the site all relevant legislation should be observed. The following themes should be of particular consideration:

- Health and Safety: Health and Safety and Work Act (1974) giving consideration to all users of the site.
- Access: Disability and Discrimination Act (2005) giving consideration to the continued accessibility of areas of the site for all users.
- Pollution: Control of Pollution Act (1974)/ Pesticides Act (1998) for the control and correct use of pesticides and other harmful substances.

1.3 Landscape & Site Proposals

The below drawing sets out the proposed site proposals as submitted to the local planning authorities for approval.



- ① NEW TEACHING BLOCK / PUPIL MAIN ENTRANCE
- ② YEAR 7 SOCIAL AREA
- ③ CYCLE PARKING - 70 SPACES TOTAL
- ④ MAIN ENTRANCE / VISITOR ACCESS
- ⑤ EXTERNAL DINING WITH LEGACY FURNITURE
- ⑥ INFORMAL HARD / PLAY
- ⑦ INFORMAL HARD / PROJECT AREA
- ⑧ HABITAT / WET AREA
- ⑨ ALL WEATHER SPORTS SURFACE
- ⑩ HARD COURTS
- ⑪ SPORTS BLOCK
- ⑫ SPORTS BLOCK ENTRANCE AREA
- ⑬ INFORMAL SOFT PLAY
- ⑭ PARKING
- ⑮ SERVICE DROP OFF / BINS
- ⑯ COVERED CYCLE PARKING - 40 SPACES
- ⑰ VISITOR CYCLE PARKING - 12 SPACES
- ⑱ LEGACY TABLE TENNIS
- ⑲ BIN STORE
- ⑳ VISITOR CYCLE PARKING - 8 SPACES

1.2 Objectives for Common Elements

The following section sets out the performance objectives for meeting both the design intent and the legal obligations for general items that are commonly found throughout the landscape proposals.

• Paths and Paved Areas

- All paths should be kept clean and weed free to avoid creating slip hazards. Where plant matter is gathered arising should be removed from site. Avoid using methods which damage the surface.
- Suitable herbicide should be applied to manufactures instructions where weeds cannot be removed manually/mechanically as required. Algaecide should be applied to manufactures instructions where paths constitute a slip hazard.
- Paving should be jet washed and chewing gum removed once per year or more as necessary in highly trafficked areas.
- Damage to paving surfaces should be reported and remedial measure taken to replace or repair with matching materials. Where uneven paving surfaces constitute a trip hazard the area should be secured before promptly making good.
- The gritting of paved surfaces in icy conditions should use substances approved by Facilities Management team with an awareness to their environmental impact. Gritting should be carefully applied to avoid any spilling over planted areas.
- Trim stray planting from paths to retain full access.

• Drainage and Watering

- Ensure all drainage is kept clean and free of detritus to avoid reduced drainage capacity. Slot or channel drains should be regularly rodded or jet washed as required.
- Watering points will be drained down in winter to prevent water freezing and damaging pipes. On re-commissioning in Spring pipes should be flushed through.
- Where water collects due to blocked drains, remedial measures should be taken promptly.

• Street Furniture, lighting and signage

- Inspect and repair/ replace street furniture using matching materials and products as detailed in the O&M manuals. Materials should be replaced within the lifetime of specified materials. Items should be kept clean and free from detritus, graffiti, marking and stains.
- Luminaire lamps should be replaced within their expected lifetime or promptly if failing prematurely.
- Way finding signage should be inspected and repaired replaced as required. Safety, wayfinding and road signage should be more frequently inspected and maintained.

• Fencing

- Remove any protective fencing specified for planting establishment during the defects liability period off site when planting has sufficiently matured, or leave in situ if this is the desired design outcome.
- Inspect, repair and maintain all fencing and gates in good working condition to appropriate secure by design standards.
- Clean, treat and repaint degraded paint finishes on metal work.

• Ornamental Shrubs

- Keep area weed free, mechanically or chemically.
- Replenish mulch until specified cover is achieved.
- Prune and dead head in accordance to species requirements.
- Remove and replant failed stock. Remove diseased plants to prevent spread.
- Fertilise regularly throughout the year as required.
- Allow for watering plant material during dry periods to ensure vigorous growth.
- Removal of detritus

• Wildflower & Amenity Grass Areas

- Removal cut arisings and dispose of off site.
- Cut at intervals as outlined in the maintenance specification.
- Re seed dead or failing areas of grass / wildflower, fence off using temporary chestnut pale fencing to allow establishment (remove upon establishment).

• Hedge Planting

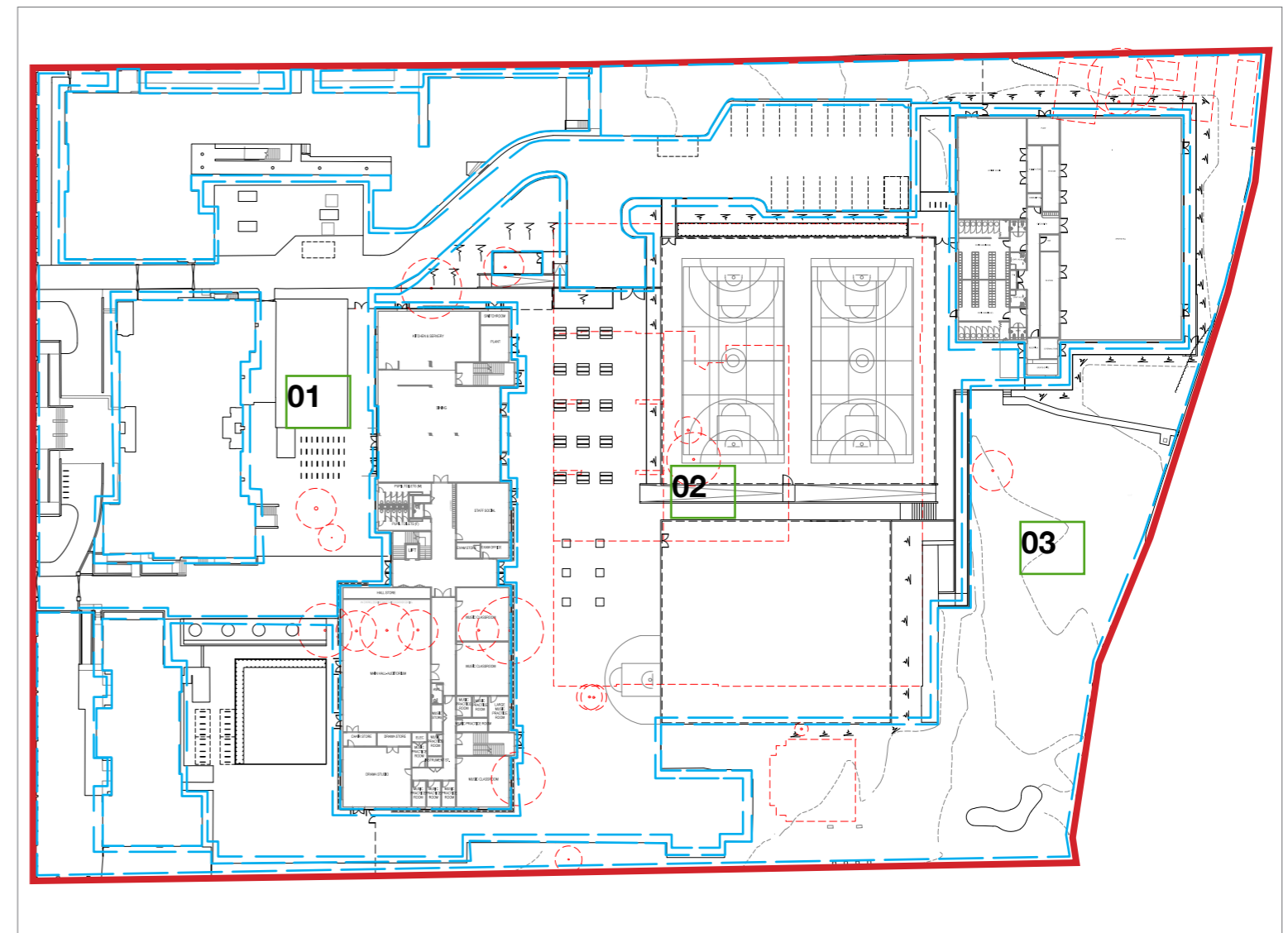
- Cut to designed dimensions / height / shape as per maintenance specification.
- Removal of detritus.
- Remove and replant failed stock. Remove diseased plants and dispose of off site.
- Keep area weed free, mechanically or chemically.
- Fertilise regularly throughout the year as required.
- Allow for watering plant material during dry periods to ensure vigorous growth.



- Trees
 - Schedule safety inspections by an arboriculturalist. Check for damaged limbs and remove and treat wounds as necessary.
 - Schedule regular safety inspections and reports by site maintenance team in accordance with Health and Safety Executive 'Forestry and Arboriculture safety leaflets and BS: 3998.
 - For emergency remedial work report to an arboricultural specialist. Replant when necessary.
 - Schedule annual crown lifting, pruning, thinning and shaping trees especially in areas close proximity to routes and new or existing buildings to avoid visual and physical obstructions as per maintenance specification.
 - Water, fertilise and aerate trees which are not thriving during and after establishment period.
 - Clear dead and dying wood, not designed climbing plants, detritus and other unwanted items. Treat accidental or intentional damages to trees. Replant when necessary.
 - Maintain loose bark mulch around tree stations where present in soft landscaping and make up levels of gravel mulches in hard paved areas.
 - Inspect guys, stakes and ties regularly for firmness and support. Adjust/ remove as necessary.
 - Seek appropriate approvals for works associated to any protected trees.
 - Follow the guidelines and recommendations as set out by the arboriculturalist.
- Site Cleanliness
 - Empty litter/ recycling bins of their contents daily or more in core areas such as within close proximity to buildings or in shared public areas as to prevent bins from overflowing. Remove arisings from site.
 - Take appropriate action to remove graffiti promptly.
 - Where fly tipping occurs remove detritus promptly upon noticing. If detritus is unable to be safely moved, secure the area where detritus constitutes a hazard and remove promptly. Take preventative measures to discourage future fly tipping.
 - The site should be checked for general cleanliness three times weekly.

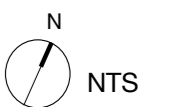
1.3 Objectives for Specific Areas

Soft landscape works can be seen to develop in three distinct phases:

- Cultivation: The planting and tending of the soft works during the defects liability period.
- Establishment: From the defects liability period to year 5 as soft works settle in.
- Maturation: From year 5 onwards as soft works stabilise and develop in accordance to their



-  Planning Application boundary
-  01= Western Entrance Area and Car Park
- 02= Central Social and Sports Area
- 03= Eastern Playing Fields



typical lifecycle.

The following section sets out specific management objectives for meeting both the design intent and the legal obligations over and above the general management objectives. This is done on an area-by-area basis during establishment and maturation. The areas can be viewed on the adjacent drawing and as described in the following tables.

Area 01 - Western Entrance Area and Car Park

Location	Landscaped areas between the existing buildings and the new teaching block
Description	Formal hard landscape forming building breakout spaces, entrance and access routes, car and cycle parking, service and drop off areas, existing mature trees.
Specific Aims	To maintain a formal hard landscaped area free of defects and safety issues. To maintain site fences to assist in site security measures. To maintain a healthy and safe existing boundary tree stock. To provide conditions for healthy tree development.
Establishment	To maintain a formal hard landscaped area free of defects and safety issues. Replace damaged or defected hard landscape promptly.
Maturation	Check for falling or dangerous trees and remove. Remove all crossing branches. Prune trees to balanced shape. Tree heights should not be restricted other than for shaping. Closely monitor, inspect and water as required. Closely monitor paving condition in relation to tree roots and general hard landscape condition.

Area 02 - Central Social and Sports Area

Location	Landscaped areas to the north of the site
Description	Hard landscaped area, new tree planting to boundary, formal clipped ornamental hedges, MUGA and All Weather Pitch.
Specific Aims	To maintain a formal hard landscaped area. To provide conditions whereby ornamental hedges are maintained to a healthy height. To provide conditions whereby a healthy tree root system and canopy can form an 'established' tree aesthetic for new trees .

Establishment	Closely monitor, inspect and water when required. Straighten leaning trees. Check tree guards and grilles Apply fertilizer to manufactures recommendations and rates. Mow grass areas and remove arisings. Replace damaged or defected hard landscape promptly.
Maturation	Check for falling or dangerous trees and remove. Manage existing tree stock in line with arboriculturalists recommendations. Apply fertilizer to manufactures recommendations and rates. Mow grass areas and remove arisings. Replace damaged or defected hard landscape promptly. Dig out and replace hedge and shrub plants at end of lifecycle.

Area 03 - Eastern Playing Fields

Location	All areas south of site
Description	Grass playing field, new and existing mature boundary trees, new native tree planting, hard landscape paths.
Specific Aims	To maintain a healthy and safe existing boundary tree stock. To maintain grass playing fields to ensure a safe, even and 'playable' surface. To provide conditions whereby native hedges are maintained to a healthy height. To provide conditions whereby a healthy tree root system and canopy can form an 'established' tree aesthetic for new trees . Existing grass playing fields are maintained to form a healthy grass sward suitable for school use and existing trees are allowed to mature in a safe fashion.

- Managing Change

Detailed Landscape Management Plans and as built works should be referenced when ever future development takes place to ensure that original design objectives remain intact.

Establishment	<p>Promptly replant dead, dying plants and trees as well as those lost to vandalism.</p> <p>Promptly treat damaged plants when it is preferable to retain rather than replant.</p> <p>Closely monitor, inspect and water when required.</p> <p>Straighten leaning trees.</p> <p>Check tree guards.</p> <p>Apply fertilizer to manufactures recommendations and rates.</p>
Maturation	<p>Remove all crossing branches.</p> <p>Prune trees to balanced shape. Tree heights should not be restricted other than for shaping.</p> <p>Remove tree guards.</p> <p>Closely monitor, inspect and water as required.</p> <p>Mow and manage lawn as per the maintenance specification.</p> <p>Closely monitor paving & hard landscape conditions.</p> <p>Check for falling or dangerous trees and remove.</p> <p>Manage existing tree stock in line with arboriculturalists recommendations.</p>

1.6 Monitoring and Review

1.4 Maintenance Schedule

The following maintenance schedule provides an outline of required maintenance operations for the site wide landscaping. It is envisaged that the schedule will evolve as the scheme is developed and adapted as the site matures. It is intended as a guide only.

- = General timing for operation in given week
- = Additional timing for operation weather depending up-to a maximum every 2nd day per week

Item	Operation(s)	January	February	March	April	May	June	July	August	September	October	November	December
01	Watering												
	1. Native Hedge Planting *1				•	•	•	•	•	•	•	•	•
	2. Ornamental Shrub Planting *2				•	•	••	••	••	••	••	••	•
	3. Trees *2				•	•	••	••	••	••	••	••	•
	4. Seeded areas generally				•	•	•	•	•	•	•	•	•
02	Native Hedge Planting Generally												
	1. Mulching				•	•			•		•		
	2. Weeding				•	•			•		•		
	3. Fertilizer application (Spring)				•								
	4. Fertilizer application (Autumn)										•		
	5. Checking shelter, ties etc				•	•			•		•		
	6. Plant replacement *3			•									
03	Ornamental Shrub Planting Generally												
	1. Mulching				•	•					•		
	2. Weeding				•	•					•		
	3. Fertilizer application (Spring)				•								
	4. Fertilizer application (Autumn)										•		
	5. Plant replacement *3			•									
04	Trees Generally												
	1. Mulching				•	•			•		•		
	2. Checking ties, stakes & guying				•	•			•		•		
	3. Refirming				•	•			•		•		
	4. Pruning *5				•								
	5. Weed Control				•	•			•		•		
	6. Replacement *3			•									
05	Maintenance of seeded areas generally												
	1. Cutting / mowing *4				•	•	•	•	•	•	•	•	•
	2. Leaf removal				•	•			•		•		
	3. Reforming edges *3												
	4. Fertilizer application (Spring)				•								

Cont.

- = General timing for operation in given week
- = Additional timing for operation weather depending up-to a maximum every 2nd day per week

Item	Operation(s)	January	February	March	April	May	June	July	August	September	October	November	December
06	Maintenance of wildflower areas												
	1. Cutting / mowing *4 - Autumn sown				•					•			
	2. Watering (on establishment only)									•	•	•	•
07	Hard Landscape Areas												
	1. Fencing check				•	•			•	•			
	2. Cleaning down of paving *6				•	•			•	•			
	3. Graffiti removal				•	•			•	•			
	4. General tidying / litter removal				•	•			•	•			
	5. Drain clearance				•	•			•	•			
	6. Street furniture inspection/repair *7				•				•				
	7. Draw down and up of irrigation system						•					•	
	8. Check and repairs to irrigation				•	•			•	•			

The maintenance regime would include:

- Removal of debris and dead vegetation from the roof surface, drainage outlets, guttering and washed pebbles, etc.
- Weeding and removal of grass / saplings (purely aesthetic.)
- Sowing of additional sprouts to repair patches of poor growth
- Application of maximum 30gm² of slow release, low nitrogen fertiliser- if assessed to be beneficial to the plant growth.
- Review Inspection Chambers and ensure that water outlets are all free draining.
- Clear and clean all perimeter and detailing surrounds [e.g. pipe upstands]

Notes & References:

- *1 Required at approximate times shown only if weather conditions require and ground conditions are dry and impeding plant growth & only required during 1st years growth to insure establishment. Supply to be on site external taps.
- *2 Required at approximate times shown only if weather conditions require and ground conditions are dry and impeding plant growth. Supply to be on site external taps from rain water harvesting tank
- *3 If required during defects period and at operators discretion post defects liability period following guidance in Landscape Management Plan and design review of scheme.
- *4 Recommended mowing times- may increase or reduce depending on weather. Remove arising for both amenity and wildflower grass.
- *5 Annual tree works to include any requirement for crown lifting, general pruning, thinning, shaping and dead-wooding as per landscape maintenance specification. Tree pruning timing according to species.
- *6 To include any spot herbicide, chewing gum removal and paving replacement works of damaged areas.
- *7 To include any annual bulb and lighting works, replacement of defective furniture etc.

1.5 Landscape Maintenance Specification

The following maintenance specification provides the detailed requirements for site wide maintenance.

It is envisaged that the following specification is implemented at practical completion of the soft landscape and would apply for the first 5 years of site maintenance, following which the specification is reviewed by contractor, client and sponsor.

Elements of the following specification are also to be adopted prior to practical completion of the project to ensure that any planting which is implemented during the course of the main build is cared for and maintained to the same standards as post completion. This includes all watering, mulching and general care and protection of works.

GENERALLY

105 MAINTENANCE OBJECTIVES

- Location: All of Site.
- Duration: 5 years.
- Aims:
 - Enhanced landscape quality;
 - Visual screening
 - Improved landscape visual amenity; and
 - Provide wildlife habitat and increase biodiversity.
- Restrictions: To be confirmed.
- Results: Adequate establishment of the landscape scheme.

110 NOTICE

- Give notice before:
 - Application of herbicide.
 - Application of fertilizer.
 - Watering.
 - Each site maintenance visit.
- Period of notice: 7 days.

130 REINSTATEMENT

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

140 CONTROL OF MAMMALIAN PESTS

- Specialist firms: Submit proposals.
- Method: Humane traps.

155 WATERING

- Supply: On site external taps.
- Quantity: Wet full depth of topsoil .
- Application: Do not damage or loosen plants.
- Compacted soil: Loosen or scoop out, to direct water to rootzone.
- Frequency: As necessary for the continued thriving of all planting from time of planting to end of maintenance contract period

160 WATER RESTRICTIONS

- 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 ARISING

- General: Unless specified otherwise, dispose of arisings as follows:
 - Biodegradable arisings: Remove to recycling facility.
 - Grass cuttings: Remove to recycling facility.
 - Tree roots and stumps: Remove from site.
 - Shrub and tree prunings: Remove to recycling facility.
 - Litter and non biodegradable arisings: Remove from site.

180 CHIPPING OR SHREDDING

- General: Not permitted on site.

190 LITTER

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

197 CLEANLINESS

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

GRASSED AREAS

210 MAINTENANCE OF GRASSED AREAS

- General: Maintain turf in a manner appropriate to the intended use.
- Soil and grass:
 - Condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - Waterlogging and compaction: Prevent.
 - Damage: Repair trampling, abrasion or scalping.
 - Ornamental lawns: Maintain reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
 - Edges: Neat and well defined, in clean straight lines or smooth flowing curves.
 - Litter and fallen leaves: Remove regularly to maintain a neat appearance.

220 GRASS CUTTING GENERALLY

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

225 TREE STEMS

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

bark.

250 LEAF REMOVAL

- Operations: Collect fallen leaves.
- Special requirements: None.
- Disposal: Remove from site for recycling.

255 MAINTAINING AREAS OF WILDFLOWER MEADOW WITH CORNFIELD ANNUALS

- Timing and cut heights:
 - Autumn Sown:
 - 1st cut to 7cm height no later than end of April.
 - 2nd cut to 4-7cm September/October to prevent grasses and annuals out competing perennial species.
 - Maintenance thereafter: March/April Cut to 4-7cm to remove excess grass, September/October cut to 4cm after flowering
 - Spring Sown:
 - 1st cut to 4-7cm height after flowering in August/September/October (later spring sowing will result in a later flowering period).
 - Maintenance thereafter: March/April Cut to 4-7cm to remove excess grass, September/October cut to 4cm after flowering
- Preparation:
 - Debris and litter: Remove.
 - Mower type: Contractor's choice.
 - Arisings: Remove in all cases.
 - Reseeding: A 100% Cornfield Annual sowing will not last for more than one year. Reseeding must be done to give an annual display. After several years of reseeded, a seed bank will have built up in the soil and simple soil disturbance in early spring will be sufficient to regenerate the flowers every year.

340 SPOT WEED KILLING IN AMENITY GRASS AREAS

- Herbicide: Suitable for suppressing perennial weeds.
- Operations: Spot treat
 - all broad leaved weeds;
 - docks (*Rumex* spp);
 - injurious weed species listed in the Weeds Act 1959 and Wildlife and Countryside Act 1981;
 - Japanese knotweed (*Fallopia* spp); and
 - ragworts (*Senecio* spp).

SHRUBS/TREES/HEDGES

500 ESTABLISHMENT OF NEW PLANTING

- Duration: Two full growing seasons from the date of planting.
- Weed control:
 - Method: Keep planting beds clear of weeds by maintaining full thickness of mulch.
 - 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.
 - Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
 - Trees: When in leaf, spray crowns during warm weather.

- Timing: After dusk.
- Watering: As required to ensure healthy establishment of all new planting.

502 ESTABLISHMENT OF NEW PLANTING - FERTILIZER

- Time of year: March or April.
- Type: Organic.
- Spreading: Spread evenly. Carefully lift and replace any mulch materials.
- Application rate: As manufacturer's recommendations.

510 TREE STAKES AND TIES

- Inspection/ Maintenance times: On every site visit and after periods of strong winds.
- Stakes:
 - Replace loose, broken or decayed stakes to original specification.
 - If longer than half of clear tree stem height, cut to this height in spring. Re-tie to tree firmly but not tightly with a single tie.
- Ties: Adjust, refix 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.
- Removal of stakes and ties: During spring when no longer required to support the tree.
- Fill stake holes with lightly compacted soil.

515 TREE GUY WIRES

- Inspection/ Maintenance times: On every site inspection & immediately after strong winds.
- Operations:
 - Replace or resecure loose or missing guy wires.
 - Adjust to suit stem growth and to provide correct and uniform tension.
- Removal: During spring when no longer required to support the tree.

520 REFIRMING OF TREES AND SHRUBS

- Timing: After strong winds, frost heave and other disturbances.
- Refirming: Tread around the base until firmly bedded.
- 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.

540 PRUNING GENERALLY

- Pruning: In accordance with good horticultural and arboricultural practice.
 - Removing branches: Do not damage or tear the stem or bark.
 - Wounds: Keep as small as possible and cut cleanly back to sound wood.
 - Cutting: Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
 - Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
- Tools: 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.

- Growth retardants, fungicide or pruning sealant: Do not use unless instructed.
 - Maintain vehicular visual splays to car parks service access - shrubs must be maintained to a height not exceeding 600mm above finished levels.
- 545 PRUNING OF EXCESSIVE OVERHANG
- Timing: As instructed .
 - Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
 - Special requirements: Remove growth of tree planting on green roofs clashing with building facades.
- 550 PRUNING OF EXCESSIVE HEIGHT
- Timing: As instructed.
- Operations: Remove excessive height as instructed. Tree heights should not be restricted unless they become a potential hazard.
- 555 PRUNING TREES AND SHRUBS
- Standard: To BS 7370-4.
 - Special requirements: Growth retardants not permitted.
- 570 FORMATIVE PRUNING OF YOUNG TREES
- Standard: Type and timing of pruning operations to suit the plant species.
 - Time of year: Do not prune during the late winter/ early spring sap flow period.
 - Young trees up to 4 m high:
 - Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well balanced head and ensure the development of a single strong leader.
 - Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.
 - Whips or feathered trees: Do not prune.
 - Operatives: Member of the Arboricultural Association.
- 575 PRUNING ORNAMENTAL SHRUBS
- General: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
 - Suckers: Remove by cutting back level with the source stem or root.
- 580 PRUNING FLOWERING SPECIES OF SHRUBS AND ROSES
- Time of year:
 - Winter flowering shrubs: Spring.
 - Shrubs flowering between March and July: Immediately after the flowering period.
 - Shrubs flowering between July and October: Back to old wood in winter.
 - Rose bushes: Early spring to encourage basal growths and a balanced, compact habit.
- 600 TRIMMING RAPIDLY ESTABLISHING HEDGES
- General: Allow to reach planned height as rapidly as possible (1.2m for ornamental & 1.5-2.0m for native hedges).
- Form: Trim back lateral branches moderately.
- 605 TRIMMING SLOWLY ESTABLISHING HEDGES
- Operations:
 - Timing: Cut back hard in June and September to encourage bushy growth down to ground level.
 - Form: Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.
- 620 REMOVAL OF DEAD PLANT MATERIAL
- 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
- Removal: Within one week of notification.
 - Replacement: In the next suitable planting season.
- 635 REINSTATEMENT OF SHRUB/ HERBACEOUS AREAS
- Dead and damaged plants: Remove.
 - Mulch/ matting materials:
 - Carefully move to one side and dig over the soil, leaving it fit for replanting.
 - Do not disturb roots of adjacent plants.
 - Replacement plants:
 - Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is greater.
 - Additional requirements: Submit proposals.
 - Dressing: Slow release fertilizer:
 - Type: Organic.
 - Application rate: As manufacturer's recommendations.
- 645 WEED CONTROL GENERALLY
- Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 100 mm high.
 - Adjacent plants, trees and grass: Do not damage.
- 655 WEED CUTTING BY HAND OR MACHINE
- Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 25 mm.
 - Herbicides: Remove arisings before application.
- 657 HERBICIDE TO KILL REGROWTH
- Type: Suitable foliar acting herbicide to kill regrowth.
 - Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.
- 675 DIGGING OVER
- General: Dig over beds. Do not damage existing plants, bulbs and roots.

- Depth of dig (minimum): 100 mm.

680 SOIL AERATION

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

690 MAINTENANCE OF LOOSE MULCH

- Thickness (minimum): 75 mm.
- Top up: As maintenance schedule or when bare patches occur.
- Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.
- Weeding: Remove weeds growing on or in mulch by hand weeding.

695 FERTILIZING ESTABLISHED TREES AND SHRUBS

- Time of year: During February or March.
- Type of fertilizer: Organic.
- Application: Spread evenly.
- Rate: As manufacturer's recommendations.

700 SNOW REMOVAL FROM SHRUBS/ TREES

- Standard: To BS 7370-4.
- Plants subject to snow removal: All.
- Timing: Within 24 hours of snowfall.

705 WINTER LEAF REMOVAL

- Operations: Take down temporary leaf fences. Collect accumulations of drifted leaves from the vicinity and from planting beds.
- Arisings: Remove to recycling facility.

TREE WORK

810 TREE WORK GENERALLY

- Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
- Protection: Avoid damage to neighbouring trees, plants and property.
- Standards: To BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- Removing branches: Cut as Arboricultural Association Leaflet 'Mature tree management'. Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
- Appearance: Leave trees with a well balanced natural appearance.
- Chain saw work: Operatives must hold a Certificate of Competence.
- Tree work: To be carried out by an approved member of the Arboricultural Association.

815 ADDITIONAL WORK

- 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, clause 8.

825 PREVENTION OF DISEASE TRANSMISSION

- Standard: To BS 3998, clause 9 and Appendix B.

830 CLEANING OUT AND DEADWOODING

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

835 CUTTING AND PRUNING GENERALLY

- Tools: Appropriate, well maintained and sharp.
- Final pruning cuts:
 - Chainsaws: Do not use on branches of less than 50 mm diameter.
 - Hand saws: Form a smooth cut surface.
 - Anvil type secateurs: Do not use.
- Removing branches: Do not damage or tear the stem.
- 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.
- Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
- Large branches: Remove only with prior approval.
 - Remove in small sections and lower to ground with ropes and slings.
- Dead branches and stubs: When removing, do not cut into live wood.
- Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
- Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

840 CROWN REDUCTION/ SHAPING

- General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.
- Operations: Allow for shaping and balancing of crowns as required, but not to restrict overall crown development and tree height.

845 CROWN LIFTING

- Clearances: Remove branch systems to give clearance.
 - Height: Min. of 2.5 m above all areas.
 - No crown lifting is needed for multi-stemmed trees and pine trees on green roofs.
- 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

- Removing branches: Remove inward growing, crossing, rubbing, dead and damaged branches.
- Thinning: Selectively remove secondary and small live branch growth evenly throughout the crown.
- Quantity: Allow for shaping and balancing of crowns as required, but not to restrict overall crown development and tree height.
- Cutting: Make no cuts of more than 35 mm diameter.
- Branches: Cut back to lateral or sublateral buds or branches without leaving stumps.
- Appearance: Leave a uniform and well balanced structure of branches and foliage.

855 CUTTING TREE ROOTS

- Excavating: Use hand tools only.
- Protected area: Do not cut roots within any trees' Root Protection Area. All works to be in accordance with BS 5837:2005
- Outside protected area: Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.
- Cutting:
 - Cutting: Make clean smooth cuts with a hand saw.
 - Wounds: Minimize. Avoid ragged edges.
 - Finishing: Pare cut surfaces smooth with a sharp knife.
- Backfilling:
 - Protection: Cover cut roots with clean sharp sand.
 - Material: Backfill with original topsoil.

860 REMOVING TREES, SHRUBS AND HEDGES

- Standards: To BS 3998, Appendix A and Health & Safety Executive (HSE)/ Arboricultural and Forestry Advisory Group Safety Leaflets.
- Existing services: Check for below and above ground services. Give notice if they may be affected.
- Shrubs and smaller trees: Cut down and grub up roots.
- Tree stumps:
 - Removal: Remove mechanically to a minimum depth of 300 mm below ground level.
 - Removal by winching: Give notice. Do not use other trees as supports or anchors.
- Protection: Avoid damage to neighbouring trees, plants and property.
- Work near retained trees: 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.
- Filling holes:
 - Material: Use as-dug material and/ or imported soil as required.
 - Finishing: Consolidate and grade to marry in with surrounding ground level.

865 BARK DAMAGE

- Wounds:
 - Do not attempt to stop sap bleeding.
 - Bark: Remove ragged edges using a sharp knife.
 - Wood: Remove splintered wood from deep wounds.

Size: Keep wounds as small as possible.

- Liquid or flux oozing from apparently healthy bark: Give notice.

870 CAVITIES IN TREES

- Investigation: 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.
- Cavity openings: Submit details.

HARD LANDSCAPE AREAS/FENCING

900 SNOW CLEARANCE

- Clearance: When instructed.
- Deicing: To roads, footpaths and car parking area.
 - Material: Submit details.
 - Timing: When freezing precipitation is forecast.
 - Application rate: Spread evenly at a rate as manufacturer's recommendations.

910 HARD SURFACES AND GRAVEL AREAS

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

920 FENCING

- Fences: Inspect and repair to maintain protection against general damage from adjoining properties.

930 GRAFFITI REMOVAL

- Method: Submit details.
- Subsequent treatment: Transparent, two part, anti-graffiti coating.
 - Finish: Matt.

END OF SPECIFICATION