

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

**RANDALL
THORP** 
CHARTERED LANDSCAPE ARCHITECTS

Land at Stakehill Phase 1 Landscape Works

Landscape Specification

March 2023

Prepared for:

 **REDROW**



Note: This landscape specification is for a Reserved Matters Application and details the soft landscape works only.



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D20

Excavating and filling

Generally/the site

145 Variations in ground water level

1. Give notice: If levels encountered are significantly different from levels in the site investigation report or previously measured.

150 Existing services, features and structures

1. Services: See drawings and survey information
2. Site features to be retained: See drawings and survey information
3. Structures: See drawings and survey information

Clearance/excavating

163 Protection to Existing Trees

1. To be in accordance with BS 5837:2012
2. No works on existing trees, including pruning, lopping, felling or severance of roots is to take place without prior consent of the local authority.
3. Levels surrounding the existing tree should not be raised or reduced
4. Tree protection fencing: Installed for all trees to be retained on site. See arboricultural drawings and report for extent of fencing. Fencing to be in accordance with BS 5837:2012

164 Tree roots

1. Protected area: Do not cut roots within precautionary protection area.
 - 1.1. Size of area: See Arboricultural tree protection drawings
2. Excavation in protected area
 - 2.1. Method: By hand
 - 2.2. Backfill as soon as possible or temporarily line with polyethylene sheet to reduce evaporation.
3. Outside protected area: Give notice of roots exceeding 25 mm and do not cut without approval.
4. Cutting
 - 4.1. Make clean smooth cuts with no ragged edges.
 - 4.2. Pare cut surfaces smooth with a sharp knife.
 - 4.3. Treatment of cut roots: Not required
5. Backfill: As dug material, enriched with phosphate fertilizer

168 Site clearance

1. Timing: Before topsoil stripping, if any.
2. General: Clear site of rubbish, debris and vegetation. Do not compact topsoil.
3. Treatment: Apply a suitable residual herbicide to areas to receive gravel surfacing and apply a suitable non-residual herbicide to areas to receive planting

170 Removing small trees, shrubs, hedges and roots

1. Identification: Clearly mark trees to be removed.
2. Small trees, shrubs and hedges: Cut down.

3. **Roots:** Grub up and dispose of without undue disturbance of soil and adjacent areas.
4. **Safety:** Comply with Forest Industry Safety Accord safety leaflets.

180 Chipping and shredding

1. **General:** Permitted, remove arisings from site

220 Stripping topsoil

1. **General:** Before beginning general excavation or filling, strip topsoil from areas where there will be regrading, buildings, pavings/ roads and other areas shown on drawings.
2. **Depth**
 - 2.1. Remove to an average depth of 250 mm-300mm.
 - 2.2. Give notice where the depth of topsoil is difficult to determine.
3. **Handling:** Handle topsoil for reuse or sale in accordance with clause 225.
4. **Around trees:** Do not remove topsoil from below the spread of trees to be retained.
5. **Site storage:** Keep separate from excavated sub-soil. Stockpiled within contract boundary for re-use.

221 Treating topsoil

1. **Treatment:** Apply a suitable translocated nonresidual herbicide.
2. **Timing:** Not less than two weeks before excavating topsoil.

225 Handling topsoil

1. **Standard:** To BS 3882.
2. **Aggressive weeds**
 - 2.1. **Species:** Notify the presence of species included in the Weeds Act, section 2, or the appropriate Wildlife and Countryside Act for the relevant jurisdiction.
 - 2.2. **Give notice:** Obtain instructions before moving topsoil.
3. **Contamination:** Do not mix topsoil with:
 - 3.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 3.2. Other soil or material containing aggressive weeds, sharps, plastics and non soil forming materials and notifiable animal or plant diseases.
 - 3.3. Oil, fuel, cement or other substances harmful to plant growth.
 - 3.4. Other classifications of topsoil.
4. **Multiple handling:** Keep to a minimum. Use topsoil immediately after stripping.

240 Adjacent excavations

1. **Requirement:** Where an excavation encroaches below a line drawn at an angle from the nearest formation level of another higher excavation, the lower excavation, all work within it and backfilling thereto, must be completed before the higher excavation is made.
2. **Angle of line below horizontal:** 30°
3. **Backfill material:** As clause 248

244 Excavations adjacent to existing foundations

1. **Prior to commencing excavation**
 - 1.1. Excavate trial pits adjacent to existing foundations to determine extent and formation levels.
 - 1.2. Allow for inspection of trial pits.
 - 1.3. Allow time for amendment of details if required.

1.3.1. Time period: 5 working days

2. Backfill material to new excavation: As clause 248

248 Backfill to excavations lower than foundation formation level

1. Critical level

1.1. Distance between near faces of foundation and lower excavation less than 1 m: 150 mm above foundation formation level

1.2. Otherwise: 150 mm above level at which line defined in clause 240 cuts near face of lower excavation

2. Backfill material

2.1. Below critical level: Lean mix concrete

2.2. Above critical level: Hardcore filling as clause 617

250 Permissible deviations from formation levels

1. Beneath mass concrete foundations: ± 25 mm.

2. Beneath ground bearing slabs and r.c. foundations: ± 15 mm.

3. Embankments and cuttings: ± 50 mm.

4. Ground abutting external walls: ± 50 mm, but such as to ensure that finished level is not less than 150 mm below dpc.

260 Inspecting formations

1. Give notice: Make advance arrangements for inspection of formations for roads and pavings and foundations and filling formations.

1.1. Notice (minimum): 5 days

2. Preparation: Just before inspection remove the last 150 mm of excavation. Trim to required profiles and levels.

2.1. Loose material: Minor compaction permitted

3. Seal: Within 4 hours of inspection, seal formations with blinding concrete.

267 Inspection of formations in shrinkable soils

1. Inspect formation: For signs of conducting and fine moisture absorbing roots.

2. Give notice: If significant quantities of roots are visible in the formation or in the bottom 75 mm of the walls of the excavation.

310 Unstable ground

1. Generally: Ensure that the excavation remains stable at all times.

2. Give notice: Without delay if any newly excavated faces are too unstable to allow earthwork support to be inserted.

3. Take action: If instability is likely to affect adjacent structures or roadways, take appropriate emergency action.

320 Recorded features

1. Recorded foundations, beds, drains, manholes, etc.: Break out and seal drain ends

2. Contaminated earth: Remove and disinfect as required by Local Authority.

330 Unrecorded features

1. Give notice: If unrecorded foundations, beds, voids, basements, filling, tanks, pipes, cables, drains, manholes, watercourses, ditches, etc. not shown on the drawings are encountered.

350 Existing watercourses

1. **Diverted watercourses which are to be filled:** Before filling, remove vegetable growths and soft deposits.

360 Excess excavation

1. Excavation taken wider than required
 - 1.1. Backfill: As instructed
2. Excavation taken deeper than required
 - 2.1. Backfill: With well graded granular material or lean mix concrete

370 Underground structures in landscape areas

1. **Generally:** Remove walls, roads, foundations, disused services, drains, manholes and the like to minimum depth.
2. **Minimum depth below finished levels**
 - 2.1. Grass, ground cover and perennial planting: 500 mm
 - 2.2. Shrub planting: 750 mm.
 - 2.3. Within 2 m of tree planting: 1000 mm.
3. **Walls and slabs remaining:** In every 10 m² of wall or slab, make a drainage hole at least 600 mm diameter.

Disposal of materials

410 Excavated topsoil storage

1. **Storage:** Stockpile in temporary storage heaps as directed on site by Redrow .

420 Topsoil storage heaps

1. **Location:** at a location agreed on site.
2. **Standard:** To BS 3882.
3. **Height (maximum):** 1m
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.

421 Topsoil storage heap treatment

1. **Treatment:** Apply a suitable herbicide at appropriate times to prevent seeding of weeds

441 Surplus subsoil

1. **Excavated material:** Stockpile in temporary storage heaps.
2. **Retained material:** Spread and level surplus subsoil on site.
 - 2.1. **Locations:** at a location to be agreed on site
 - 2.2. **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.
3. **Remaining material:** Remove from site.

450 Water

1. **Generally:** Keep all excavations free from water until:

- 1.1. Formations are covered.
- 1.2. Below ground constructions are completed.
- 1.3. Basement structures and retaining walls are able to resist leakage, water pressure and flotation.
2. **Drainage:** Form surfaces of excavations and fill to provide adequate falls.
3. **Removal of water:** Provide temporary drains, sumps and pumping as necessary. Do not pollute watercourses with silt laden water.

454 Ground water level, springs or running water

1. **Give notice:** If it is considered that the excavations are below the water table.
2. **Springs/ Running water:** Give notice immediately if encountered.

457 Pumping

1. **General:** Do not disturb excavated faces or stability of adjacent ground or structures.
2. **Pumped water:** Discharge without flooding the site or adjoining property.
3. **Sumps:** Construct clear of excavations. Fill on completion.
 - 3.1. **Locations:** Submit proposals

Filling

500 Proposed fill materials

1. **Details:** Submit full details of proposed fill materials to demonstrate compliance with specification, including:
 - 1.1. Type and source of imported fill.
 - 1.2. Proposals for processing and reuse of material excavated on site.
 - 1.3. Test reports as required elsewhere.
2. **Timing:** At least 21 days before starting filling

510 Hazardous, aggressive or unstable materials

1. **General:** Do not use fill materials which would, either in themselves or in combination with other materials or ground water, give rise to a health hazard, damage to building structures or instability in the filling, including material that is:
 - 1.1. Frozen or containing ice.
 - 1.2. Organic.
 - 1.3. Contaminated or noxious.
 - 1.4. Susceptible to spontaneous combustion.
 - 1.5. Likely to erode or decay and cause voids.
 - 1.6. With excessive moisture content, slurry, mud or from marshes or bogs.
 - 1.7. Clay of liquid limit exceeding 80 and/or plasticity index exceeding 55.
 - 1.8. Unacceptable, class U2 as defined in the 'Specification for highway works', clause 601.

530 Placing fill

1. **Surfaces of excavations and areas to be filled:** Free from loose soil, topsoil, organic material, rubbish and standing water.
2. **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
3. **Adjacent structures, membranes and buried services**
 - 3.1. Do not overload, destabilise or damage.

- 3.2. Submit proposals for temporary support necessary to ensure stability during filling.
- 3.3. Allow 14 days (minimum) before backfilling against in situ concrete structures.
- 4. **Layers:** Place so that only one type of material occurs in each layer.
- 5. **Earthmoving equipment:** Vary route to avoid rutting.

550 Geotextile sheet

- 1. **Manufacturer:** Terram or similar approved
 - 1.1. **Product reference:** Terram 1000 or similar approved
- 2. **Type:** Nonwoven
- 3. **Polymer type:** Polypropylene
- 4. **Recycled content:** None permitted
- 5. **Jointing:** 1000 mm overlap
- 6. **Preparation of subgrade:** Before laying sheet, remove humps and sharp projections. Fill hollows
- 7. **Protect from**
 - 7.1. Exposure to light.
 - 7.2. Contaminants.
 - 7.3. Materials listed as potentially deleterious by geotextile manufacturer.
 - 7.4. Wind uplift.

610 Compacted filling for landscape areas

- 1. **Fill:** Material capable of compaction by light earthmoving plant.
- 2. **Filling:** Layers not more than 200 mm thick. Lightly compact each layer to produce a stable soil structure.

615 Loose tip filling for landscape areas

- 1. **Filling:** Do not firm, consolidate or compact when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

Bioremediation - Not Used

'specification for highway works: earthworks specification' appendices - Not Used

Ω End of Section

Q28

Topsoil and soil ameliorants

System outline

115 Topsoil system for turfing and seeding

1. Description: FOR ALL GRASSED AREAS
2. Composition
 - 2.1. Topsoil: Site-sourced topsoil
 - 2.2. Ameliorants: None
 - 2.3. Accessories: None

145 Planting pit backfilling topsoil system

1. Description: FOR ALL TREE PITS
2. Composition
 - 2.1. Topsoil: Site-sourced topsoil
 - 2.2. Ameliorants: None
 - 2.3. Accessories: Mycorrhizal inoculant

155 Mulching and top dressing system

1. Description: for specimen trees and hedges
2. Composition
 - 2.1. Material: Amenity grade mulch

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.

310 Materials not permitted

1. Materials: Peat and products containing peat

315 Imported topsoil to BS 3882

1. Description: FOR TREE PITS
2. Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and 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: Contractor's choice
 - 5.1. Product reference: Submit proposals

380 Mycorrhizal inoculant

1. Description: FOR TREE PITS
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice

Execution

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: 1 week

655 Mechanical tools

1. Restrictions: Do not use within 100 mm of tree and plant stems. Do not damage adjacent planting.

660 Grading subsoil for:

1. Description: Grassed areas, wildflower areas, woodland planting areas and amenity planting areas
2. Standard: In accordance with BS 8601.
3. General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
4. Areas of thicker topsoil: Excavate locally.
5. Avoid compaction.
6. Excess subsoil: Remove.

665 Subsoil surface preparation for:

1. Description: Grassed areas, wildflower areas, woodland planting areas and amenity planting areas
2. Standard: In accordance with BS 3882.
3. General: Excavate and/ or place fill to required profiles and levels, as section D20.
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: 450 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 including builders rubble

670 Inspecting formations

1. Give notice: Before spreading topsoil for areas to receive forestry planting.
2. Notice period: 7 days

675 Preparation of undisturbed topsoil

1. Standard: In accordance with BS 4428.
 - 1.1. Grading and cultivation: Category C
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): One month
 - 5.1. Weed control: At appropriate times treat with a suitable translocated nonresidual herbicide.

680 Surplus topsoil to be retained

1. Generally: Spread and level on site:
 - 1.1. Locations: As directed by 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: Not required
2. Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

690 Topsoil storage heaps

1. Location: As directed by CA or Landscape Architect to minimise possible damage to existing grass, plants, hard surfacing. Unless agreed otherwise by the CA/Landscape Architect spoil heaps shall be on protected ground such as plastic sheets, boards.
2. Height (maximum): 1.0 m
3. Width (maximum): 3.0 m
 - 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: Type A

1. **Description:** Grassed Areas, wildflower areas, amenity planting areas and woodland planting areas.
2. **Standard:** In accordance with BS 3882.
3. **Temporary roads/ surfacing:** Remove before spreading topsoil.
4. **Inspection:** No topsoil to be spread until subsoil grade has been inspected by a Landscape Architect
5. **Layers**
 - 5.1. **Depth (maximum):** 150 mm.
 - 5.2. Gently firm each layer before spreading the next.
6. **Depth after firming and settlement:** 300 mm
7. **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 grass seeding, planting beds and woodland block planting.
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:** 250-350 mm.
5. **Particle size (maximum):** 5 mm.
6. **Timing:** Within a few days before planting.
7. **Weather and ground conditions:** Suitably dry.
8. **Surface:** Leave regular and even.
9. **Levels:** 25 mm above adjoining paving or kerbs.
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:** 25mm above adjacent hard areas.
2. **In relation to dpc of adjoining buildings:** Not less than 150 mm below.
3. **In relation to adjacent grass areas:** 25 mm below
4. **Seeded areas:** Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
5. **Sportsfields:** To even levels and within the following permitted deviations:

- 5.1. From levels or gradients shown on drawings: ± 75 mm.
- 5.2. From line between boning rods 30 m apart: ± 25 mm.
- 6. Within root spread of existing trees and shrubs to be retained: Do not dig or cultivate.
- 7. Adjoining soil areas: Marry in.
- 8. Thickness of turf or mulch: Included.

840 Applying mycorrhizal inoculant

- 1. Description: To tree pits
- 2. Depth: To maintain contact with root system

845 Applying loose mulch

- 1. Description: For tree pits and hedges
- 2. Timing: Immediately after planting
- 3. Preparation: Ensure that soil is thoroughly moistened, applying water where necessary
- 4. Coverage of mulch (minimum)
 - 4.1. Trees: In a circular area of 1000 mm radius measured from the tree stem; 75mm depth
 - 4.2. Hedge planting: 75mm depth
- 5. Finished level of mulch: 50 mm below adjacent grassed or paved areas

Completion

920 Applying mulch

- 1. Timing: At end of the maintenance period
- 2. Watering: Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
- 3. Trees: Remulch.
 - 3.1. Depth (minimum): 75 mm
- 4. Hedge planting: Remulch.
 - 4.1. Depth (minimum): 75mm

Ω End of Section

Q30

Seeding/ turfing

General information/requirements

115 Seeded and turfed 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 herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Preparing seed bed.
 - 1.5. Seeding or turfing.
 - 1.6. Visiting site during maintenance period.
2. Period of notice: 1 week

170 Setting out

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

Preparation

210 Herbicide

1. **Description:** for all grassed areas
2. **Type:** Suitable for suppressing perennial weeds.
3. **Timing:** Allow fallow period before cultivation.
 - 3.1. **Duration:** 3 weeks

212 Seed bed cleaning before sowing

1. **Description:** for all grassed areas

2. Operations: Kill pernicious weeds with selective contact herbicide.

250 Soil requirements

1. Type
 - 1.1. Seeded areas: Existing topsoil

Seeding

311 Grass seed

1. Description: Amenity Grass Mix
2. Supplier: Emorsgate or similar approved
 - 2.1. Mixture reference: EG22 - Strong Lawn Grass Mixture
3. Application rate: 25 g/m²

311B Grass seed

1. Description: General Purpose Meadow Mixture
2. Supplier: Emorsgate or similar approved
 - 2.1. Mixture reference: EM2 - Standard General Purpose Meadow Mixture
3. Application rate: 4 g/m²

311C Grass seed

1. Description: Meadow Grass Mix for Wetlands
2. Supplier: Emorsgate or similar approved
 - 2.1. Mixture reference: EM8 - Meadow Mixture for Wetlands
3. Application rate: 4 g/m²

311D Grass seed

1. Description: Pond Edge Mix
2. Supplier: Emorsgate or similar approved
 - 2.1. Mixture reference: EP1 - Pond Edge Mixture
3. Application rate: 4 g/m²

319 Quality of seed

1. Description: FOR ALL GRASSED AREAS
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. Germination testing: Not required
2. Freshness of seed: Produced for the current growing season
3. Samples: Submit when requested.

330 Sowing

1. General: Establish good seed contact with the root zone.
2. Method: Manually broadcast, raked and rolled
 - 2.1. Distribution: 2 equal sowings at right angles to each other and diagonally to main axis

335 Grass sowing season

1. Grass seed generally: April to June or August to October

336 Wildflower sowing season

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

340 Pre-emergent herbicide

1. Description: FOR LAWNS
2. Standard: Pesticide Safety Directorate approved.
3. Application rate: In accordance with manufacturer's written recommendation.
 - 3.1. Timing: Immediately after sowing.

352 Edges to seeded areas

1. Description: AROUND TREE PITS AND HEDGE PLANTING
2. Timing: After seeded areas are well established.
3. Edges: Clean straight lines or smooth curves.
 - 3.1. Mulch and soil: Draw back to permit edging.
4. Arisings: Remove.
5. Completion: Respread soil and mulch.

Turfing - Not Used

Protecting/cutting

530 First cut of grassed areas

1. Timing: When grass is reasonably dry.
 - 1.1. Height of initial growth: 100 mm
2. Preparation
 - 2.1. Debris and litter: Remove.
 - 2.2. Stones and earth clods larger than 25 mm in any dimension: Remove
3. Height of first cut: 50 mm
4. Mower type: Contractor's choice
5. Arisings: Remove from site

540 First cut of wildflower meadows

1. Description: WILDFLOWER MEADOWS
2. Height of initial growth: 100mm
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
7. Arisings: 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/ turfing

1. Duration: Carry out the following operations from completion of seeding/ turfing until: practical completion.
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/ returfing.
4. Timing of making good: The next suitable planting season
5. Bare areas and areas of dead grass which are apparent at Practical completion will be regarded as defects and must be made good by recultivation and re-seeding at times to be agreed with the contractor. Grass and wildflower areas will only be accepted as reaching practical completion when germination is complete and the sward is satisfactorily established - 95% cover will be required.

620 Maintaining

1. Description: GENERAL GRASSED AREAS
2. Duration: Carry out the following operations from completion of seeding/ turfing until: practical completion.
3. Maximum height of growth at any time: 100 mm
4. Preparation: Before each cut remove all litter and debris.
5. Cutting: As and when necessary to a height of 50 mm.
 - 5.1. Arisings: Remove
6. Bulb planting areas: Do not cut until bulb foliage has died down.
7. Trimming: All edges.
 - 7.1. Arisings: Remove.
8. Weed control: Substantially free of broad leaved weeds.
 - 8.1. Method: Application of a suitable selective herbicide.
9. Stones brought to the surface: Remove regularly.
 - 9.1. Size: Exceeding 25 mm in any dimension.
10. Areas of settlement: Make good.
11. Watering: As necessary to ensure a healthy sward

650 Maintaining grassed areas with perennial wildflowers

1. Duration: Carry out the following operations from completion of seeding/ turfing until: practical completion.
2. Preparation: Before each cut remove all litter and debris.
3. Height and frequency of cut in first growing season
 - 3.1. Time of first cut: March/ April
 - 3.2. Height of first cut: 50 mm

- 3.3. Frequency of subsequent cutting (minimum): Every 6-8 weeks until autumn
- 3.4. Height of growth permitted (maximum): 100 mm
- 4. Height and frequency of cut in second growing season
 - 4.1. Time of cut: October, March and August
 - 4.2. Height of cut: 50 mm
- 5. Trimming: All edges.
 - 5.1. Arisings: Remove.
- 6. Watering: Contractor's choice

660 Maintaining grassed areas with annual wildflowers

- 1. Duration: Carry out the following operations from completion of seeding/ turfing until: practical completion.
- 2. Preparation: Before each cut remove all litter and debris.
- 3. Timing of first cut: After flowers have set seed.
- 4. Height of first cut: 50 mm
- 5. Subsequent cutting: As necessary, so the height of growth does not exceed 100 mm.
 - 5.1. Height of cut: 50 mm
- 6. Trimming: All edges.
 - 6.1. Arisings: Remove
- 7. Watering: Contractor's choice

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
5. **Large roots:** Grub up and dispose of without undue disturbance of soil and adjacent areas.
6. **Additional requirements:** None

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
3. **Additional requirements:** None

118 Soil conditions

1. **Soil for cultivating and planting:** Moist, friable and (except in aquatic/ marginal planting) not waterlogged.
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:** Provide as necessary.
5. **Dried bulbs, corms and tubers:** September/ October.
6. **Colchicum (crocus):** July/ August.
7. **Green bulbs:** After flowering in spring.
8. **Wildflower plugs:** Late August to mid November or March/ April.
9. **Aquatic plants:** May/ June or September/ October.

130 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and 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.

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 herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Delivery of plants/ trees.
 - 1.5. Planting shrubs.
 - 1.6. Planting trees into previously dug pits.
 - 1.7. Watering.
 - 1.8. Visiting site during maintenance period.
2. **Period of notice:** One week

170 Soil requirements

1. **Type**
 - 1.1. Planted beds:
 - 1.2. Tree pits, shrub pits and other backfilling: Existing topsoil
 - 1.3. External container planting:
 - 1.4. Mulch applied after planting: Mulching and top dressing system, as section Q28

200 Plants/ Trees – 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 relevant parts of BS 3936
7. **Species:** True to name.
8. **Origin/ Provenance:** British grown
9. **Definition:** Origin and Provenance have the meaning given in the National Plant Specification.

215 Plants/ Trees – specification criteria

1. **Name, forms, dimensions, provenance and other criteria:** As scheduled and defined in the National Plant Specification (available on CS Design Software Limited's website).

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/ Trees

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.

245 Labelling and information

1. **General:** Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:
 - 1.1. Full botanical name.
 - 1.2. Total number.
 - 1.3. Number of bundles.
 - 1.4. Part bundles.
 - 1.5. Supplier's name.
 - 1.6. Employer's name and project reference.
 - 1.7. Plant specification, in accordance with scheduled National Plant Specification categories.
2. **Additional information:** Submit on request: Country of origin and Impact of pest/ disease.

255 Plants/ Trees reserved at supplier's premises

1. **Types/ Species:** Tree planting for tagging
2. **Predelivery inspection:** Give notice.
3. **Labelling:** Identify inspected plants/ trees as reserved for use on this project.

260 Plant/ Tree substitution

1. **Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering:** Submit alternatives, stating:
 - 1.1. Price.
 - 1.2. Difference from specified plants/ trees.
2. **Approval:** Obtain before making any substitution.

265 Plant handling, storage transport and planting

1. **Standard:** To BS8454:2014 and 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.

280 Treatment of tree wounds

1. **Cutting:** Keep wounds as small as possible.
 - 1.1. Cut cleanly back to sound wood using sharp, clean tools.
 - 1.2. Leave branch collars. Do not cut flush with stem or trunk.
 - 1.3. Set cuts so that water will not collect on cut area.
2. **Fungicide/ Sealant:** Do not apply unless instructed.

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.

Plant containers - Not Used

Preparation of planting beds/ planting materials

300 Herbicide

1. **Description:** TO CLEAR EXISTING VEGETATION
2. **Locations:** All planting areas
3. **Type:** Suitable for suppressing perennial weeds.
4. **Timing:** Allow fallow period before cultivation.
 - 4.1. **Duration (minimum):** Three weeks

315 Cultivation

1. **Compacted topsoil:** Break up to full depth.
 - **Cultivation:** Loosen, aerate and break up soil into particles of 2-8 mm.
 - **Depth:** 250 mm.
 - **Timing:** Within a few days before planting.
 - **Weather and ground conditions:** Suitably dry.
 - **Surface:** Leave regular and even.
 - **Levels:** 25 mm above adjoining paving or kerbs.
 - **Undesirable material brought to the surface:** Remove visible weeds, roots and large stones with any dimension exceeding 50 mm. Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.

390 Geotextile fabric lining for aquatic/ Marginal planting

1. **Description:** TO POND EDGES
2. **Manufacturer:** See section J44
 - 2.1. **Product reference:** See section J44
3. **Lining:** Lining, as section J44
4. **Timing:** Lay before planting.

5. **Laying:** In close contact with soil surface. Lap or butt joints as recommended by manufacturer, with no gaps.
6. **Planting:** Cut neat slits or flaps. Refit closely around plant stems.

Planting shrubs/ herbaceous plants/ bulbs

400 Random plant layout

1. **Description:** TO WOODLAND PLANTING AND SCRUB AREAS
2. **Spacing:** Evenly, avoiding straight lines
3. **Density:** As plant schedule

401 A Regular plant layout Type B

1. **Description:** TO BULB PLANTING
2. **Spacing:** In regular, staggered rows
3. **Density:** At 5 plants per m²

401 B Regular plant layout Type A

1. **Description:** TO HEDGE PLANTING
2. **Spacing:** In regular, double-staggered rows
3. **Density:** As plant schedule

405 Shrub planting pits

1. **Timing:** Excavate 1-2 days (maximum) before planting.
2. **Sizes:** As plant schedule
3. **Pit bottom improvement** Not required.

415 Antidesiccant for conifers/ Evergreens

1. **Manufacturer:** Contractor's choice
 - 1.1. **Product reference:** Contractor's choice
2. **Application:** Dip before delivering to site. Spray soon after planting.
 - 2.1. Do not apply in wet or frosty weather.
 - 2.2. Ensure full coverage of underside of foliage.

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.

457 Planting aquatic/ Marginal plant plugs

1. **Handling:** Keep plants watered and in shade until planted. Do not allow to dry out.
2. **Preparation:** Remove coarse weeds etc. from planting sites.
3. **Planting sites:** Existing and proposed ponds
4. **Waterproofing membrane below soil:** Do not puncture.

5. **Planting:** Into a hole to suit plug size and shape. Create a cleft at bottom of hole to improve rooting. Gently firm plant into hole to ensure good root hold into substrate.

461 Planting containerized, bagged and weighted bunch aquatic plants

1. **Preparation:** Remove coarse weeds, debris, etc.
2. **Waterproofing membrane below soil:** Do not puncture.
3. **Planting sites:** Form level, stepped or gently sloping areas as scheduled and/ or appropriate to planting water depths and container/ bag sizes and shapes.
4. **Planting:** Lower containers/ bags/ bunches gently into place, keeping plants upright.

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.

471 Naturalized hedges

1. **Planting:** In trenches large enough to take full spread of roots. Set out plants evenly.

472 Fencing support for new hedges

1. **Type:** Timber post and general pattern wire mesh
2. **Timing:** Before planting hedge.
3. **Support:** Lightly secure hedge plants to fence wires at appropriate intervals.

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:** 50 mm

486 A Shrub protection to hedge planting

1. **Manufacturer:** Greentech or similar approved.
 - 1.1. **Product reference:** Rainbow Treebio Biodegradable Spiral Guard or similar approved.
2. **Type:** Spiral.
3. **Material:** Polylactic acid with UV stabilisation system.
4. **Size:** As appropriate to size of shrub.
5. **Colour:** Green.
6. **Support:** Single timber stake or bamboo cane support.
7. **General:** Ensure that protection methods do not impede natural movement of shrubs or restrict growth.

486 B Shrub protection to woodland block planting

1. **Manufacturer:** Go Green Guards or similar approved.
 - 1.1. **Product reference:** Paper Tree Guards or similar approved.
2. **Type:** Square
3. **Material:** Wet strength kraft board.
4. **Size:** As appropriate to size of shrub.
5. **Colour:** As supplied.

6. **Support:** Single timber stake
7. **General:** Ensure that protection methods do not impede natural movement of shrubs or restrict growth.

495 Instant Hedge Planting Instant Native Hedge Mix and Purple Beech Instant Hedge

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 in regular staggered rows at 4 plants per m2. Avoid air pockets.
3. **Irrigation:** Bowser fed irrigation system using pressure compensating pipe, supplied by Practicality Brown or similar approved.
4. **Water:** 2-3 times a week or as necessary to ensure healthy growth of hedge.

Planting trees

500 Tree planting

1. **Standard:** Prepare trees and transplant in accordance with BS 8545

502 Antidesiccant for conifers/ Evergreens

1. **Manufacturer:** Contractor's choice
 - 1.1. **Product reference:** Contractor's choice
2. **Application:** Dip or thoroughly spray before delivering to site. Spray again soon after planting.
 - 2.1. Do not apply in wet or frosty weather.
 - 2.2. Ensure full coverage of underside of foliage.

505 Tree pits

1. **Sizes:** 75 mm wider than the root spread, and same depth as the rootball
2. **Sloping ground:** Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
3. **Excavated material:** Separate topsoil and subsoil material and stockpile for backfilling
4. **Pit bottoms:** Excavate with slightly raised centre: Break up base to a depth of 200 mm.
 - 4.1. **Treatment:** Soil ameliorant worked into pit bottoms
5. **Pit sides:** Scarify.
6. **Backfilling material:** Excavated material from tree pit, installed to original soil profiles in accordance with BS 8545

510 Tree pit root barriers

1. **Locations:** As drawing
2. **Manufacturer:** Green Blue Urban or similar approved
 - 2.1. **Product reference:** Rootsafe or similar approved
3. **Thickness:** 2.0 mm
4. **Barrier depth:** 1500 mm
5. **Foil liner:** Not required
6. **Top of root barrier in relation to finished topsoil level:** 25 mm above ground level
7. **Installation:** With sides vertical. Remove all sharp objects adjacent to barrier.

512 Tree pit irrigation and ventilation accessories

1. Locations: To all tree pits
2. Manufacturer: GreenBlue Urban Ltd
 - 2.1. Product reference: Roottrain or similar approved
3. Type: Perforated plastic irrigation pipe with inlet
4. Pipe diameter: 60 mm
5. Ring diameter: Suitable to fit the tree
6. Inlet: Black plastics, with cap
7. Installation
 - 7.1. Pipe: Lay in loop above root ball with slight fall away from inlet pipe. Trim length to ensure a close fit in the tree pit. Connect both ends of pipe securely into plastics tee junction on inlet.
 - 7.2. Top cap of inlet: Protruding slightly above finished surround level.
 - 7.3. Backfill material: Carefully compact in layers.

526 Underground guying for:

1. Description: MULTISTEM TREES AND CONIFERS
2. Manufacturer: Platipus or similar approved.
 - 2.1. Product reference: RF1P for trees 12-25cm girth
RF2P for trees 25-45cm girth
RF3P for trees 45-75cm girth.
3. Anchoring system: 3 no drive-in anchors.
4. Installation: Ensure tree is positioned correctly and vertically prior to tightening guy line tensioners.

535 Tree stakes

1. Stakes: Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.
 - 1.1. Preservative treatment: Not required
2. Stake size (minimum): 35mm diameter
3. Stake length (minimum): 1500mm

546 Single vertical staking for

1. Description: STANDARD TREES, WHIPS AND FEATHERED TREES
2. Staking
 - 2.1. Position: Close to tree position on windward side.
 - 2.2. Driving: Vertically at least 300 mm into bottom of pit before planting.
 - 2.3. Backfilling: Consolidate material around stake.
 - 2.4. Firming: Sufficiently firm to prevent movement of the rootball/ rootstock.
3. Height of stakes: Cut off just below lowest branch of tree
4. Ties: Adjustable
 - 4.1. Number of ties: Two
5. Tying: Secure tree firmly but not rigidly to stake with ties. Prevent tree from touching stake using spacer blocks or cushions if required.
 - 5.1. Position: Top tie within 25 mm of top of stake and additional ties equally spaced along the stake.
6. Nails: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.

550 Double staking for

1. **Description:** ALL EXTRA HEAVY STANDARD TREES
2. **Staking**
 - 2.1. **Position:** Either side of tree position and perpendicular to wind direction.
 - 2.2. **Driving:** Vertically at least 300 mm into bottom of pit before planting.
 - 2.3. **Backfilling:** Consolidate material around stake.
 - 2.4. **Firming:** Sufficiently firm to prevent movement of the rootball/ rootstock.
3. **Height of stakes:** Cut off to approximately 750 mm above ground level
4. **Horizontal bracing:** Flexible webbing
 - 4.1. **Fixing:** Contractor's choice
5. **Ties:** Contractor's choice
6. **Tying:** Secure flexible webbing around tree stem firmly without causing constriction or chafing
7. **Nails for fixing ties, belts and webbing:** To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
8. **Nails for fixing cross bars:** Not required

566 Tree protection

1. **Manufacturer:** GreenTech or similar approved.
 - 1.1. **Product reference:** Premium Strimmer Tree Guards.
2. **Type:** Conical strimmer guard.
3. **Material:** Plastic.
4. **Size:** To suit size of tree.
5. **Colour:** Brown.
6. **Support:** N/A.
7. **General:** Ensure that protection methods do not impede natural movement of trees or restrict growth.

576 Tree pit surfacing – loose fill

1. **Surfacing material:** Mulch, as section Q28
2. **Area:** 1000 mm radius circle
3. **Depth:** 75 mm
4. **Watering:** Water soil thoroughly before laying.
5. **Installation:** Ensure the base of the tree stem is kept free from loose filled material.

Woodland/ matrix/ buffer zone planting

600 Woodland work generally

1. **Services:** Check for below and above ground services, including land drainage, in the vicinity. Give notice if they may be affected and obtain instructions before proceeding.
2. **Safety:** Comply with Arboriculture and Forestry Advisory Group Safety leaflets.

605 Existing vegetation/ Weed clearance

1. **Surface vegetation clearance:** Screef an area one metre diameter around each planting location
2. **Arisings:** Remove.

615 Existing trees/ Seedlings/ Coppice shoots

1. Existing trees and seedlings: Retain.
2. Coppice shoots: Remove all stems and treat with suitable herbicide to prevent regrowth

617 Removing trees and hedges

1. Identification: Clearly mark trees and hedges to be removed.
2. Work near retained trees: Where canopies overlap, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.
3. Arisings: Remove.
4. Tree stumps: Remove mechanically to a minimum depth of 300 mm below ground level

625 Cultivation

1. General: Rotary cultivate to full depth of topsoil
2. Consolidation: Leave for one month
3. Soil within root spread of trees to be retained: Do not plough or cultivate.

635 Notch planting in uncultivated ground

1. Notching: Make a vertical 'I', 'L', 'T' or 'H' notch.
 - 1.1. Depth: To accommodate full depth of roots.
2. Planting: Plant tree, close notch with root collar at ground level and firm the soil.

665 Setting out

1. Distance between trees: As plant schedule
2. Distance between rows: As plant schedule
 - 2.1. Plant in staggered rows.
3. Groupings:: Random groups of no less than 3 or more than 7 of the same species, ensuring that no three plants are aligned in any one direction

Protecting/ maintaining/ making good defects

710 Maintenance

1. Duration: Carry out the operations in the following clauses from completion of planting until practical completion.
2. Frequency of maintenance visits: In accordance with the agreed maintenance schedule

715 Watering of tree stock

1. As necessary to maintain healthy establishment of plants. It is recommended a monitored watering regime should commence around the end of March/early April dependent on weather conditions to ensure healthy establishment.
2. As a guide, watering needs to be undertaken every other week from April - September. A standard tree will need 20 litres each for the first two years; the larger the tree the more water will be required as necessary to ensure healthy establishment.
3. During drought conditions watering will need to be undertaken weekly. As a guide; 50L - 100L once a week should be applied during periods of drying winds or very high temperatures beginning in the spring months when the trees begin to flush. Water to be applied frequently and as necessary to ensure survival and healthy growth of the tree.
4. Water is to be applied slowly into the underground irrigation tube

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

730 Protective fencing

1. Fencing type: Post and wire
2. Erection: On completion of planting.
3. Removal: After 3-5 years of establishment

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 tree and 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 use of approved non-residual herbicides
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 trees/ shrubs. Straighten leaning trees/ shrubs.
5. Trees: Spray crown when in leaf during warm weather.
 - 5.1. Timing: After dusk.
6. Tree accessories: Check condition of stakes, ties, guys, guards and irrigation and ventilation systems.
 - 6.1. Broken or missing items: Replace.
 - 6.2. Loose stakes: Re-firm in the ground or replace as necessary to provide support to the tree.
 - 6.3. Loose guys: Re-firm anchor points and adjust as necessary to provide support to the tree.
 - 6.4. Ties: Adjust to accommodate growth and prevent constriction or abrasion.
 - 6.5. Damage to bark: Cut back neatly with sharp knife. Prevent further damage.
 - 6.6. Frequency of checks: Every month
7. 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: In accordance with the agreed maintenance schedule
 - 1.3. Trees: Favour a single central leading shoot.
2. Arisings: Remove.

770 Woodland planting maintenance

1. **Watering:** Only as necessary to prevent plants wilting.
2. **Loose plants:** Refirm surrounding soil, without compacting.
3. **Weed control:** Cut down and remove weeds prior to setting seed in a 1 m diameter area around each tree.
4. **Vegetation except trees and coppice shoots to be retained:** Cut within the plantation area.
 - 4.1. **Height (maximum):** 50 mm
 - 4.2. **Arisings:** Leave between rows.
5. **Mechanical, chemical or mulching methods of vegetation control:** Submit proposals.
6. **Ditches and drains:** Keep clear.
7. **Watering:** As required for healthy establishment.

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 details of any special procedures to be carried out.

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

110 Notice

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

130 Reinstatement

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

140 Control of mammalian pests

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

155 Watering

1. Supply: Potable mains water as per irrigation strategy
2. Quantity: As required to ensure successful establishment of trees and shrubs
3. Application: Do not damage or loosen plants.
4. Compacted soil: Loosen or scoop out, to direct water to rootzone.
5. Frequency: As necessary for the continued thriving of all planting

160 Water restrictions

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

170 Disposal of arisings

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

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 Performance-based maintenance of grassed areas

1. **General:** Maintain turf 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.

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.

222 Maintaining general amenity grass areas post practical completion

1. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
2. **Maximum height of growth at any time:** 75 mm.
3. **Preparation:** Before each cut remove all litter and debris.
4. **Cutting:** As and when necessary to a height of 50 mm.
 - 4.1. **Arisings:** Spread evenly over cut areas.
5. **Bulb planting areas:** Do not cut until bulb foliage has died down.
6. **Trimming:** All edges.
 - 6.1. **Arisings:** Remove.
7. **Weed control:** Substantially free of broad leaved weeds.
 - 7.1. **Method:** Application of a suitable selective herbicide.
8. **Stones brought to the surface:** Remove regularly.
 - 8.1. **Size:** Exceeding 25 mm in any dimension.
9. **Areas of settlement:** Make good.
10. **Watering:** as necessary to secure healthy sward.

224 Maintaining grass areas with perennial wildflowers post practical completion

1. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.

2. Preparation: Before each cut remove all litter and debris.
3. Height and frequency of cut in first growing season:
 - 3.1. Time of first cut: If sown in August, first cut will be end of October.
 - 3.2. Height of first cut: 100 mm.
 - 3.3. Frequency of subsequent cutting (minimum): After flowers have seeded in August, then maintain at 50mm.
 - 3.4. Height of growth permitted (maximum): 1000 mm.
4. Height and frequency of cut in second growing season:
 - 4.1. Time of cut: October.
 - 4.2. Height of cut: 100 mm.
5. Trimming: All edges
 - 5.1. Arisings: Box collect
6. Watering: When instructed

225 Tree stems

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

235 Bulbs and corms in grassed areas

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

250 Leaf removal

1. Operations: Collect fallen leaves.
2. Special requirements: Remove by hand raking
3. Disposal: Shred and compost on site

255 A First cut of Amenity Grassed Areas

1. Description: AMENITY GRASSED AREAS
2. Height of initial growth: 75 mm
3. Preparation
 - 3.1. Debris and litter: Remove.
 - 3.2. Stones and earth clods larger than 25 mm in any dimension: Remove
4. Height of first cut: 50 mm
5. Mower type: Rotary
6. Arisings: Remove

260 Mowing lawns

1. Grass height: Maintain between 25 and 50 mm
2. Arisings: Remove

265 Mowing general areas Areas containing wildflowers

1. Grass height: 100 mm maximum
2. Arisings: Remove

272 Maintaining grassed areas with perennial wildflowers

1. Preparation: Before each cut remove litter and debris.
2. Height and frequency of cut in first growing season
 - 2.1. Time of first cut: Late June
 - 2.2. Height of first cut: 100 mm
 - 2.3. Frequency of subsequent cutting (minimum): Every six to eight weeks until autumn
 - 2.4. Height of growth permitted (maximum): 150 mm
3. Height and frequency of cut in second growing season
 - 3.1. Time of cut: October, March and August
 - 3.2. Height of cut: 100 mm
4. Trimming: All edges.
 - 4.1. Arisings: Remove.
5. Watering: As schedule and when instructed

309 Edges to seeded areas

1. Location: Planting beds and around newly planted trees.
2. Timing: After seeded areas are well established.
3. Method: Cut to clean, straight lines or smooth curves. Draw back soil to permit edging.
4. Arisings: Remove.

311 Re-forming grass edges

1. Location: All edges and where damage occurs.
2. Edges:: Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical

330 Selective herbicide

1. Location: All areas
2. Herbicide: Non residual selective translocating herbicide
3. Areas not to be sprayed: Bulb and corm-planted areas when in leaf

340 Spot weed killing in rough grass areas

1. Herbicide: Suitable for suppressing perennial weeds
2. Operations: Spot-treat Injurious weed species listed in the Weeds Act 1959 and Wildlife and Countryside Act 1981.

350 Fertilizer – spring application

1. Type: Slow-release 15:10:10 NPK
2. Application rate: 60 g/m²

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 - Not Used

Shrubs/ trees/ hedges

500 Establishment of new planting

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

502 Establishment of new planting – fertilizer

1. Time of year: March or April.
2. Type: Slow-release
3. Spreading: Spread evenly.
 - 3.1. Application rate: As manufacturer's recommendations

510 Tree stakes and ties

1. Inspection/ maintenance times: As scheduled and immediately after strong winds
2. Stakes
 - 2.1. Replace loose, broken or decayed stakes to original specification.
 - 2.2. If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
3. Ties: Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
 - 3.1. Where chafing has occurred, reposition or replace ties to prevent further chafing.
4. Removal of stakes and ties: When instructed
 - 4.1. Fill stake holes with lightly compacted soil.

520 Refirming of trees and shrubs

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

525 Tree guards

1. Loose or defective guards: Adjust, refix or replace to original specification and to prevent chafing.

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.
3. **Special requirements:** None

555 Pruning trees and shrubs

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

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.

630 Dead and diseased plants

1. **Removal:** As soon as possible
2. **Replacement:** In the next suitable planting season

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.
- 4.2. **Additional requirements:** None
5. **Dressing:** Slow-release fertilizer:
 - 5.1. **Type:** Contractor's choice
 - 5.2. **Application rate:** As manufacturer's recommendations

645 Weed control generally

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

650 Hand-weeding

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

670 Weed control with summer herbicide

1. **Type:** Suitable foliar-acting herbicide.
2. **Timing:** Allow recommended period for herbicide to take effect before clearing dead weeds.

680 Soil aeration

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

685 Soil level adjustment

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

690 Maintenance of loose mulch

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

695 Fertilizing established trees and shrubs

1. **Time of year:** During April or May
2. **Type of fertilizer:** Enmag slow release
3. **Application:** Spread evenly.
 - 3.1. **Rate:** As manufacturer's recommendations

710 Woodland planting maintenance

1. **Watering:** In exceptional circumstances to prevent plants dying.
2. **Loose plants:** Refirm surrounding soil, without compacting.

3. Vegetation: Except trees and coppice shoots to be retained, cut down to 200 mm above ground level within the plantation area.
 - 3.1. Arisings: Leave between rows.
4. Ditches and drains: Keep clear.

Green walls - Not Used

Tree work

810 Tree work generally

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

815 Additional work

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

820 Prevention of wound bleeding

1. Standard: To BS 3998.

825 Prevention of disease transmission

1. Standard: To BS 3998.

835 Cutting and pruning generally

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

845 Crown lifting

1. **Clearances:** Remove branch systems to give clearance.
 - 1.1. **Height:** 2.5 m above footpaths and 3 m above cycleways
2. **Removing branches:** Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

850 Crown thinning

1. **Removing branches:** Remove inward-growing, crossing, rubbing, dead and damaged branches.
2. **Thinning:** Selectively remove secondary and small live branch growth evenly throughout the crown.
 - 2.1. **Quantity:** 15 %
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.

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.

Water areas - Not Used

Hard landscape areas/ fencing

900 Snow clearance

1. **Clearance:** On reaching a depth of 5 mm
2. **De-icing:** To cycleways and footpaths
 - 2.1. **Material:** Grit
 - 2.2. **Timing:** When instructed
 - 2.3. **Application rate:** Spread evenly at a rate of 20 g/m².

Ω End of Section

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