Pegasus Planning Group

Miller Homes, Kier Ventures & Kingacre Estates

R10 / R14 Link Road

Illustrative for PLANNING purposes only - not to be used for construction

03-09-2025

Contents

D20
Excavating and filling

Generally/the site

110 Site investigation

1. Report: To be read in conjunction with available ground investigation reports

111 General Site Soils

1. Soil removal, handling, re-use and storage to be carried out in accordance with BS 3882, BS 8601 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA 2009..
    1.1. A Soil Scientist will oversee soil handling, soil amelioration and placement in accordance with best practice.

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.

Clearance/excavating

164 Tree roots

1. Protected area: Do not cut roots within precautionary protection area.
    1.1. Size of area: Circle around each tree of radius 4 times trunk girth, measured 1.5 m above ground level
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 amelioration as section Q31

166 Tree root barriers

1. Trench: Sever all roots.
    1.1. Depth: As per engineer's specification
2. Root barrier: As per engineer's specification
3. Cutting roots: As clause 164.
4. Root barrier installation: Full depth of excavation. Fit closely to trench wall nearest the tree.

5. Backfill material: As dug material excavated from trench.
6. Backfilling: Lay and compact thoroughly in layers not more than 300 mm thick.

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 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.

175 Felling large trees

1. Definition: Girth over 600 mm.
2. Identification: Clearly mark trees to be removed.
3. Safety: Comply with Forest Industry Safety Accord safety leaflets.
4. Felling: As close to the ground as possible.
5. Stumps: Remove mechanically to a minimum depth of 300 mm below ground level
6. Work near retained trees: Take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained, where tree canopies overlap and in confined spaces generally.

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 200 mm.
    2.2. Give notice where the depth of topsoil is difficult to determine.
    2.3. Note: : Soil scientist to oversee stripping of topsoil
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 in locations agreed with the contract administrator as per clause 410

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, specifically Annex A, and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
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.

Disposal of materials

410 Excavated topsoil storage

1. Storage: Stockpile in temporary storage heaps location to be agreed with the contract administrator .

420 Topsoil storage heaps

1. Location: As agreed
2. Standard: To BS 3882, specifically Annex A, and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
3. Height (maximum): 2m
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. New Item: To be handled as per BS 8601 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
2. Excavated material: Stockpile in temporary storage heaps
3. Retained material: Spread and level surplus subsoil on site. Handle as per best practice
   3.1. Locations: to be agreed
   3.2. Protected areas: Do not raise soil level within root spread of trees that are to be retained.

4. Remaining material: Move to storage location within the wider site in accordance with the available materials management strategy

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

460 Permanent drainage system

1. Disposal of water from the excavations through system: Not permitted

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.

520 Frost susceptibility

1. General: Except as allowed below, fill must be non frost-susceptible as defined in the 'Specification for highway works', clause 801.8.
2. Test reports: If the following fill materials are proposed, submit a laboratory report confirming they are non frost- susceptible:
   2.1. Fine grained soil with a plasticity index less than 20%.
   2.2. Coarse grained soil or crushed granite with more than 10% retained on a 0.063 mm sieve.
   2.3. Crushed chalk.
   2.4. Crushed limestone fill with average saturation moisture content in excess of 3%.
   2.5. Burnt colliery shale.
3. Frost-susceptible fill: May only be used:
   3.1. At depths below the finished ground surface greater than: 600 mm
   3.2. Within the external walls of buildings below spaces that will be heated. Protect from frost during construction.
   3.3. Where frost heave will not affect structural elements.

525 Testing of suitability of fill materials before start of filling

1. Laboratory: UKAS accredited laboratory
2. Submit report to: Civil Engineer (two copies)
   2.1. Timing: 21 days before starting filling
3. Samples: Deliver to laboratory as required.
   3.1. Additional requirements: None
4. Tests: As directed
5. Frequency: Submit with tender proposed rate and frequency of testing to demonstrate continuing compliance of imported or reprocessed fill with specified properties

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.

535 Compaction generally

1. General: Compact fill not specified to be left loose as soon as possible after placing.
2. After compaction: Surface of each layer must be well closed, showing no movement under compaction plant, and without cracks, holes, ridges, loose material and the like.
3. Defective areas: Remove and recompact to full thickness of layer using new material.

540 Benching in fill

1. Adjacent areas: If, during filling the difference in level between adjacent areas of filling exceeds 600 mm, cut into edge of higher filling to form benches 600 mm minimum width and height equivalent to depth of a layer of compacted filling.
2. New filling: Spread and compact to ensure maximum continuity with previous filling.

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.

620 Subgrade improvement layer (capping)

1. Fill: To 'Specification for highway works', Table 6/1, Class 6F1 or 6F2.
2. oFilling: Place and compact to MCHW Volume 1: 'Specification for highway works' (SHW), Table 6/1, clause 612 and clause 613.3, 613.9 and 613.10.

700 Backfilling around foundations

1. Under oversite concrete and pavings: Hardcore as clause 710.
2. Under grassed or soil areas: Material excavated from the trench, laid and compacted in 300 mm maximum layers.

Bioremediation - Not Used

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

Ω End of Section

L37
External stair, ramps, handrail and balustrades systems

General

110 Stair systems

1. Type: Timber sleepers to basin; 'Embankment Steps' by Playdale, or similar approved
2. Base/ Fabric: To engineers specification
3. Unobstructed width: 1200mm
4. Accessories: None

System performance

210 Design

1. Description: Timber step forms, treads to be grassed
2. Structure and associated features: Chunky treated softwood timber, to achieve 1200mm width, 150mm upstand steps
3. Other performance criteria: Non-slip edging to top of timber step edge, anti-erosion grass matting to tread
4. Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

Products - Not Used

Fabrication

510 Fabrication generally

1. Design: Complete the detailed design and obtain approval prior to commencing fabrication.
2. Shop drawings: Submit.
3. Structural calculations: Submit.
4. Frameworks: Assemble and brace, including temporary members required for installation.
5. Contact between dissimilar metals: Avoid.
6. Fixings: Fully bolt together. Tighten bolts.
7. Temporary support: Do not subject members to non-design loadings.

Execution

620 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: Designated not less than GEN 1 or standard prescribed not less than ST2.
3. Admixtures: Do not use.
4. Foundation holes: Neat vertical sides.
5. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

630 Setting components in concrete

1. Components: Accurately positioned and securely supported.
2. Concrete fill: Compact as filling proceeds.
3. Concrete foundations exposed to view: Finished to weathering profile to shed water and trowel smooth.
4. Temporary component support: Maintain undisturbed for minimum 48 hours.

640 Preservative treated timber

1. Surfaces exposed by minor cutting and drilling: Treated by immersion or with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.
2. Heavily worked sections: Re-treat.

650 Installation generally

1. Fasteners: To section Z20.
2. Structural members: Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
3. Temporary support: Do not use finished work as temporary support or strutting for other work.
4. Applied finishes: Substrates to be even, dry, sound and free from contaminants. Make good substrate surfaces and prepare/ prime as finish manufacturer's recommendation before application.

662 Adverse weather

1. General: Do not use frozen materials and do not lay on frozen surfaces.
2. Working limits: Do not lay blocks/ dressings:
    2.1. Cement gauged mortars: When the air temperature is at or below 3°C and falling or below 1°C and rising (unless mortar has a temperature of not less than 4°C when laid and work is thoroughly protected).
    2.2. Hydraulic lime:sand mortars: When the air temperature is at or below 5°C and falling or below 3°C and rising.
3. Temperature of the work: Maintain above freezing until mortar has fully set.
4. Newly erected work: Protect from precipitation; Prevent rapid drying in hot conditions.
5. Remedial work: Rake out and replace mortar damaged by frost.
    5.1. Damaged work: Rebuild.

Completion

910 Inspection

1. Period of notice (minimum): 3 working days.

Ω End of Section

Q28
Topsoil and soil ameliorants

System outline

110 General

1. All subsoil and topsoil handling to be completed in accordance with:
    - BS 3882,
    - the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA (2009)

116 Rain garden soil system

1. Composition
    1.1. Soil: : Bioretention soil
    1.2. Supplier: Bourne Amenity (or similar approved)
    1.3. Depth: 300mm

131 Native shrub soil system

1. Composition
    1.1. Topsoil: Site-sourced topsoil
    1.2. Ameliorants: Fertiliser to be incorporated into topsoil
    1.3. Dpeth: 300mm

145 Tree pit backfilling topsoil system

1. Composition
    1.1. Topsoil: Site-sourced topsoil
    1.2. Ameliorants: Fertiliser to be incorporated into topsoil
    1.3. Depth: 400mm

155 Mulching and top dressing system

1. Composition
    1.1. Material: Composted bark mulch

156 Mulching and top dressing system - Rain garden

1. Composition
    1.1. Material: 75mm depth 14-20mm clean grey stone 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/or products containing peat.

315 Imported topsoil to BS 3882

1. Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
2. Standard: To BS 3882.
3. Classification: Multipurpose, or low nutrient composition to suit grassland mixture and site conditions
    3.1. Soil textural class to BS 3882, Figure 1: Sandy loam
4. Source: Submit proposals
    4.1. Product reference: Submit proposals

330 Imported manufactured topsoil/ growing medium

1. Description: Free draining soil suitable for rain gardens
2. Source: Bioretention soil
3. Manufacturer: Bourne Amenity

401 Organic fertilizers

1. Description: For tree pits and planting area only. DO NOT apply fertiliser to grassland areas.
2. Manufacturer/ source: Contractor's choice
3. Standard: In accordance with the Fertilizer Industry Assurance Scheme (FIAS)
4. Purpose: General purpose fertilizer
5. Type: Sanitized and stabilized compost
6. Availability to plants: Slow-release

Execution

610 Topsoil analysis

1. Soil to be analysed: Imported and the site-won topsoil stockpile
2. Soil analyst: MCERTS accredited testing laboratory specialising in the chemical testing of soil for horticultural purposes.
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. Report detailing soil analyst's recommendations.

620 Importing topsoil

1. Give notice: Before stripping topsoil for transfer to site.
    1.1. Notice period: 5 days

625 Sample loads

1. Description: For imported topsoil
2. Deliver to site a sample load: of 5 kg
3. Give notice: Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
    3.1. Notice period: 5 days

630 Documentation for imported topsoil

1. Timing: Submit at handover.
2. Contents
    2.1. Full description of all soil components.
    2.2. Record of source for all soil components.
    2.3. Record drawings showing the location and depth of all soils by type and grade.
    2.4. Declaration of analysis: in accordance with BS 3882, clause 6 and Table 1.
3. Number of copies: Two

635 Documentation for compost and composted materials

1. Description: FOR IMPORTED SOIL IMPROVERS
2. Timing: Submit at handover.
3. Contents
    3.1. Full description of all compost components.
    3.2. Record of source for all compost components.
    3.3. Analyst's report for each test carried out.
    3.4. Declaration of compliance: in accordance with PAS 100 and BSI PD CR 13456.
    3.5. Quality Compost Protocol certification: Required
4. Number of copies: Two

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. Do not damage adjacent planting.

660 Grading subsoil for:

1. Description: All soft landscape 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 all areas:

1. Standard: In accordance with BS 3882 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
2. General: Excavate and/ or place fill to required profiles and levels, as section D20.
3. Loosening
    3.1. When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth
        3.1.1. Light and noncohesive subsoils: 300 mm
        3.1.2. Stiff clay and cohesive subsoils: 450 mm
        3.1.3. Rock and chalk subgrades: Lightly scarify to promote free drainage.
    3.2. Wet conditions: Do not loosen subsoils.
4. Stones: Immediately before spreading topsoil, remove stones larger than 50 mm.
5. Remove from site: Arisings, contaminants and debris and builders rubble
6. Tools: Hand operated machinery or hand tools should be used where necessary, e.g. within tree root protection areas.
7. Note: If the topsoil is not immediately applied to the prepared topsoil and the subsoil left open to the weather, it should be re-broken up to a depth of 150mm immediately prior to topsoiling.

670 Inspecting formations

1. Give notice: Before spreading topsoil for grassland areas and planting beds.

2. Notice period: 7 days

675 Preparation of undisturbed topsoil

1. Standard: In accordance with BS 4428.
    1.1. Grading and cultivation: Category B
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 Landscape Architect
    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: To be agreed with the contract administrator
2. Height (maximum): 2.0 m
3. Width (maximum): to suit site constraints
    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 tree pits

1. Standard: In accordance with BS 3882 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
2. Temporary roads/ surfacing: Remove before spreading topsoil.
3. Layers
   3.1. Depth (maximum): 150 mm.
   3.2. Gently firm each layer before spreading the next.
4. Depth after firming and settlement: 400mm
5. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

711 Spreading topsoil on grasslands

1. Standard: In accordance with BS 3882 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
2. Temporary roads/ surfacing: Remove before spreading topsoil.
3. Layers
   3.1. Depth (maximum): 150 mm.
   3.2. Gently firm each layer before spreading the next.
4. Depth after firming and settlement: 150mm
5. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

713 Spreading topsoil within rain gardens

1. Standard: In accordance with BS 3882 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
2. Temporary roads/ surfacing: Remove before spreading topsoil.
3. Layers
   3.1. Depth (maximum): 150 mm.
   3.2. Gently firm each layer before spreading the next.
4. Depth after firming and settlement: 300mm
5. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

714 Spreading topsoil on planting areas

1. Standard: In accordance with BS 3882 and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites by DEFRA, 2009.
2. Temporary roads/ surfacing: Remove before spreading topsoil.
3. Layers
    3.1. Depth (maximum): 150 mm.
    3.2. Gently firm each layer before spreading the next.
4. Depth after firming and settlement: 300mm
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 of planting beds

1. Compacted topsoil: Break up to full depth.
2. Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
3. Depth: 300 mm
4. Particle size (maximum): 2-8 mm
5. Timing: After grading, and within a few days before seeding
6. Weather and ground conditions: Suitably dry.
7. Surface: Leave regular and even.
8. Levels: As engineer detailed levels drawing
9. Undesirable material brought to the surface
    9.1. Remove visible weeds.
    9.2. Remove roots and large stones with any dimension exceeding 50mm.

719 Final cultivation of grassland areas

1. Compacted topsoil: Break up to full depth.
2. Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
3. Depth: 150 mm
4. Particle size (maximum): 2-8 mm
5. Timing: After grading, and within a few days before seeding
6. Weather and ground conditions: Suitably dry.
7. Surface: Leave regular and even.
8. Levels: As engineer detailed levels drawing
9. Undesirable material brought to the surface
    9.1. Remove visible weeds.
    9.2. Remove roots and large stones with any dimension exceeding 50mm.

720 Finished levels of topsoil after settlement

1. In relation to adjoining paving, kerbs or hard surfaces: 25 mm above
2. In relation to adjacent grass areas: 50 mm above
3. Seeded areas: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
4. Within root spread of existing trees and shrubs to be retained: Do not dig or cultivate.
5. Adjoining soil areas: Marry in.
6. Thickness of turf or mulch: Included.

805 Applying soil ameliorant For tree pits

1. Type: Alginure soil improver (or similar approved)
2. Fully incorporate into topsoil to a depth of 300 mm.
3. Application: Spread evenly.
    3.1. Timing: Apply prior to cultivation.
    3.2. Rate: 1.5 kg/m3
4. Timing: Prior to cultivation.
5. Other requirements: Submit details of recent chemical and physical analysis before ordering

806 Applying soil ameliorant For planting beds

1. Type: Alginure soil improver (or similar approved)
2. Fully incorporate into topsoil to a depth of 300 mm.
3. Application: Spread evenly.
    3.1. Timing: Apply prior to cultivation.
    3.2. Rate: 75g/m2
4. Timing: Prior to cultivation.
5. Other requirements: Submit details of recent chemical and physical analysis before ordering

810 Applying compost to tree pits

1. Application rate for trees and shrubs: 20litres/m2 for tree pits to be incorporate d into the top 150mm topsoil
    1.1. Timing: Apply prior to cultivation.
2. Other requirements:

820 Applying general fertilizer - for planting beds

1. Application: Spread evenly, carefully incorporating below mulch materials.
    1.1. Timing: Immediately before cultivation.
    1.2. Application rate: Immediately before cultivation.
    1.3. Other requirements: As per manufacturer's recommendations

845 Applying loose bark mulch - to tree pits and planting beds

1. Description: Loose bark mulch to tree pits and planting beds (NOT to tree pits within rain gardens)

2. Material: Fine grade 100% bark mulch free from any foreign matter or other timbers .
    2.1. Purity: Free of pests, disease, fungus and weeds.
3. Timing: Immediately after planting
4. Preparation: Ensure that soil is thoroughly moistened, applying water (to field capacity) where necessary
5. Coverage of mulch (minimum)
    5.1. Planting beds (depth): 75 mm depth
        5.1.1. Application: Take care not to bury ground cover plants
    5.2. Trees: Depth to taper from 50-75mm to no more than 25mm over the root-ball surface, ensuring that the root flare and the base of the stem, along within any ground cover plants are not buried. Taper mulch to 20mm where circle adjoins footway or highway.
6. Finished level of mulch: 50 mm below adjacent grassed or paved areas

846 Applying loose fill stone mulch - to rain gardens

1. Description: Refer to Q31
2. Preparation: Ensure that soil is thoroughly moistened, applying water (to field capacity) where necessary
3. Coverage of mulch (minimum)
    3.1. Trees: 75mm, to be tapered to 20mm towards the trunk so the flaring base is not buried
4. Finished level of mulch: 50 mm below adjacent grassed or paved areas

Completion

905 Applying maintenance fertilizer to soil

1. Description: To all planting beds and tree pits
2. Duration: Carry out the following operations from completion of seeding/ turfing until practical completion.
3. Time of year: March or April
4. Application: Evenly spread, carefully incorporating below mulch materials.
5. Rate: To suit soil report recommendations

920 Applying mulch - topping up

1. Watering: Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
2. Planting beds: Re-mulch.
    2.1. Depth (minimum): 75 mm
    2.2. Timing: Top up at least once annually
3. Trees: Remulch.
    3.1. Depth (minimum): To original specified depth and diameter.

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 until instructed. If seeding 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 to match the planting plan / layout arrangements as set out on the landscape plans. Obtain approval of setting out before starting any site work cultivations.
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: As manufacturer's recommendation

212 Seed bed cleaning before sowing

1. Description: ALL GRASSED AREAS
2. Operations: Kill pernicious weeds with selective contact herbicide.

250 Soil requirements

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

Seeding

311 Amenity grass

1. Supplier: Germinal Seeds (or similar approved)
    1.1. Mixture reference: A22 Amenity Grass Mix
2. Application rate: 50 g/m2

312 Wildflower Meadow

1. Supplier: Emorsgate (or similar approved)
    1.1. Mixture reference: EM1 Basic General Purpose Meadow Mixture
2. Application rate: 4g/m2

314 Wetland meadow

1. Supplier: Emorsgate (or similar approved)
    1.1. Mixture reference: EM8 Meadow Mixture for Wetlands
2. Application rate: 4g/m2

322 Quality of 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)
3. Freshness of seed: Produced for the current growing season
4. Samples: Submit when requested.

330 Sowing

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

336 Sowing season

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

1.1. Weather conditions: Only sow during calm weather and not when the ground is waterlogged or frost bound

340 Pre-emergent herbicide

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

Turfing - Not Used

Protecting/cutting

510 Protective fencing

1. Fencing type: Post and wire with netting
   1.1. Height: 1m
2. Erection: On completion of seeding/ turfing.
3. Removal: After grass is well established. Fencing will remain the property of the Contractor

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: 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/ returfing.
4. Timing of making good: Submit proposals

620 Maintaining amenity grass

1. Description: For amenity grass areas only
2. Duration: Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
3. Maximum height of growth at any time: 50 mm
4. Preparation: Before each cut remove all litter and debris.
5. Cutting: As and when necessary to a height of 25 mm.
   5.1. Arisings: Remove
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 per clause 146.
11. Other: Make good any bare patches

650 Maintaining grassland areas

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. Mowing height/timings:: Refer to Q35
4. Trimming: All edges.
   4.1. Arisings: Remove.
5. Watering: As per Clause 146
6. Other: Make good any bare patches

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.

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. Planting should not be carried out when the ground is waterlogged, frost bound or drying periods of cold drying winds
    1.1. Strong winds: Do not plant.

125 Times of year for planting

1. General timescales:: All plants should be planted within a short time frame, preferably immediately after arrival on site
2. Deciduous trees and shrubs: Late October to late March.
3. Conifers and evergreens: September/ October or April/ May.
4. Herbaceous plants (including marginal): September/ October or March/ April.
5. Container grown plants: At any time if ground and weather conditions are favourable.
    5.1. Note:: If container / pot grown plants are not planted immediately upon arrival on site they must be watered frequently to prevent drying out. If the health of any plant suffers due to storage / drying out, they will be replaced at the contractor's expense.
    5.2. Watering and weed control: Provide as necessary.
6. Dried bulbs, corms and tubers: September/ October.
7. Colchicum (crocus): July/ August.
8. Green bulbs: After flowering in spring.
9. Aquatic plants: May/ June or September/ October.

9.1. Storage of aquatic plants:: Keep plants watered and in shade until planted. Do not allow to dry out. All plants should be planted within a short time frame, preferably immediately after arrival on site. If container/pot grown plants are not planted on arrival at site they must be watered frequently to prevent drying out. If the health of any plant suffers due to being stored and drying out they will be replaced at the contractor's expense.

9.2. Timing:: Planting to be carried out prior to the drainage basins features being brought online

10. Note - bareroot planting stock: All bareroot planting stock must have their roots covered until planted in order to minimise water-loss and prevent the roots from drying out.

11. Note: : If planting is undertaken whilst construction work is still underway temporary protection shall be installed to ensure that no damage is caused to the soil structure and new plants. If any damage is found to have occurred due to lack of temporary protection, the works will be made-good by the contractor.

130 Mechanical tools

1. Restrictions: Do not use within 500 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: Until well established all shrubs are to be watered during the growing season. Following any dry periods of 7-10 days, soil water content should be assessed and watering undertaken as necessary. Planting areas are to be brought up to field capacity at each visit. If plants are showing signs of drought stress the watering regime should be reviewed and increased as required. Care should be taken to ensure applied water is absorbed into the root-zone and does not run off the surface.

146 Watering - trees

1. Quantity: Wet full depth of topsoil.
2. Application: Even and without damaging or displacing plants or soil.
3. Frequency: Until well established all trees are to be watered during the growing season. Following any dry periods of 7-10 days, soil water content should be assessed and watering undertaken as necessary. Each tree is to receive 40 litres or as required. If trees are showing signs of drought stress the watering regime should be reviewed and increased as required. Care should be taken to ensure applied water is absorbed into the root-zone and does not run off the surface.

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: Planting bed soil system, as section Q28

1.2. Tree pits, shrub pits and other backfilling: Plant pit backfilling soil system, as section Q28

1.3. Mulch applied after planting: Mulching and top dressing system, as section Q28

200 Plants/ Trees – general

1. Condition: Materially undamaged, sturdy, healthy and vigorous. Trees to have sturdy trunks and well balanced canopies.
2. Standard:: All plants shall conform to BS 3936
3. Appearance: Of good shape and without elongated shoots.
4. Hardiness: Grown in a suitable environment and hardened off.
5. Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
6. Budded or grafted plants: Bottom worked.
7. Root system and condition: Balanced with branch system.

7.1. Standard: The National Plant Specification, no tree shall be planted that does not conform with BS 8545:2014, in particular Table 1, p21, see clause 201.

8. Species: True to name.
9. Origin/ Provenance: Grown in the United Kingdom for at least one growing season, unless otherwise approved
10. Definition: Origin and Provenance have the meaning given in the National Plant Specification.
11. Acceptance of all planting stock:: All planting stock should only be accepted on site if they are materially undamaged and have been carefully protected and packed to survive transport, loading and unloading to site. Plants that have suffered nominal damage should be carefully pruned to remove any damage. Plants that are materially damaged should be rejected.
12. Nurseries:: Supplying nurseries shall be registered under the HTA Nursery Specification Scheme.

201 Trees - Acceptance of tree stock

1. No tree shall be planted that does not conform with BS 8545:2014, in particular Table 1, p21. It shall be confirmed before acceptance that the trees accord with BS 8545:2014, - prior to acceptance of delivery to site the check list set out in Table 1, p21 of BS 8545:2014 should be reviewed and trees which do not accord with this check list should be rejected.
2. Trees should be accepted on site only if they are materially undamaged and have been carefully protected and packaged to survive transport, loading / unloading to site.

3. Trees that have suffered nominal damage should be carefully pruned to remove any damage. Trees that are materially damaged should be rejected.

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).
2. Note:: All plants shall conform to BS 3936 and be in accordance with the National Plant Specification.
3. Note:: No tree shall be planted which does not conform with BS 8545:2014, in particular Table 1, p21, see clause 201.

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. Containerised trees should also be reviewed to ensure that root circling has not begun, producing a packed distorted root system which prevents lateral root development and reduces stability. Where minor root circling is discovered the root ball can be 'shaved' to remove potential stem girdling circling roots, and roots that grow vertically down the side of the container are removed. The outer periphery of the root ball should be shaved to a maximum of 2 inches thick. Any trees which suffer from root girdling as a consequence of root circling should not have been accepted onto the site.
4. Wrappings and cages:: All non-perishable wrapping and cages shall be removed prior to planting root balled trees. Perishable wrappings and fine gauge non-galvanised wire may be retained until the tree is in position but then cut, peeled back and ideally removed to one third of the root ball height. Wrappings and cages should be removed entirely from cohesive root balls.
5. Hardiness: Grown in the open for at least two months before being supplied.
6. 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 Date supplied and consignment details or reference.

246 Labelling and information

1. Standard: To BS 3936.

255 Plants/ Trees reserved at supplier's premises

1. Types/ Species: As per Plant Schedule
2. Predelivery inspection: Give notice.
3. Labelling: Identify inspected plants/ trees as reserved for use on this project.

260 Plant/ Tree substitution

1. NO SUBSTITUTES SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT FROM THE LANDSCAPE ARCHITECT, AND BY THE LOCAL PLANNING AUTHORITY.
2. Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering: Submit alternatives, stating:
   2.1. Price.
   2.2. Difference from specified plants/ trees.
3. Approval: Obtain written approval (as above) before placing order / making any substitution.

265 Plant handling, storage transport and planting

1. Standard: To CPSE 'Handling and establishing landscape plants' and BS 8545.
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: Coextruded polyethylene bags with black interior and white exterior
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.
    1.1. Move subsoil to designated location in accordance with the Plas dwr Outline Soils Re-use Strategy by Arup. Do not dispose of surplus subsoils unless confirmed in writing by the CA / Arup and Landscape Architect.
    1.2. Temporary labelling - remove after instruction by the Landscape Architect

Plant containers - Not Used

Preparation of planting beds/ planting materials

300 Herbicide

1. Description: Where necessary to treat remaining weeds, a minimal approach to using herbicides should be adopted.
2. Locations: All planting areas.
3. Type: A non-residual herbicide suitable for suppressing perennial weeds
4. Timing: Allow fallow period before cultivation.
    4.1. Duration (minimum): As manufacturer's recommendation

305 Weed control

1. Locations: All planting areas
2. General: Prevent weeds from seeding and perennial weeds from becoming established, by hand weeding, use of herbicides to be minimised where possible..

380 Cultivation in unsuitable conditions

1. The Landscape Contractor shall not carry out cultivation or the incorporation of mulch or soil conditioners when ground conditions are unsuitable (eg. saturated or frozen) as this may result in the development of severely denatured, structureless, or anaerobic soil conditions and subsequent plant deaths. The Landscape Contractor will be held wholly responsible for plant losses and replacement due to this clause and for any remedial works necessary to reinstate the condition of the soil so that it is suitable for replanting.

Planting shrubs/ herbaceous plants/ bulbs

400 Random plant layout

1. Description: To all planting beds, as per the detailed planting plan
2. Spacing: Random groups of 5-7 plants of the same species. Evenly, avoiding straight lines, man made grids or as directed by the detailed planting plans.
3. Density: As per the planting schedule

405 Shrub planting pits

1. Timing: Excavate 1-2 days (maximum) before planting.
2. Sizes: 150 mm wider than roots when fully spread and 300 mm deep
3. Pit bottom improvement Break up to a depth of 150 mm, incorporating 25 g of slow release fertilizer per planting pit.

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. Waterproofing membrane below soil: Do not puncture.
4. 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.

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: 75mm to around 900mm did of each planting station (for shrub planting).

486 Shrub protection - bare root shrub/scrub planting

1. Manufacturer: Green Tech (or similar approved)
    1.1. Product reference: 160PS1051-PRO
2. Type: Rainbow WSpiral
3. Material: PVC (100% recycled)
4. Size: 0.6m high x 50mm diameter
5. Colour: clear
6. Support: 09cm x 10-12mm bamboo cane, as advised by the manufacturer
7. General: Ensure that protection methods do not impede natural movement of shrubs or restrict growth.

Planting trees

500 Tree planting

1. Standard: Prepare trees and transplant in accordance with BS 8545, in particular Table 1, p21.

2. Timing:: All trees should be planted within the day of arrival. If trees are not planted on arrival at site they must be watered frequently to prevent drying out. If the health of any plants suffers due to being stored incorrectly or being allowed to dry out they will be replaced at the contractor's expense. If bare-root or root-ball trees are not planted on the day of arrival at site they must be heeled-in by placing the roots in a prepared trench and covering them with fine soil which shall be watered in to avoid air pockets around the roots.
3. Conditions:: No tree planting shall take place during freezing winds. By preference tree planting must take place when the weather is dull and the ground moist, friable and workable. Planting during frosty conditions will only be permitted if adequate precautions are taken. The prepared root balls must have additional wrapping, and the bottom/sides of the tree pits and the piles of excavated soil must be protected from freezing using boards, tarpaulins or other approved materials.
4. Root system preparation:: The root system of the tree should be wetted prior to planting. The tree should be planted at the correct depth considering the position of the root flare and the finished level - the root-ball or root stem transition should be level with the existing host soil or surface.

505 Tree pits

1. Sizes: Tree pits of at least 75mm diameter greater than the root system and no deeper than the root-ball / container depth are to be excavated.
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 150 mm.
    4.1. Treatment: Soil ameliorant to be worked into the top 150mm of topsoil only in accordance with Soils Resource Report.
5. Pit sides: Scarify to prevent smearing.
6. Extraneous material:: All extraneous matter such as plastic, wood, metal and stones greater than 50mm in any dimension shall be removed from site.
7. Backfilling material: Tree pits should be backfilled with 300mm suitable site won topsoil and 600mm of suitable site won subsoil or a suitable imported subsoil, as per the Soil Resource Survey. Backfill should be added gradually, in layers of 150mm to 230mm depth, ensuring the tree is held upright. At each stage the fill should be firmed in to eliminate all air pockets under and around the root system, but with care being taken not to excessively compact the soil. The final layer should not be consolidated.
8. Rootball support:: 200mm washed sand (horticultural grade sharp sand) should be applied to support the root-ball refer to clause 516. No washed sand to be applied to tree pits within rain gardens.

510 Tree pit root barriers

1. Locations: To be confirmed.
2. Manufacturer: To civil engineers specification
3. Thickness: To civil engineers specification
4. Barrier depth: To civil engineers specification
5. Top of root barrier in relation to finished topsoil level: To civil engineers specification
6. Installation: With sides vertical. Remove all sharp objects adjacent to barrier.

512 Tree pit irrigation and ventilation accessories

1. Locations: To each tree pit
2. Manufacturer: Green-Tech (or similar approved)
   2.1. Product reference: Mona Relief System - Grande MRG1
3. Type: Perforated plastic irrigation pipe with inlet
4. Pipe diameter: As supplied
5. Ring diameter: 3000mm
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.

516 Rootball Support

1. Locations: to all tree pits except those within the rain garden verges
2. Aggregate layer:: Washed horticultural grade sharp sand
   2.1. Sand to be a quarried horticultural sand in accordance with the following specification: : Clay and Silt: 0 lower limit % - 5 upper limit %
   Very Fine Sand: 0 lower limit % - 5 upper limit %
   Fine Sand: 5 lower limit % - 25 upper limit %
   Medium Sand: 40 lower limit % - 75 upper limit %
   Coarse Sand: 25 lower limit % - 45 upper limit %
   Stones(2-10mm): 0 lower limit - 10 upper limit %dw
   Stones(>10mm): 0 lower limit - 0 upper limit %dw
   Calcium Carbonate (expressed as CaCo3): 0 lower limit - 2.0 upper limit %
   Ph Value: 5.0 lower limit - 8.5 upper limit %dw
   2.2. Depth: 200mm applied to support the rootball, to be increased to 400mm if there are locally heavy poorly drained soils

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): 75 mm diameter
3. Stake length (minimum): 1500 mm

550 Triple staking for all trees

1. Staking
   1.1. Position: Either side of tree position and perpendicular to wind direction.
   1.2. Driving: Vertically at least 300 mm into bottom of pit before planting.
   1.3. Backfilling: Consolidate material around stake.
   1.4. Firming: Sufficiently firm to prevent movement of the rootball/ rootstock.

2. Height of stakes: Cut off to approximately 600 mm above ground level
3. Horizontal bracing: Timber cross bar, 75 mm x 38 mm x 900 mm
    3.1. Fixing: Firmly fix using nails on windward side of tree and as close as possible to the stem without making contact with the bark. Position cross bar horizontally and 25 mm from top of stakes
4. Ties: Biodegradable natural fibre
5. Tying: Secure flexible webbing around tree stem firmly without causing constriction or chafing
6. Nails for fixing ties, belts and webbing: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
7. Nails for fixing cross bars: To BS 1202-1, galvanized round wire, minimum 75 mm long and 3.75 mm gauge

576 Tree pit surfacing – loose fill bark mulch

1. Surfacing material: Mulch, as section Q28
2. Area: 1.0m diameter circle around individual trees, where space allows a 1.0m radius should be used
3. Depth: Depth will taper from 50-75mm to no more than 25mm over the root-ball surface, ensuring that the root flare and base of the stem, along with any ground cover plants, are not buried. The mulch depth should taper to 20mm where the circle adjoins a footway or highway.
4. Watering: Water soil thoroughly before laying.
5. Installation: Ensure the base of the tree stem is kept free from loose filled material.

576 Tree pit surfacing – loose fill stone mulch

1. Surfacing material: 14-20mm clean stone
2. Colour:: Grey
3. Area: 1.4m square (to provide total 2m2) from tree trunk
4. Depth: 75mm, to be tapered to 20mm towards the trunk so the flaring base is not buried
5. Watering: Water soil thoroughly before laying.
6. Installation: Ensure the base of the tree stem is kept free from loose filled material.

Woodland/ matrix/ buffer zone planting

635 Notch planting

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

680 Setting out

1. Planting density and layout:: As per planting plans

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.
2. Frequency of maintenance visits: Fortnightly during growing season
3. In the autumn following planting the CA/landscape contractor will prepare a list of all trees which are dead, dying or diseased and are to be replaced during the following planting season. All stock deemed to be dead, dying or diseased within the defects period shall be replaced by the contractor at their own cost.

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. Species substitutions are not authorised without prior written approval from the Landscape Architect.
2. Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater. Seek approval from the Landscape Architect prior to making replacements. Species substitutions are not authorised without prior written approval from the Landscape Architect.
3. Timing of making good: During the next suitable planting season

730 Protective fencing

1. Fencing type: Timber post and wire fence to all hedges (ornamental and native): 75mm round timber posts with spiked end, 800mm above ground, min. 400mm driven below ground, at max 2.5m centres; 3no. tensed wires at max. 200mm centres
2. Erection: On completion of planting.
3. Removal: After planting is well established

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 hand weeding and by the 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. Ties: Adjust to accommodate growth and prevent constriction or abrasion.
   6.4. Damage to bark: Cut back neatly with sharp knife. Prevent further damage.
   6.5. Frequency of checks: Every month
7. Litter:: All litter is to be removed from all planting areas during maintenance tasks. Dispose of litter responsibly to a suitable tase disposal site, segregating materials for recycling whenever appropriate.
8. Watering: Until well established all shrubs are to be watered during the growing season. Following any dry periods of 7-10 days, soil water content should be assessed and watering undertaken as necessary. Care should be taken to ensure applied water is absorbed into the root-zone and does not run off the surface.
   8.1. Watering - planting areas: Planting areas are to be brought up to field capacity at each visit. If plants are showing signs of drought stress the watering regime should be reviewed and increased as required.
   8.2. Watering - trees: Tree planting areas are to be brought up to field capacity at each visit and each tree is to receive 40 litres or as required. If trees are showing signs of drought stress the watering regime should be reviewed and increased as required.

760 Planting maintenance – formative pruning

1. General: Prune to promote healthy growth and natural shape for species and shape for their circumstance. Any damaged shoots / branches, foliage, flowers and extension growth to be pruned as necessary. Prune damaged shoots /branches back to healthy wood.
   1.1. Dead, dying, diseased wood and suckers: Remove.
   1.2. Timing: As appropriate to the species, note, all pruning works to trees, hedgerows and native shrub planting should be avoided during the general bird nesting season of 1st March to 31st August inclusive. Any works required outside of this time period should be subject to checks and advice from an Ecologist to ensure there are no nesting birds present.
   1.3. Trees: Favour a single central leading shoot.
2. Arisings: Remove.
3. Standard:: Trees are to be pruned in accordance with good horticultural practice and BS 3998 to maintain healthy well-shaped specimens which are appropriately shaped for their circumstances.

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): 75mm
5. Trees: Remulch.
    5.1. Loose fill bark mulch:: 1.0m diameter circle around individual trees, where space allows a 1.0m radius should be used. Depth will taper from 50-75mm to no more than 25mm over the root-ball surface, ensuring that the root flare and base of the stem, along with any ground cover plants, are not buried. The mulch depth should taper to 20mm where the circle adjoins a footway or highway.
    5.2. Loose fill stone mulch:: 1.4m square (to provide total 2m2) from tree trunk. Depth of 75mm, to be tapered to 20mm towards the trunk so the flaring base is not buried

Ω End of Section

Q35
Landscape maintenance

Generally

105 Rectification Period / Maintenance Period

1. Rectification Period / Maintenance Period: 1 years from Practical Completion
2. Duration: Carry out the operations in the following clauses from the completion of planting until the end of the defects liability period.
3. Frequency of maintenance visits: Minimum once every 2 weeks, between April - Octover. Extra visits may be required during extended periods of hot and dry weather between May - August and therefore it is recommended for the contractor to allow for additional visits as necessary. In periods of hot and dry weather, the contractor is to ensure a good watering is carried out at least weekly and AS NECESSARY to ensure all plants fully establish and new topsoil top planting is kept moist. The contractor will be required to obtain a Programme of maintenance visits which will be approved by the Landscape Architect prior to the landscape maintenance subcontractor being appointed. The contractor is to request photo evidence (from the subcontractor), dated with actions carried out during each scheduled maintenance visit for handover to the Landscape Architect at the end of the maintenance defects liability period, prior to the Landscape Architect signing off final completion inspection.

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: Reinstate to original condition.

155 Watering

1. Supply: Potable mains water
2. Quantity: Wet full depth of topsoil
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

181 Mechanical equipment

1. General: Minimize.
2. Prohibited equipment: Litter vacuums
3. Timing: Use of mechanical equipment allowed between the hours of 10:00 am and 4:00 pm only

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 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.

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):

250 Leaf removal

1. Operations: Collect fallen leaves.
2. Special requirements: None
3. Disposal: Remove from site for recycling

254 Mowing of any grassed area

1. Preparation
    1.1. Debris and litter: Remove.
    1.2. Stones and earth clods larger than 25 mm in any dimension: Remove

256 First year management of grasslands

1. Mowing regime: 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. Do not cut until August.
    1.1. First cut: August
    1.2. Subsequent cuts: Continue mowing from August , as required, through March.
    1.3. Height: 50mm
    1.4. Arisings: Remove

257 First year management of wetland meadow

1. First cut: Mid-September
    1.1. Subsequent cuts: Continue mowing from Mid-September, as required, through March.
    1.2. Height: 70-100mm
    1.3. Arisings: Remove

266 Mowing - grasslands

1. Mowing regime: :
    1.1. April - Mid-August: Mowing to be paused during flowering period, approximately 14 weeks
    1.2. Mid-August: Undertake 'hay cut
    1.3. Mid-August - April: Mow to 50mm height when required

2. Hay cut:
    2.1. Hay cut height: 50mm
    2.2. Hay cut arisings: Leave 'hay' to dry and shed seed for 1-7 days then remove from site.
3. Arisings: Remove

267 Mowing - wetland meadows

1. First cut: Mid-September
    1.1. Subsequent cuts: Continue mowing from Mid-September, as required, through March.
    1.2. Height: 70-100mm
    1.3. Arisings: Remove

309 Edges to seeded areas

1. Location: Adjacent to planting beds and around 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.

320 Levelling hollows and bumps in turf

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

340 Spot weed killing in grass areas/wildflower grasslands

1. Herbicide: Contractor's choice
2. Operations: Spot-treat All broad-leaved weeds.

350 Fertilizer – spring application

1. Type: Organic
2. Application rate: 60 g/m²
3. DO NOT apply fertiliser to wildflower areas, species rich long grass or flowering lawn

380 Reinstatement of damaged lawns

1. Damaged turf: Remove to a depth of .....
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

460 Beds of perennials and shrubs

1. Gaps in planting: Refill by replanting.
2. Watering
   - 2.1. New plants: Before and after planting out.
   - 2.2. Ongoing: As necessary for the continued thriving of all planting.
3. Operations at end of growing season
   - 3.1. Trim: Older flowering stems of herbaceous perennials.
   - 3.2. Remove: Redundant plant supports, litter, debris and arisings.
   - 3.3. Cultivate: Fork over the soil, taking care not to cause undue disturbance to plants.
   - 3.4. Top dress: Apply Fertilizer at a rate of 60 g/m².

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.
2. Fungicide: Contractor's choice
3. Insecticide: Contractor's choice

Shrubs/ trees/ hedges

500 Establishment of new planting

1. Duration: 1 year
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: Contractor's choice

502 Establishment of new planting – fertilizer

1. Note:: Excludes grasslands
2. Time of year: March or April.
3. Type: Organic
4. Spreading: Spread evenly.

4.1. 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: Two years after planting
   4.1. Note:: If at this time trees have not anchored (inform the Landscape Architect), investigations shall be carried out to ascertain the reasons for failure. Inform the Landscape Architect as amelioration measures or amendments to the specification will need to be proposed and submitted to the LPA for approval.
   4.2. 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.

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: Allow ground cover plants to partially overlap paths and lawns

555 Pruning trees and shrubs

1. Standard: To BS 7370-4.
2. Special requirements: None. Growth retardents not permitted

570 Formative pruning of young trees

1. Standard: Type and timing of pruning operations to suit the plant species.
2. Time of year: Do not prune during the late winter/ early spring sap flow period.
3. Young trees up to 4 m high
    3.1. Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader.
    3.2. Remove duplicated branches and potentially weak or tight forks. In each case, cut back to live wood.
4. Whips or feathered trees: Do not prune.
5. Operatives: Member of the Arboricultural Association or other approved specialist contractor
6. Standards: Trees are to be pruned in accordance with good horticultural practice (BS 3998:2010) to maintain healthy well-shaped specimens which are appropriately shaped for their circumstances.

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

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.

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: Submit details and cost of plants before ordering/ No plant species to be substituted without written approval from the Landscape Architect.
5. Dressing: Slow-release fertilizer:
   5.1. Type: Organic
   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.

657 Herbicide to kill regrowth

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

675 Digging over

1. General: Dig over beds. Do not damage existing plants, bulbs and roots.
   1.1. Depth of dig (minimum): 150 mm

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. Arisings (if any): Spread evenly over the bed.

690 Maintenance of loose mulch

1. Thickness (minimum): 75 mm
   1.1. Top up: Every three months
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: Organic, Slow-release
3. Application: Spread evenly.
   3.1. Rate: As manufacturer's recommendations

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.

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.

1.6. Climbing plants:

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:
   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.

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. Treatment:
    4.2. Removal by winching: Give notice. Do not use other trees as supports or anchors.
5. Protection:
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.
4. Cavity openings:

Water areas - Not Used

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 accidents.

930 Graffiti removal

1. Method: Pressure wash
2. Subsequent treatment: Not required

Ω End of Section

Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

Cirencester
33 Sheep Street, Cirencester, GL7 1RQ
T 01285 641717
Cirencester@pegasusgroup.co.uk
Offices throughout the UK and Ireland

Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE

All paper sources from sustainably managed forests

Pegasus Group is a trading name of Pegasus Planning Group Limited (07277000) registered in England and Wales.
Registered office: Querns Business Centre, Whitworth Road, Cirencester, Gloucestershire, GL7 1RT
We are **ISO** certified **9001, 14001, 45001**

PEGASUSGROUP.CO.UK