LIZARD
Landscape Design and Ecology

SOFT LANDSCAPE SPECIFICATION

COURTLANDS

37 Parklands Avenue, Worthing. West Sussex

On behalf of Courtlands by the Sea Ltd.

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Q28
Topsoil and soil ameliorants

System outline

115 Soil system for grass swards

1. Description: FOR WILDFLOWER MEADOW
2. Composition
   2.1. Soil: Site sourced topsoil, subject to soil testing.
   Otherwise, imported topsoil to BS 3882

135 Planting bed soil system

1. Description: For ornamental and native planting areas
2. Composition
   2.1. Topsoil: Site sourced topsoil, subject to soil testing.
   Otherwise, imported topsoil to BS 3882

155 Mulching and top dressing system

1. Description: For planting areas
   1.1. Location: As shown in drawing LLD3085-LAN-DWG-200
2. Composition
   2.1. Material: Sanitized and stabilized composted conifer bark mulch.
   2.2. Size: Medium grade ornamental bark mulch particle size 10 -35mm. No fines.
   2.3. Additional requirements: FSC certified;
   Free from pests, disease, fungus, weeds or any contaminant that is hazardous to human or animal life or detrimental for plant growth.

Products

300 Preparation materials generally

1. Purity: Free of pests and disease.
2. Foreign matter: On visual inspection, 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.
3. Contamination Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
   3.1. Corrosive, explosive or flammable.
   3.2. Hazardous to human or animal life.
   3.3. Detrimental to healthy plant growth.
4. Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. Objectionable odour: None.
6. Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

305 Permitted materials

1. Materials: Composted bark;
   Composted animal manures;
   Composted green waste
2. Give notice: before ordering or using.
3. Declaration of compliance in accordance with BS EN 13650: Required

310 Materials not permitted

1. Materials: Products containing peat

315 Imported topsoil to BS 3882

1. Description: For ornamental and native planting areas
2. Quantity: Provide as necessary to complete the work.
3. Standard: To BS 3882.
4. Classification: Multipurpose
   4.1. Soil textural class to BS 3882, Figure 1: Sandy loam
5. Source: Local - submit proposals
   5.1. Product reference: Submit proposals

340 Imported subsoil to BS 8601

1. Description: For ornamental and native planting areas
2. Quantity: Provide as necessary to complete the work.
3. Standard: To BS 8601.
4. Classification: Multipurpose
   4.1. Soil textural class to BS 8601, Figure 1:: Sandy loam
5. Source: Local - submit proposals
   5.1. Product reference: Submit proposals

405 Inorganic fertilizers

1. Description: ProloNg 20-4-20+TE Slow Release Fertiliser
2. Manufacturer/ source: ProloNg
3. Purpose: ProloNg 20-4-20+TE is a quality NPK fertiliser which will slowly release over a 4-6 month period. Spread by Hand.
4. Type: NPK (macronutrient)
5. Availability to plants: Amenity Turf, Lawn, Sports Turf, Trees, Ornamentals, Conifer Safe, Grass, Lawns, New Grass, Safe Around Fruit Trees, Safe Around Shrubs, Safe Around Trees, Sports Turf.

Execution

610 Topsoil analysis

1. Soil to be analysed: Existing soil in soft landscape/ grass areas.
2. Soil analyst: Local soil lab
3. Samples: Collect in accordance with BS 3882.
4. Submit
   - 4.1. Declaration of analysis: In accordance with BS 3882, clause 6 and Table 1.
   - 4.2. Additional analysis: Chemical analysis
     Chemical contaminants
     Potentially toxic elements (PTEs)
   - 4.3. Report detailing soil analyst's recommendations.

620 Importing topsoil

1. Give notice: Before stripping topsoil for transfer to site.
   - 1.1. Notice period: 14 days

630 Documentation for imported topsoil

1. Description: For ornamental and native planting areas
2. Timing: Submit at handover.
3. Contents
   - 3.1. Full description of all soil components.
   - 3.2. Record of source for all soil components.
   - 3.3. Record drawings showing the location and depth of all soils by type and grade.
   - 3.4. Declaration of analysis: in accordance with BS 3882, clause 6 and Table 1.
4. Number of copies: As agreed with Contract Administrator

650 Notice

1. Give notice before
   - 1.1. Setting out.
   - 1.2. Spreading topsoil.
   - 1.3. Applying herbicide.
   - 1.4. Applying fertilizer.
   - 1.5. Visiting site during maintenance period.
2. Period of notice: 2 weeks

655 Mechanical tools

1. Restrictions: Do not use within 500 mm of tree and plant stems.

660 Grading subsoil for

1. Description: For ornamental and native planting areas
2. Standard: In accordance with BS 8601.
3. General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
4. Avoid compaction.
5. Excess subsoil: Remove.

665 Subsoil surface preparation for

1. Description: For ornamental and native planting areas
2. Standard: In accordance with BS 3882.
3. General: Excavate and/ or place fill to required profiles and levels.
4. Loosening
   - 4.1. When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth
     - 4.1.1. Light and noncohesive subsoils: 300 mm
     - 4.1.2. Stiff clay and cohesive subsoils: 300 mm
     - 4.1.3. Rock and chalk subgrades: Lightly scarify to promote free drainage.
   - 4.2. Wet conditions: Do not loosen subsoils.
5. Stones: Immediately before spreading topsoil, remove stones larger than 50 mm.
6. Remove from site: Arisings, contaminants and debris;
   Builders rubble

670 Inspecting formations

1. Give notice: Before spreading topsoil for ornamental and native planting areas.
2. Notice period: 14 days

675 Preparation of undisturbed topsoil

1. Standard: In accordance with BS 4428.
   - 1.1. Grading and cultivation: To suit cultivation operations specified in Q30 and Q31
2. Hard ground: Break up thoroughly.
3. Clearing: Remove visible roots and large stones with a diameter greater than 50 mm.
4. Areas covered with turf or thick sward: Plough or dig over to full depth of topsoil.
5. Fallow period (minimum): Three months
   - 5.1. Weed control: At appropriate times re-cultivate at fortnightly intervals to suppress weed growth.

680 Surplus topsoil to be retained

1. Generally Spread and level on site:
   - 1.1. Locations: As agreed with Contract Administrator
   - 1.2. Protected areas: Do not raise soil level within root spread of trees that are to be retained.

685 Surplus materials to be removed

1. Topsoil removal from site: Topsoil remaining after completion of all landscaping work
2. Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

690 Topsoil storage heaps

1. Location: As agreed with Contract Administrator
2. Height (maximum): 1.0 m
3. Width (maximum): Subject to space available
   3.1. Formation: Loose tip and shape from the side only, without running machinery on the heap at any time.
4. Protection
   4.1. Do not place any other material on top of storage heaps.
   4.2. Do not allow construction plant to pass over storage heaps.
   4.3. Prevent compaction and contamination, by fencing and covering as appropriate.

700 Grading of topsoil

1. Topsoil condition: Reasonably dry and workable.
2. Contours: Smooth and flowing, with falls for adequate drainage.
   2.1. Hollows and ridges: Not permitted.
3. Give notice: If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. Standard: In accordance with BS 3882.
2. Aggressive weeds: Give notice and obtain instructions before moving topsoil.
3. Plant: Select and use plant to minimize disturbance, trafficking and compaction.
4. Contamination Do not mix topsoil with:
   4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
   4.2. Other grades of topsoil.
5. Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on

1. Description: For ornamental and native planting areas
2. Standard: In accordance with BS 3882.
3. Temporary roads/ surfacing: Remove before spreading topsoil.
4. Layers
   4.1. Depth (maximum): 400 mm.
   4.2. Gently firm each layer before spreading the next.
5. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 Loose tipping of topsoil

1. Standard: In accordance with BS 3882.
2. General: Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

718 Final cultivation

1. Description: For ornamental and native planting areas
2. Compacted topsoil: Break up to full depth.
3. Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
4. Depth: 450 mm
5. Particle size (maximum): 20 mm
6. Timing: Within a few days before planting
7. Weather and ground conditions: Suitably dry.
8. Surface: Leave regular and even.
9. Levels: As shown on drawings
10. Undesirable material brought to the surface
    10.1. Remove visible weeds.
    10.2. Remove roots and large stones with any dimension exceeding 50 mm.

720 Finished levels of topsoil after settlement

1. In relation to adjoining paving, kerbs or hard surfaces: 0-25 mm above
2. In relation to dpc of adjoining buildings: Not less than 150 mm below.
3. In relation to adjacent grass areas: 0-25 mm above
4. Seeded areas: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
5. Within root spread of existing trees and shrubs to be retained: Do not dig or cultivate.
6. Adjoining soil areas: Marry in.
7. Thickness of turf or mulch: Included.

810 Applying compost

1. Application rate for trees and shrubs: 50g per m2
    1.1. Timing: Apply prior to cultivation.

820 Applying general fertilizer

1. Application: Spread evenly, carefully incorporating below mulch materials.
    1.1. Timing: Immediately before cultivation.
    1.2. Application rate: As recommended by soil analyst.

Ω End of Section

Q30
Seeding/ turfing

General information/requirements

115 Seeded areas

1. Growth and development: Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
2. Appearance: A closely knit, continuous ground cover of even density, height and colour.

120 Climatic conditions

1. General: Carry out the work while soil and weather conditions are suitable.

145 Watering

1. Quantity: Wet full depth of topsoil.
2. Application: Even and without displacing seed, seedlings or soil.
3. Frequency: As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 Water restrictions

1. Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

160 Notice

1. Give notice before
    1.1. Setting out.
    1.2. Applying fertilizer.
    1.3. Preparing seed bed.
    1.4. Seeding or turfing.
    1.5. Visiting site during maintenance period.
2. Period of notice: 2 weeks

170 Setting out

1. Boundaries: Mark clearly.
2. Delineation: In straight lines or smoothly flowing curves as shown on drawings.

Preparation

250 Soil requirements

1. Type
    1.1. Seeded areas: Soil for grass swards, as section Q28

Seeding

311 Wildflower seed mixture

1. Description: EH1 - Hedgerow Mixture
2. Supplier: Emorsgate Seeds (or equal and approved)
   2.1. Web:: wildseed.co.uk
3. Application rate: 4g / m2

311 Wildflower seed mixture

1. Description: EP1 - Pond Edge Mixture
2. Supplier: Emorsgate Seeds (or equal and approved)
   2.1. Web:: wildseed.co.uk
3. Application rate: 4g / m2

311 Grass seed for maintenance.

1. Description: For maintenance of existing amenity lawns
2. Supplier: Emorsgate Seeds
   2.1. Web:: wildseed.co.uk
   2.2. Mixture reference: EG21 Fine Lawn Grass Mixture
3. Application rate: 25 g/m²

319 Quality of seed

1. Description: To seed mixtures.
2. Freshness: Produced for the current growing season.
3. Certification: Blue label certified varieties.
   3.1. Standard: EC purity and germination regulations.
   3.2. Official Seed Testing Station certificate of germination, purity and composition: Submit when requested.
4. Samples of mixtures: Submit when requested.

322 Quality of wildflower seed

1. Standard: In accordance with Flora Locale's 'Code of practice for collectors, growers and suppliers of native flora'.
2. Germination testing: Submit germination test results (to ISTA International rules for seed testing) in situation described below
3. Freshness of seed: Produced for the current growing season. Otherwise supply germination test certificate confirming viability for the planned growing season.
4. Samples: Submit when requested.

330 Sowing

1. General: Establish good seed contact with the root zone.
2. Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
   2.1. Distribution: 2 equal sowings at right angles to each other.

336 Wildflower sowing season

1. Wildflower seed generally: March to May or August to October

Protecting/cutting

540 First cut of

1. Description: Wildflower Grassland Area
2. Height of initial growth: 75 mm
3. Preparation:
4. Debris and litter: Remove.
   4.1. Stones and earth clods larger than 25 mm in any dimension: Remove
5. Height of first cut: 50 mm
6. Mower type: Contractor's choice, but ensure cutting machinery is very sharp and in good condition to avoid pulling out young seedlings.
7. Arisings: Leave the initial mowings in situ for a few days to allow seed to drop to the ground, then collect arisings and remove from site.

590 Cleanliness

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

Maintenance

610 Failures of seeding

1. Duration: Carry out the following operations from completion of seeding until: the end of the rectification period.
2. Defective materials or workmanship: Areas that have failed to thrive.
   2.1. Exclusions: Theft or malicious damage.
3. Method of making good: Recultivation and reseeding.

Ω End of Section

Q31
External planting

General information/ requirements

112 Site clearance generally

1. General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
2. Stones: Remove those with any dimension exceeding 50 mm.
3. Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
4. Vegetation: Clear scrub to ground level by flail mowing and remove arisings; retain and protect trees indicated on drawings
5. Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.

115 Site clearance for aquatic/ marginal planting

1. Clearance
   - 1.1. General: Remove loose debris and rubbish.
   - 1.2. Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
2. Vegetation/ Algae: Skim surface to remove duckweed

118 Soil conditions

1. Soil for cultivating and planting: Moist, friable.
2. Frozen or snow covered soil: Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.

120 Climatic conditions

1. General: Carry out the work while soil and weather conditions are suitable.
   - 1.1. Strong winds: Do not plant.

125 Times of year for planting

1. Deciduous trees and shrubs: Late October to late March.
2. Conifers and evergreens: September/ October or April/ May.
3. Herbaceous plants (including marginal): September/ October or March/ April.
4. Container grown plants: At any time if ground and weather conditions are favourable.
   - 4.1. Watering and weed control: Twice a week in summer season.
5. Dried bulbs, corms and tubers: September/ October.
6. Green bulbs: After flowering in spring.
7. Aquatic plants: May/ June or September/ October.

130 Mechanical tools

1. Restrictions: Do not use within 1 m of existing trees and 0.5 m of other plant stems.

145 Watering

1. Quantity: Wet full depth of topsoil.
2. Application: Even and without damaging or displacing plants or soil.
3. Frequency: As necessary to ensure establishment and continued thriving of planting. Two times per week in summer as minimum during establishment period.

146 Watering Planting Areas

1. Quantity: Soil analysis to be undertaken to measure matric potential (capacity to release water) of soil prior to calculating irrigation needs. If soil analysis not practical, apply 20 l per application in the summer. Less (c. 10 l) in the spring and autumn.
2. Application: Wet full depth of topsoil. Even and without damaging or displacing plants or soil.
3. Frequency: When planted, and at the point of bud burst in the spring. To be continued throughout the spring and summer until the leaves have fallen in autumn (for deciduous species)
   Apply water two times per week during summer.

150 Water restrictions

1. General: If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.

160 Notice

1. Give notice before
   1.1. Setting out.
   1.2. Applying fertilizer.
   1.3. Planting shrubs.
   1.4. Watering.
   1.5. Visiting site during maintenance period.
2. Period of notice: Two weeks

170 Soil requirements

1. Type
   1.1. Planted beds: Planting bed soil system, as section Q28
   1.2. External container planting: Container planting growing media system, as section Q28
   1.3. Mulch applied after planting: Mulching and top dressing system, as section Q28. *Refer to drawing LLD3085-LAN-DWG-200 for Planting Layout.*

200 Plants - general

1. Condition: Materially undamaged, sturdy, healthy and vigorous.
2. Appearance: Of good shape and without elongated shoots.
3. Hardiness: Grown in a suitable environment and hardened off.
4. Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
5. Budded or grafted plants: Bottom worked.
6. Root system and condition: Balanced with branch system.
   6.1. Standard: The National Plant Specification
7. Species: True to name.
8. Origin/ Provenance: Grown in the United Kingdom for at least one growing season, unless otherwise approved.
   Local provenance for native species.
9. Definition: Origin and Provenance have the meaning given in the National Plant Specification.

216 Plants - specification criteria

1. Name, forms, dimensions and other criteria: To the relevant part of BS 3936.

225 Bulbs/ Corms/ Tubers

1. Condition: Firm, entire, not dried out or shrivelled.
2. Health: Free from pests, diseases and fungus.
3. Handling: Remove from packaging immediately.
4. Storage: Permitted only when necessary.
   4.1. Location: Well ventilated, dark, covered, rodent proof container, away from exhausts and fruit.
   4.2. Duration: Minimum period.
   4.3. Temperature: 18-21°C.

235 Container grown plants

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

246 Labelling and information

1. Standard: To BS 3936.

260 Plant substitution

1. Plants unobtainable or known to be likely to be unobtainable at time of ordering Submit alternatives, stating:
   1.1. Difference from specified plants.

265 Plant handling, storage transport and planting

1. Standard: To CPSE 'Handling and establishing landscape plants'.
2. Frost: Protect plants from frost.
3. Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
4. Plant packaging: Black polyethylene bags
5. Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped
6. Planting: Upright or well balanced with best side to front.

285 Protection of existing grass

1. General: Protect areas affected by planting operations using boards/ tarpaulins.
    1.1. Excavated or imported material: Do not place directly on grass.
    1.2. Duration: Minimum period.

290 Surplus material

1. Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.
   Non-contaminated debris and woody arisings can be retained for habitat creation on site.
   Refer to Landscape Architect or Ecology Consultant's ecological enhancements proposals, if applicable.

Preparation of planting beds/ planting materials

305 Weed control

1. Description: FOR INVASIVE NON-NATIVE WEEDS
2. Locations: All planting areas
3. General: Prevent weeds from seeding and perennial weeds from becoming established, by hand weeding.

Planting shrubs/ herbaceous plants/ bulbs

400 Random plant layout

1. Description: To native shrub planting
2. Spacing: Random groups of 3-5 plants of the same species.
3. Density: 0.4 m c/c

401 Regular plant layout

1. Description: To planting beds
2. Spacing: In regular, staggered rows
3. Density: If single-species groups are not demarcated in construction drawings, for herbaceous perennials, group 3-5 plants per m², to achieve specified numbers.

405 Shrub planting pits

1. Timing: Excavate 1-2 days (maximum) before planting.
2. Sizes: Min. wide enough to accommodate roots when fully spread and the same depth as plant container.
3. Pit bottom improvement Break up to a depth of 150 mm, if compacted or soil of low permeability..

445 Planting bulbs/ Corms/ Tubers

1. Depth: Top of bulb/ corm/ tuber at a depth of approximately twice its height, base in contact with bottom of hole.
2. Backfilling: Finely broken soil. Lightly firm to existing ground level.
3. Naturalized planting in existing grassed areas
   - 3.1. Scattering: Random. Plant bulbs/ corms/ tubers where they fall.
   - 3.2. Planting: Neatly remove a plug of turf and replace after planting.

470 Formal hedges

1. Shrubs for hedges: Consistent in species, cultivar and clone to ensure a uniform hedge.
2. Planting: In trenches large enough to take full spread of roots. Set out plants evenly, as specified.
   Plant min. 300 mm from building walls. Allow 600 mm rooting depth over foundation levels.

471 Naturalized hedges

1. Planting: In trenches large enough to take full spread of roots. Set out plants evenly.
   Plant min. 300 mm from building or boundary walls. Allow 600 mm rooting depth over foundation levels.

480 After planting

1. Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
2. 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.
3. Top dressing: Mulching and top dressing system, as section Q28
   - 3.1. Depth: 75 mm

Protecting/ maintaining/ making good defects

710 Maintenance

1. Duration: Carry out the operations in the following clauses from completion of planting until the end of the rectification period. The rectification period is to be for 1 year (TBC with form of contract) after practical completion..
2. Frequency of maintenance visits: TBC with land owner. In accordance with the agreed maintenance schedule/ monthly?

720 Failures of planting

1. Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive.
   1.1. Exclusions: Theft or malicious damage after completion.
   1.2. Rectification: Replace with equivalent plants/ trees/ shrubs.
2. Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
3. Timing of making good: During the next suitable planting season

740 Cleanliness

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

750 Planting maintenance generally

1. Weed control: Maintain weed free area around each shrub.
   1.1. Diameter (minimum): The larger of 1 m or the surface of original planting pit.
   1.2. Keep planting beds clear of weeds: By maintaining full thickness of mulch
2. 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.
3. Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
4. Firming up: Gently firm loosened soil around shrubs. Straighten leaning shrubs.
5. Watering: As required for healthy establishment, depending on weather conditions

760 Planting maintenance - pruning

1. General: Prune to promote healthy growth and natural shape.
   1.1. Dead, dying, diseased wood and suckers: Remove.
   1.2. Timing: As appropriate to the species
2. Arisings: Compost on site.

780 Maintenance instructions

1. General: Before end of the maintenance period, submit printed instructions recommending procedures to be established by the Employer for maintenance of the planting work for one full year: Provide a schedule of any ongoing maintenance problems experienced during the rectification period.

790 Final mulching

1. Timing: At end of the maintenance period.
2. Watering: Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
3. Planting beds: Remulch.
4. Depth (minimum): 75 mm
5. Trees: Remulch.
6. Depth (minimum): 75 mm

Ω End of Section

Q35
Landscape maintenance

Generally

105 Maintenance objectives

1. Location: Soft landscape scheme.
    1.1. Duration: 30 years
2. Aims: Safeguard and improve landscape quality; Improved landscape visual amenity; Provide wildlife habitat and increase biodiversity
3. Restrictions: As described in any third party reports and Landscape Management Plan.
4. Results: Successful establishment; Long-term contribution to landscape character and biodiversity; Visual amenity.

110 Notice

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

130 Reinstatement

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

155 Watering

1. Quantity: Wet full depth of topsoil. Application dose and frequency to be determined on soil analysis including matric potential (capacity to release water). If soil analysis not practical/ results not available, apply 20 l per application per tree two times per week during establishment period (first two years) during summer. Post establishment, irrigate only when required, due to prolonged period of dry weather. Always check soil moisture before applying new dose.
2. Application: Do not damage or loosen plants. Apply in the morning.
3. Compacted soil: Loosen or scoop out, to direct water to rootzone.
4. Frequency: As necessary for the continued thriving of all planting.

156 Watering

1. Application: Do not damage or loosen plants.
2. Compacted soil: Loosen or scoop out, to direct water to rootzone.

160 Water restrictions

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

170 Disposal of arisings

1. General: Unless specified otherwise, dispose of arisings as follows:
   1.1. Biodegradable arisings: Compost on site or remove to recycling facility
   1.2. Grass cuttings: Compost on site or remove to recycling facility
   1.3. Tree roots and stumps: If not diseased, reuse for habitat creation.
   1.4. Shrub and tree prunings: If not diseased, reuse for habitat creation.
   1.5. Litter and nonbiodegradable arisings: Remove from site

180 Chipping or shredding

1. General: TBC with contract administrator.

181 Mechanical equipment

1. General: Minimize.
2. Prohibited equipment: TBC with land owner.
3. Timing: TBC.

190 Litter

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

195 Protection of existing grass

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

197 Cleanliness

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

Grassed areas

210 Maintenance of grassed areas

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

211 Maintenance of grassed areas

1. Standard: To BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:
   1.1. Objectives: To BS 7370-3, Table 6.
   1.2. Programme: To BS 7370-3, clause 11.
   1.3. Mowing methods: To BS 7370-3, Table 3.

220 Grass cutting generally

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

225 Tree stems

1. Precautions: Do not 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.

226 Tree stems

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

240 Mowing strips

1. Width (approximate): 150 mm.

250 Leaf removal

1. Operations: Collect fallen leaves.
2. Special requirements: None
3. Disposal: Compost on site or remove to recycling facility.

260 Mowing lawns

1. Grass height: Maintain between 25 and 50 mm
2. Arisings: Compost on site or remove to composting facility.

272 Maintaining grassed areas with perennial wildflowers EP1 Pond Edge Mixture

1. First Year management: In the first year, annual weed growth may be cut back to encourage the development of a good perennial ground cover. Establishment on sites prone to flooding may be patchy and may take several years to fully colonise.
2. Management Once Established: The habitat value of pond edge sowings is enhanced if there are a variety of vegetation structures from dense tussock stands to bare and recently colonised mud. Management of these wetland areas should therefore aim to create variation with minimum disturbance to animal populations.
   Variation in structure can be achieved by cutting back and removing short sections of vegetation every 2-3 years in rotation. In ditches, cut out sections and /or work from one bank each year. With ponds, remove vegetation as a wedge, like removing a slice of cake. Dense stands of single species (eg yellow iris) may benefit from selective thinning. Vegetation removal causes the least disruption to wildlife when carried out between September and November. On larger sites light grazing by cattle or horses in late summer can be used and is less disruptive than mechanical clearance. Machines and heavy equipment should be used with care on wet sites to avoid damage to soil and vegetation. Wet grassland which only occasionally or seasonally floods can be managed as meadow or grassland. In marginal wetland zones the water levels in the soil are never more than 50cm below the surface, but only occasionally submerge the plants growing there. New ponds constructed with liners often have very narrow margins (less than 1 metre wide) unless wider, gently shelving edges are designed in from the outset. Embankments away from the water's edge are often well drained. These are best seeded with a meadow mixture appropriate to the soil type. Establishment of emergent pond vegetation (eg reeds) and other aquatic plants is best achieved using plants.
3. Supplier Guidance: Guidance above taken from supplier website. https://wildseed.co.uk/ Refer to supplier for further guidance.

272 Maintaining grassed areas with perennial wild flowers Hedgerow Mixture EH1

1. First Year management: Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.
2. Management Once Established: Hedgerows, woodland edges, rides, glades and other semi-shaded communities usually sit on the boundary between one habitat type (eg open grassland) and another (eg closed tree canopy). The management requirements of established hedgerow mixtures can be tailored to light levels and to fit in with adjacent vegetation types.
   Zoned management of hedgerow margins frequently produces the best diversity of habitat structure: areas closest to the hedge or woodland boundary and those which are more shaded are left uncut in most years. Areas that are further from the margin and more open can be managed as grassland habitat. For example in a 6 metre sown margin the 2-3 metres against the boundary could be left uncut, the next 3-4 metres cut once or twice a year.
   Hedgerow vegetation that is not mown or grazed each year will become rough and “tussocky” in character. It can form useful refuge habitat on corners and margins of a site. To control scrub and bramble development these tussocky areas may need cutting every 2-3 years between October and February. For wildlife this cutting is best done on a rotational basis so that no more than half the area is cut in any one year leaving part as a undisturbed refuge. Hedgerows and margins that are cut regularly can be managed as grassland.
3. Supplier Guidance: Guidance above taken from supplier website. https://wildseed.co.uk/ Refer to supplier for further guidance.

320 Levelling hollows and bumps in turf

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

345 Control of Japanese knotweed

1. Operations: Spot treat in June and September during suitable weather conditions and when plants are growing vigorously.
2. Herbicide: TBC.

350 Fertilizer – spring application

1. Type: ProloNg 20-4-20+TE Slow Release Fertiliser
2. Application rate: 50g per m2

360 Fertilizer – autumn application

1. Type: ProloNg 20-4-20+TE Slow Release Fertiliser
2. Application rate: 50g per m2

380 Reinstatement of damaged lawns

1. Damaged turf: Remove to a depth of 50 mm.
2. Preparation: Cultivate substrate to a fine tilth.
3. Reinstatement: Contractor's choice of returfing or topsoiling and reseeding:
   - 3.1. Returfing: Quality and appearance to match existing.
   - 3.2. Reseeding: Fill with fine topsoil to BS 3882 multipurpose class, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.
4. Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

381 Reinstatement of worn or damaged lawns

1. Worn or damaged areas: Make good by returfing or reseeding:
   - 1.1. Returfing standard: To BS 7370-3, Clause 12.2.
   - 1.2. Reseeding standard: To BS 7370-3, Clause 12.6.
2. Turf or seed: To match existing in appearance and quality.
3. Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

Flower beds/ seasonal beddings

450 Planting beds of annuals

1. Clearance: Remove previous season's bedding, including all bulbs, litter and debris.
2. Preparation: Dig over beds using a spade or hand held mechanical cultivator:
   - 2.1. Annual weeds: Bury.
   - 2.2. Perennial weeds: Carefully dig out.
3. Fertilizer: Either in autumn or spring spread and incorporate Slow release fertilizer.
   - 3.1. Application rate: 50g per m2
4. Annual bedding plants
   - 4.1. Standard: To BS 3936-7.
   - 4.2. Setting out: Plant out as planting plan and schedule, including edging plants, main layer, specimen or pot plants, corms, bulbs or tubers.
5. Watering: Keep plants watered as necessary before planting out and water in after planting.
6. Failed planting: Replant as necessary any plants, or areas of plants, that have failed to thrive.

470 Flower beds generally

1. Operations
   - 1.1. Remove: Dead flower heads, fallen leaves, litter and debris.
   - 1.2. Weeds: Thoroughly hand weed.
   - 1.3. Cultivate: Lightly hoe.
   - 1.4. Trim: Clip grass edges.

490 Thinning by removal of surplus plants

1. Standard: BS 7370-4, clause 3.5.17.1.
2. Timing: Thin when foliage of adjacent plants has begun to touch.
3. Roots
   - 3.1. Disturbance to adjacent plants: Minimize.
   - 3.2. Soil: Refill holes with topsoil to leave an even graded surface.
   - 3.3. Mulch: Maintain mulch as original specification.
4. Adjacent plants: Make good any minor damage immediately.
5. Plants for retention: Select plants with a strong healthy habit.

Shrubs/trees/hedges

500 Establishment of new planting

1. Duration: Two full growing seasons from the date of planting
2. Weed control
   2.1. Method: Keep planting beds clear of weeds by Keep planting beds clear of weeds by hoeing and screefing and maintaining full thickness of mulch..
   2.2. Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.

502 Establishment of new planting – fertilizer

1. Time of year: March or April.
2. Type: ProloNg 20-4-20+TE.
3. Spreading: Spread evenly.
   3.1. Application rate: 50g per m2.

520 Refirming of shrubs

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

537 Nesting wild birds

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

540 Pruning generally

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

545 Pruning of excessive overhang

1. Timing: As instructed
2. Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.

555 Pruning trees and shrubs

1. Standard: To BS 7370-4.
2. Special requirements: Growth retardents not permitted

575 Pruning ornamental shrubs

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

580 Pruning flowering species of shrubs and roses

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

600 Trimming rapidly establishing hedges

1. General: Allow to reach planned height as rapidly as possible.
    1.1. Form: Trim back lateral branches moderately.

605 Trimming slowly establishing hedges

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

620 Removal of dead plant material

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

635 Reinstatement of shrub/ herbaceous areas

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

650 Hand weeding

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

655 Weed cutting by hand or machine

1. Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 25 mm.
2. Herbicides: Roundup ProVantage 480

675 Digging over

1. General: Dig over beds. Do not damage existing plants, bulbs and roots.

680 Soil aeration

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

685 Soil level adjustment

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

690 Maintenance of loose mulch

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

695 Fertilizing established shrubs

1. Time of year: June to August.
2. Type of fertilizer: ProloNg 20-4-20+TE
3. Application: Spread evenly.
    3.1. Rate: 50g per m2.

705 Winter leaf removal

1. Operations: Take down temporary leaf fences. Collect accumulations of drifted leaves from the vicinity and from planting beds.

Tree work

810 Tree work generally

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

815 Additional work

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

820 Prevention of wound bleeding

1. Standard: To BS 3998.

825 Prevention of disease transmission

1. Standard: To BS 3998.

830 Cleaning out and deadwooding

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

835 Cutting and pruning generally

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

840 Crown reduction/ shaping

1. General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.

845 Crown lifting

1. Clearances: Remove branch systems to give clearance.
   - 1.1. Height: As recommended by BS 7370-4, clause 3.7.2.3
2. Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

850 Crown thinning

1. Removing branches: Remove inward growing, crossing, rubbing, dead and damaged branches.
2. Thinning: Selectively remove secondary and small live branch growth evenly throughout the crown.
3. Cutting: Make no cuts of more than 50 mm diameter.
   - 3.1. Branches: Cut back to lateral or sublateral buds or branches without leaving stumps.
4. Appearance: Leave a uniform and well-balanced structure of branches and foliage.

855 Cutting tree roots

1. Excavating: Use hand tools only.
2. Protected area: Do not cut roots within an area which is the larger of:
    2.1. The branch spread of the tree.
    2.2. An area with a radius of half the tree's height, measured from the trunk.
3. Outside protected area: Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.
4. Cutting
    4.1. Cutting: Make clean smooth cuts with a hand saw.
    4.2. Wounds: Minimize. Avoid ragged edges.
    4.3. Finishing: Pare cut surfaces smooth with a sharp knife.
5. Backfilling
    5.1. Protection: Cover cut roots with clean sharp sand.
    5.2. Material: Backfill with original topsoil.

860 Removing trees, shrubs and hedges

1. Standard: To BS 3998.
2. Existing services: Check for below and above ground services. Give notice if they may be affected.
3. Shrubs and smaller trees: Cut down and grub up roots.
4. Tree stumps
    4.1. Removal by winching: Give notice. Do not use other trees as supports or anchors.
5. Protection: Avoid damage to neighbouring trees, plants and property
6. 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.
7. Filling holes
    7.1. Material: Use as-dug material and/ or imported soil as required.
    7.2. Finishing: Consolidate and grade to marry in with surrounding ground level.

865 Bark damage

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

870 Cavities in trees

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

Water areas

890 Dredging to

1. Description: POND
2. Frequency: Every five years
3. Time of year: Submit proposals
4. Method: Submit proposals
5. Phasing: A 10 m² section each year in sequence

Hard landscape areas/fencing

910 Hard surfaces and gravel areas

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

920 Fencing

1. Fences: Inspect and repair to maintain protection against Intruders.

Ω End of Section



LIZARD

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NBS

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